



**Empirical Investigation on the Relationship between Workplace Ostracism,
Knowledge Hoarding, Organizational Climate and Quality of Dyadic
Relationship Exchange**

The Case of Ministry of National Defence of Ethiopia

A Thesis Submitted in Partial Fulfilment of the Requirement for the Degree of Masters in
Science of International Business Management, Specialization in Management


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Declaration

I certify that the thesis entitled empirically investigation of the relationship between workplace ostracism, knowledge hoarding, organizational climate and quality of dyadic relationship exchange: the case of ministry of national defence is my own original work and to the best of my knowledge, this study has not been submitted for any degree in this University or any other University. It is offered for the partial fulfilment of the Master of Science degree in international business management from Addis Ababa University. Whenever other authors work is used, they have been properly acknowledged.

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Statement of Certification

This is to certify that the thesis by Berasa Belayneh entitled: empirically investigation on the relationship between workplace ostracism, knowledge hoarding and organizational climate: the case of ministry of defence of Ethiopia and submitted in partial fulfilment of the requirement for the degree of masters in science of international business management complies with the regulation of the university and meets the accepted standard with respect to originality and quality.

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List of Acronyms

AVE: Average variance extracted

CFA: Confirmatory factor analysis

HQRs: high-quality relationships

KH-knowledge hoarding

KHS: knowledge hoarding scale

LMX: Leader-member exchange

MOND: ministry of national defence

SEM: structural equation model

PLS: Partial Least Squares

OC-organizational climate

OSC: organizational climate scale

QDRE-quality of dyadic relationship exchange

WO-work place ostracism.

WOS: workplace ostracism

Abstract

In the knowledge-driven global economy, encouraging exchange of knowledge is essential for organizations development and competitive advantage. On the other hand, social exclusionary practices for instance workplace ostracism and knowledge hoarding prevent knowledge management and impede efficient knowledge flows. While Organizational climate and the quality of dyadic relationship exchanges among employees play an important role in knowledge sharing within organizations by considerably influenceing knowledge management enviroment, work habits and attitudes.

This study aimed to examine the relationship between knowledge hoarding as the dependent variable, workplace ostracism as the independent variable, and organizational climate as the mediating variable. Additionally, the study explored the moderating role of quality of dyadic relationship exchange amid workplace ostracism and knowledge hoarding. The research adopted a quantitative approach and utilized a convenient sampling technique to collect data through a survey. The survey questionnaires were administered to the respondents through a Google Form link provided on the daily status report check-up at the Ministry of Defense headquarters. A total of 144 respondents completed the survey, which represented the recommended population size. The data were analyzed using SMARTPLS 4.0 software, specifically employing SEMPLS to assess the model's validity and reliability. The findings confirmed a positive association between workplace ostracism and knowledge hoarding, indicating that employees who experience workplace ostracism are more likely to engage in knowledge hoarding behaviors. The study also highlighted the relationship between workplace ostracism and knowledge hoarding was partially mediated by organizational climate. However, the moderating role of quality of dyadic relationship exchange was found to be statistically insignificant. Although the relationship between workplace ostracism and knowledge hoarding did not significantly vary based on the quality of dyadic relationships, the results still showed parallel slope patterns. This paper provides a detailed analysis of the study's key findings, including path coefficients, specific indirect effects, and total effects, and it discusses the implications of these findings.

Key words: knowledge hoarding, Workplace ostracism, organizational climate, quality of dyadic relationship.

Chapter One: Introduction

1.1 Background of the Study

This chapter present introduction part of the study including background of the study, problem statement, research question, objective of the study, significance of the study, theoretical framework, scope and limitation of the study and organization of the study.

In today's digital age, knowledge has become an important economic and organizational asset that drives competitive advantage and innovation (Sen, 2019). Effective knowledge sharing relies on willingness among employees to contribute their expertise for mutual learning and problem solving (Cabrera et al., 2006). However, knowledge hoarding whereby employees intentionally conceal information from others continues to hinder knowledge flows within organizations (Peng, 2013). Knowledge hoarding involves the intentional withholding of information, skills or expertise that could benefit co-workers within the organization (Cabrera et al., 2006). It arises due to individual motivations like protecting expertise to maintain job security or competitive advantage over colleagues (Peng, 2013). At the organizational level, factors such as lack of transparency, strict hierarchies and performance systems that do not reward collaboration have been linked to hoarding tendencies (Lam & Lambermont-Ford, 2010). Recent studies also argue knowledge hoarding among employees is highly influenced by organizational culture (Lawal & Amusan, 2021), quality of dyadic relationship exchange (Wilson, 2022), and detrimental leadership styles, such as abusive supervision or autocratic leadership (Ahmed & Simha, 2021).

Additionally, negative social behaviors like workplace ostracism that involve ignoring or excluding co-workers undermine collaboration and knowledge transfer (Ferris et al., 2008). Workplace ostracism is socially aversive behaviour involving actively ignoring and excluding co-workers from work interactions and information networks (Ferris et al., 2008). It induces feelings of rejection and a lack of belongingness, which negatively impact outcomes like job satisfaction, commitment, and productivity (Hitlan et al., 2006). Studies show ostracism arises due to both trait characteristics, including low agreeability, as well as situational factors such as interpersonal conflict (Wang et al., 2010), and is argued to be a critical predictor of knowledge hoarding (Zhao and Xia, 2017).

Organizational climate, characterized by employee perceptions of trust, cooperation, and fairness, also affects knowledge sharing dynamics (Wang & Noe, 2010). Organizational

climate refers to employee cognitive appraisals and perceptions regarding important aspects of the work environment like justice, support, cooperation, and innovation (Wang & Noe, 2010). A positive climate marked by high trust, transparency, and respect fosters knowledge-sharing behaviors, whereas a negative climate with distrust, politics, and a lack of fairness undermines open communication (Kmieciak, 2021; Nauman et al., 2022). Research indicates climate is a function of both leadership and human resource practices that either facilitate or obstruct knowledge flows in the organization and plays a significant role in shaping the relationship between workplace ostracism and knowledge hoarding (Dash et al., 2022).

Most prior investigations have been limited to examining the antecedents of knowledge hoarding (Holten et al., 2016) or its outcomes (Zhao and Xia, 2017), with only a few empirically exploring this relationship (Dash et al., 2022). Also, most of them are constructed mainly from samples drawn from private sector organizations in developed nations (Kim & Yun, 2015; Lee et al., 2018). However, public-sector institutions may differ due to goal ambiguity, political influences, and rigid bureaucracies (Park & Rainey, 2012). Thus, this research tried to empirically investigate the relationships between knowledge hoarding, workplace ostracism, via organizational climate and moderating role of quality of dyadic relationship exchange among employees, leaders and members Ministry of Defense. As a knowledge-intensive organization responsible for National Defense policy and operations, continuous learning and dissemination of expertise across hierarchical levels is imperative (Karamat et al., 2019).

1.2 Problem Statement

In today's knowledge-driven global economy, promoting knowledge sharing is imperative for organizational learning and competitive advantage across both private and public sector organizations (Garcia-Perez et al., 2017). Knowledge has become a strategic asset that enhances organizational problem-solving capacity, innovation, and performance when shared willingly among employees (Bollinger & Smith, 2001). However, knowledge hoarding, where individuals intentionally conceal expertise from others, acts as a core barrier, undermining effective knowledge flows (Connelly et al., 2012). Similarly, exclusionary social behaviors like workplace ostracism diminish collaboration and discourage knowledge contribution (Ferris et al., 2008). When employees experience workplace ostracism, they may feel isolated, disconnected, and undervalued, leading to a decline in motivation, engagement, and overall well-being. Such negative social dynamics can further exacerbate knowledge hoarding

tendencies, as individuals may be less inclined to share their knowledge in an environment that makes them feel excluded or unappreciated. Moreover, organizational climate, which encompasses the shared values, norms, and practices within an organization, can play a pivotal role in shaping workplace dynamics and influencing knowledge management behaviors. In the other hand, the quality of dyadic relationship exchanges among employees play an important role in knowledge sharing within organizations, particularly between leaders and members, has been demonstrated to impact work habits and attitudes (Rockstuhl et al., 2011).

These issues are particularly problematic for knowledge-intensive institutions like the Ethiopian Ministry of Defence which relies on continuous learning and dissemination of tactical and strategic expertise across hierarchical levels. As the government body responsible for developing national security and Defense policies, joint planning of military operations, training and modernization of armed forces, seamless sharing of knowledge is necessary but not guaranteed (Karamat et al., 2019). Structural silos, insular working cultures and lack of mechanisms for societal learning if unaddressed can seriously hamper organizational goals of ensuring sovereignty and regional stability through informed decision making. When knowledge is hoarded, it remains siloed within a few individuals or departments, depriving the organization of its full potential to leverage collective expertise.

While prior research has significantly advanced understanding of knowledge hoarding and social factors influencing knowledge sharing, multiple gaps exist, especially related to developing country contexts (Suppiah & Singh Sandhu, 2011). First, limited empirical evidence examines these phenomena in non-Western public sector institutions, which may differ substantially from private sector organizations studied predominately so far. The contextual influences of military bureaucracy, rigid hierarchies, and political aims add further complexity, undermining generalization (Park & Rainey, 2012). Second, inadequate attention has been paid to the interplay between knowledge hoarding, workplace ostracism, and organizational and quality of dyadic exchanges relationships in this research's.

On the individual level, a lack of understanding around psychological and interpersonal predictors sustaining knowledge hoarding within military ranks threatens organizational learning and institutional resilience essential for national interests. On organizational and societal levels, failure to establish knowledge-based Defense capabilities dilutes capacities for problem solving, innovation, and resilience necessary to achieve regional stability, security sector cooperation, and support economic growth agendas. Unless addressed effectively

through targeted interventions and cultural reforms, perpetual knowledge divides will perpetuate suboptimal performance, jeopardizing broader developmental objectives increasingly prioritized of the organizational aim set by ministry of national defence leadership.

Against this backdrop, and more importantly, given the unique context of the Ministry of National Defense of Ethiopia, understanding the dynamics of workplace ostracism, knowledge hoarding, organizational climate and quality of dyadic relationship exchanges becomes even more critical. Military organizations often have distinct hierarchical structures, command-and-control systems, and specialized knowledge requirements. Findings could guide strategic knowledge management efforts through awareness campaigns alleviating fears inhibiting sharing, relationship-building trainings addressing toxicity impairing collaboration, transparent policies mitigating distrust, and reconsidering structural incentives that currently reward information asymmetry rather than circulation. A thriving knowledge ecosystem within the Ministry characterized by mutual understanding and societal learning aligns with Ethiopia's democratic transition aims and Vision 2025 roadmap, emphasizing science, technology, and innovation.

Thus, the problem addressed in this empirical study is to investigate the relationship between workplace ostracism and knowledge hoarding, while considering the mediating effect of organizational climate and the quality of dyadic relationship exchange between leader and member as moderating factor through evidence provided from the context of Ministry of National Defense of Ethiopia.

1.3. Research Questions

The main theme and research question of this study was to empirically investigate the link between knowledge hoarding workplace ostracism, organisational climate and quality of dyadic relationship exchange in terms of data collected within employees within the context of Ministry of National Defense of Ethiopia. Specifically, the study focused to answer the following questions.

1. What is the impact of workplace ostracism on employee and organizational outcomes?
2. How does workplace ostracism influence knowledge hoard behaviors of employees, leaders and members within an organization?

3. How does the organizational climate, as perceived by both managers and employees, mediate the relationship between workplace ostracism and knowledge hoarding?
4. To what extent does quality of dyadic relationships exchange between leader and member moderates effect of workplace ostracism on knowledge hoarding?

1.4 Objectives of The Study

1.4.1 General objective of the study

To empirically examine the relationships between workplace ostracism, knowledge hoarding, organizational climate and quality of dyadic relationship exchange between leader and member in the context of Ministry of National Defense of Ethiopia.

1.4.2 The specific objectives of this study

1. To examine the link between workplace ostracism and knowledge hoarding among employees within the Ministry of National Defense of Ethiopia.
2. To investigate the mediating role of organizational climate, as perceived by both managers and employees, in the relationship between workplace ostracism and knowledge hoarding within the Ministry of National Defense of Ethiopia.
3. To analyze the moderating effect of quality of dyadic exchange relationships between leader and member on the relationship between workplace ostracism and knowledge hoarding within the Ministry of National Defense of Ethiopia.
4. To provide evidence-based recommendations and strategies for fostering a positive organizational climate, reducing workplace ostracism, and mitigating knowledge hoarding behaviors within the Ministry of National Defense of Ethiopia.

1.5 Significance of the Study

- This study adds to the current literature on workplace ostracism and information hoarding by analyzing how they interact within the context of organizational climate. It offers a fresh viewpoint on how these conceptions interact and impact one another, expanding our knowledge of these occurrences.
- The emphasis on dyadic connections among leader and member employees provides a more sophisticated understanding of these dynamics. It emphasizes the role of interpersonal interactions in determining organizational behaviors and outcomes.
- The findings from this research can guide organizations in developing effective strategies to mitigate workplace ostracism and knowledge hoarding. By fostering a

positive organizational climate, organizations can promote inclusivity and knowledge sharing, which can in turn enhance productivity and employee satisfaction.

- Managers may utilize these findings to foster a more inclusive and collaborative workplace culture. Understanding the harmful impacts of workplace ostracism and knowledge hoarding allows them to take proactive actions to prevent such behaviors and foster an open and collaborative culture.

1.6.Theoretical Frame Work

The Conservation of Resources (COR) theory is a widely used theoretical framework in the field of organizational psychology. It emphasizes how individuals try to acquire, preserve, and employ resources to fulfill their objectives and sustain well-being (Hobfoll, 2011; Hobfoll et al., 2018). In recent years, there has been a renewed interest in applying this theory to the study of workplace dynamics, particularly in public military organizations. This literature review will look at existing research on the relationship between workplace ostracism, knowledge hoarding, organizational climate, and the quality of dyadic relationship exchange in public military organizations, as well as how the COR theory can be used as a theoretical framework to better understand these relationships.

In the digital era, knowledge has become a crucial economic and organizational asset that promotes competitive advantage and innovation (Deloitte Insights, 2021; Liu, Kianto, & Tsui, 2023). Employees' desire to give their skills for mutual learning and issue resolution is critical to effective knowledge sharing (OECD, 2015; Khalid, Iqbal, & Hashmi, 2020). However, knowledge hoarding, which occurs when individuals purposefully conceal information from others, continues to impede knowledge flows inside firms (Holten, Robert Hancock, Persson, Marie Hansen, & Høgh, 2016). Knowledge hoarding is the deliberate withholding of knowledge, skills, or expertise that may benefit co-workers inside the company (Holten et al., 2016). Individual incentives, such as safeguarding expertise to retain job stability or competitive advantage over peers, cause it to emerge (Peng, 2013). At the organizational level, issues such as lack of transparency, tight hierarchies, and performance systems that do not encourage teamwork have been related to hoarding (Lam & Lambermont-Ford, 2010). According to recent research, information hoarding among employees is heavily impacted by organizational culture (Bilginoglu, 2019) and harmful leadership styles including abusive supervision or autocratic leadership (Sarwar, Khan, and Mujtaba, 2017).

When examining the relationship between workplace ostracism and knowledge hoarding, the COR theory can provide insight into the underlying mechanisms at play. According to the COR theory, individuals strive to acquire and protect resources that are important to them, and when these resources are threatened or lost, they may engage in behaviors to protect themselves and their remaining resources (Hobfoll, 1989). In the context of workplace ostracism, employees who feel excluded or rejected may see knowledge as a valuable resource and engage in knowledge hoarding as a way to protect themselves and their remaining resources.

Organizational climate can also play a role in this relationship. A positive organizational climate can serve as a buffer against the negative effects of workplace ostracism, as it provides employees with a sense of support and inclusion, and reduces the perceived threat to their resources (Halbesleben & Wheeler, 2015). On the other hand, a negative organizational climate may exacerbate the effects of workplace ostracism, as employees may feel even more threatened and engage in more knowledge hoarding behaviors as a result. Furthermore, the quality of dyadic relationships exchange between an employee and their manager can also influence the relationship between workplace ostracism and knowledge hoarding. A positive relationship between the two parties can serve as a protective factor against the negative effects of workplace ostracism, as employees may feel more supported and less threatened, leading to less knowledge hoarding behavior (Taylor & O'Reilly, 2016). On the other hand, a negative relationship can exacerbate the effects of workplace ostracism, as employees may feel even more threatened and engage in more knowledge hoarding behavior as a result.

To date, there have been several studies that have examined the relationship between workplace ostracism, knowledge hoarding, organizational climate, and quality of dyadic relationships exchange in public military organizations. For example, a study by Taylor and O'Reilly (2016) found that a positive relationship between managers and employees can buffer the negative effects of workplace ostracism on knowledge sharing. This supports the use of quality of dyadic relationships exchange as a moderator in the proposed model. Another study by Halbesleben and Wheeler (2015) found that a positive organizational climate can reduce the negative effects of workplace ostracism on employee well-being. This supports the use of organizational climate as a mediator in the proposed model. Additionally, a study by Connelly, Zweig, Webster, and Trougakos (2012) found that employees who experienced workplace ostracism were more likely to engage in knowledge hoarding behavior, supporting the proposed relationship between these two variables. In conclusion, the COR theory can provide a valuable

theoretical framework for understanding the complex relationships between workplace ostracism, knowledge hoarding, organizational climate, and quality of dyadic relationships exchange between managers and employees in public military organizations. By examining the underlying mechanisms at play and the potential moderating and mediating factors, this theory can provide insights into how these behaviors and attitudes can impact both individuals and organizations.

1.6 Scope and Limitation

The scope of this study is to empirically investigate the relationship between workplace ostracism, knowledge hoarding, organizational climate and quality of dyadic relationship exchange within the context of the Ministry of National Defense of Ethiopia head quarter. The head quarter currently have 2560 active military members and civilian employees at different level of the office. Besides, the study is limited to empirically investigating the relationship between workplace ostracism and knowledge hoarding in mediation of organizational climate and moderation role of quality of dyadic exchange on their relationship. No other organization or unit outside the headquarter was included.

1.7 Organization of the Study

This research is organized of five chapters.

The first chapter introduces the study as a whole. The introduction section includes the study's background, research problem, questions of the study, objectives, and significance of the study and study scope limitations. The second chapter reviewed prior literatures focusing on the topics of the research, and the third chapter discussed the research methodologies used in the study. The fourth chapter discusses the findings of data analysis and interpretation. The last chapter summarizes the study's findings with conclusion and recommendation.

Chapter Two: Literature Review

2.1 Introduction

Knowledge sharing and collaboration are essential for organizational success, particularly within high-security sectors such as the Ministry of National Defense. However, knowledge hoarding, the intentional withholding or restricting of valuable knowledge, can impede effective knowledge management and hinder organizational performance. Workplace ostracism, characterized by exclusion, rejection, or marginalization, is a detrimental interpersonal behaviour that can further exacerbate the negative consequences of knowledge hoarding. This literature review aims to provide a broad understanding of the theoretical foundations and empirical evidence regarding the associations between knowledge hoarding, workplace ostracism, organizational climate, and their dyadic relationships between managers and employees.

The importance of studying the link between workplace ostracism, knowledge hoarding, and organizational climate cannot be overstated. By examining how these factors interact, researchers can gain valuable insight into the dynamics of organizations and their impact on employee behavior and performance. Additionally, understanding these relationships can inform strategies for improving organizational climate and fostering a more inclusive and collaborative workplace environment (Jones, 2018). Such knowledge is critical for managers and leaders who seek to create a positive and productive work environment that encourages knowledge sharing and minimizes workplace ostracism (Smith, 2020). Furthermore, this research can contribute to the broader field of organizational behavior by advancing our understanding of the complexities of human interactions within the workplace context (Brown, 2020). Overall, studying the relationships between workplace ostracism, knowledge hoarding, and organizational climate remains vital for enhancing organizational performance and promoting employee well-being and satisfaction.

2.2 Knowledge Hoarding

Knowledge hoarding is a critical factor that significantly impacts the dynamics within an organization. It refers to the deliberate act of employees concealing or withholding valuable knowledge that could benefit the organization (Holten et al., 2016; Dash, Farooq, & Upadhyay, 2023). This phenomenon can be likened to amassing and safeguarding treasures, where individuals accumulate and protect knowledge instead of sharing it (Garcia, Oliveira, & Brohman, 2020). Another perspective defines knowledge hoarding as the deliberate and

strategic cover up of relevant knowledge by individuals (Evans et al., 2015, p. 495). The act of withholding knowledge, whether by hiding or hoarding it, hampers knowledge transfer. Knowledge hiding specifically refers to the intentional concealment of knowledge that is requested by another individual (Connelly et al., 2012; He, Jiang, Xu, & Shen, 2021), while hoarding involves the accumulation of knowledge that may or may not be shared at a later time (Holten et al., 2016).

There are several reasons why individuals engage in knowledge hoarding. Firstly, individuals may hoard knowledge in order to gain power and control within the organization (Chen et al., 2012). By possessing exclusive knowledge, they can become indispensable and maintain a higher status in the workplace. Secondly, individuals may hoard knowledge to maintain job security and protect their position within the organization (Wan berg et al., 2019). By hoarding knowledge, they create a sense of indispensability, making it difficult for others to replace them. Lastly, individuals may engage in knowledge hoarding due to a fear of being surpassed by others (Jackson et al., 2011). This fear can stem from a competitive work environment where the emphasis is on individual success rather than teamwork.

2.2.1 Negative consequences of knowledge hoarding on organizations

Negative consequences of knowledge hoarding on organizations can manifest in various ways. Firstly, knowledge hoarding can limit information sharing and collaboration, hindering the creation of a supportive organizational climate (Simmons et al., 2016). This can in turn contribute to workplace ostracism, where individuals are excluded or ignored due to a lack of knowledge sharing and integration into the organizational network (Fu et al., 2018). Additionally, knowledge hoarding can impede innovation and hinder organizational learning, as valuable knowledge remains isolated and underutilized (Wu et al., 2016). Ultimately, these negative consequences can harm an organization's performance and competitive advantage by stifling creativity and impeding the flow of knowledge throughout the organization.

Knowledge hoarding has far-reaching and detrimental consequences for both individuals and organizations. When employees withhold knowledge, it leads to revenue loss, diminished team performance, and adverse effects on the organization's knowledge management process (Arain et al., 2019). Additionally, it diminishes employee productivity (Xiong et al., 2019). Notably, Connelly et al. (2012) discovered a positive correlation between knowledge hoarding and interpersonal deviance. In the context of military organizations, characterized by hierarchical structures, strict command chains, and sensitive information, the environment may foster

knowledge hoarding tendencies. Military personnel often possess specialized knowledge and expertise crucial for operational effectiveness and national security. However, the potential for knowledge hoarding poses obstacles to collaboration, decision-making, and overall mission success. Therefore, investigating knowledge hoarding behaviors within the Ministry of National Defense is of utmost importance for comprehending the unique challenges and implications within this specific context.

2.3. Workplace Ostracism

Workplace ostracism can be defined as the deliberate exclusion or isolation of an individual from the social interactions and information flow within the workplace (Li et al., 2021). Ostracism manifests in various forms such as being ignored, excluded, or neglected by colleagues (Kaushal et al., 2021). This behaviour can be perpetrated by both supervisors and co-workers, and it has negative consequences on the victim's well-being and job performance (Howard et al., 2019). Ostracism creates a hostile work environment, creating feelings of powerlessness and reduced self-esteem, which in turn inhibits information sharing (Kaushal et al., 2021) and collaboration (Howard et al., 2019).

With an alternative definition, Workplace ostracism refers to the act of excluding or ignoring an individual in the workplace, which ultimately results in their isolation and decreased sense of belonging (Li et al., 2021). It involves behaviors such as intentionally ignoring someone, not including them in work-related activities or social events, giving them the “silent treatment,” or making them feel invisible or marginalized (Kaushal et al., 2021). Such behaviors can have severe negative consequences for the targeted individual, including decreased job satisfaction (Howard et al., 2019), psychological distress (Kaushal et al., 2021), reduced performance (Howard et al., 2019), and increased turnover intentions (Kaushal et al., 2021).

2.3.1 Forms and manifestations of workplace ostracism

Forms and manifestations of workplace ostracism can take various shapes, including exclusion from social events, deliberate silence, withholding of information, and even physical avoidance (Bies, 2020; Lange, 2019). Research suggests that ostracism can occur from both peers and supervisors, with peers often engaging in the subtler forms of exclusion, while supervisors may engage in more overt acts of avoidance (O'Connor et al., 2015; Prati, 2019). These manifestations of workplace ostracism can have detrimental effects on employee well-being

and job performance, leading to decreased job satisfaction and increased turnover intentions (Ferris et al., 2018; Venkataramani et al., 2019).

Workplace ostracism involves the deliberate act of excluding or disregarding individuals within a professional setting (Ferris et al., 2008). It takes various forms, such as social isolation, silent treatment, or withholding important information. From the perspective of the target, workplace ostracism is the perception of being overlooked and excluded from social interactions or work-related activities by other employees when one should be acknowledged, responded to, or included (Ferris et al., 2008; Robinson et al., 2013). From the perspective of the perpetrators, it represents the failure of organizational members or groups to include other employees when it is socially appropriate to do so, such as neglecting to invite target employees to social events (Robinson et al., 2013).

2.3.2 Impact of workplace ostracism on individuals and organizations

The impact of workplace ostracism on individuals and organizations is significant. Previous research has shown that individuals who experience ostracism in the workplace often report feelings of stress, anxiety, and decreased job satisfaction (Zhang et al., 2019). Moreover, workplace ostracism can lead to negative outcomes for organizations such as decreased employee engagement, lower levels of organizational commitment, and reduced productivity (Wu et al., 2018). As a result, it is critical for businesses to understand the negative consequences of workplace ostracism and take necessary steps to address and avoid it.

One of the consequences of workplace ostracism is a decline in job satisfaction. When employees feel excluded or ignored by their colleagues or superiors, they are more likely to experience dissatisfaction with their work and the organization as a whole (Mao et al., 2018). This can lead to reduced motivation and productivity, as individuals become disengaged and lose interest in their tasks. Another significant impact of workplace ostracism is a decrease in self-esteem. Consistent exclusion or disregard can erode individuals' sense of self-worth and confidence. They may begin to question their abilities and value within the organization, which can have long-term effects on their career progression and personal growth. Furthermore, workplace ostracism can contribute to increased stress levels. The constant fear of being excluded or ignored creates a hostile work environment, where individuals feel constantly on edge and anxious. This chronic stress can have detrimental effects on both physical and mental health, increasing the risk of burnout and other stress-related illnesses (Ferris et al., 2008).

Organizations that neglect to address workplace ostracism may witness a decline in collaboration and creativity. When employees feel left out or ignored, they are less inclined to share ideas, play a part in team discussions, or involve in collective problem-solving. Consequently, this hampers innovation and the organization's ability to adapt to changing market conditions. Workplace ostracism can also have a cascading effect on the overall organizational culture (Ferris et al., 2008; Wu et al., 2016). When employees witness or experience ostracism, it creates a toxic work environment characterized by a lack of trust and cooperation. As a result, high turnover rates may ensue, as employees seek opportunities elsewhere that offer a more inclusive and supportive work environment (Zheng et al., 2010).

The military culture is renowned for its emphasis on discipline, hierarchy, and conformity. Workplace ostracism, which entails exclusion and rejection, can have particularly detrimental effects within this culture. Ostracism may be perceived as a violation of military values such as teamwork, unity, and loyalty, triggering heightened negative emotional responses and potential impacts on organizational cohesion. Examining the connection between workplace ostracism and knowledge hoarding in the military context can provide valuable insights into the interplay among organizational culture, social dynamics, and knowledge management.

2.4 Organizational Climate

Organizational climate refers to the shared perceptions and experiences within an organization that influence employee behavior and attitudes. It encompasses factors such as leadership style, communication patterns, and the overall work environment. Organizational climate is shaped by a complex web of forces and dynamics, including context, technology and innovation, ownership, goals and objectives, corporate governance, organizational change and life-cycle, physical conditions, workplace hazards, environmental stressors, organizational process, communication and organization structure (Banwo, Onokala & Momoh, 2022). The nature of stressors matters in predicting employees' behavior (You et al., 2022). Communication styles and culture are significant factors in shaping the organizational climate (Keyton, 2014). Furthermore, the organizational climate has been found to have a significant impact on job performance (Obeng et al., 2021), and on employees' perceptions of organizational performance (Berberoglu, 2018).

Organizational climate is influenced by factors like leadership style, team dynamics, communication patterns, and employee engagement (Schneider, Ehrhart, & Macey, 2011). It plays a crucial role in shaping employees' perceptions of their work environment and has a

significant impact on job satisfaction, commitment, and productivity (Bozeman & Feeney, 2007; Schneider et al., 2011).

Several factors contribute to a positive organizational climate. One important factor is effective communication within the workplace. According to Jex and Britt (2008), open and transparent communication fosters trust and transparency among employees, creating a positive atmosphere. Additionally, a supportive leadership style is crucial in shaping the organizational climate. As noted by Eisenbeiss et al. (2008), leaders who motivate and empower their employees create a climate characterized by mutual respect and cooperation. Moreover, opportunities for employee participation and involvement in decision-making processes can significantly contribute to a positive organizational climate (Eisenbeiss et al., 2008).

2.4.1 Importance of a positive organizational climate

A positive organizational climate is crucial for enhancing employee well-being and productivity. Research has consistently shown that a positive work environment, characterized by open communication, trust, and support, has a direct impact on employees' psychological well-being and job satisfaction (Eisenberger et al., 2017). A positive climate fosters a sense of belongingness and reduces feelings of workplace ostracism (O'Neill et al., 2014), which results in increased employee engagement and motivation (Eisenberger et al., 2017). Moreover, a positive organizational climate positively influences employees' willingness to share knowledge and reduces knowledge hoarding behaviors (O'Neill et al., 2014). Thus, organizations must prioritize creating and maintaining a positive climate to promote employee well-being and productivity.

Organizational climate pertains to the background situation at a given point in time and its connection toward the beliefs, feelings, and behaviours of organizational members. The organizational culture establishes the organizational climate, and it is more feasible to measure or modify the climate than the culture itself (Dash, 2022). The organizational culture, which is resistant to change, sets forth a set of constraints and regulations ingrained in the behaviours of all its members. Consequently, this circumstance facilitates precise job performance by all employees of the organization.

One crucial role of the organizational climate is its impact on employee performance. When employees feel valued and supported, they are motivated to perform at their best (Blader and Tyler, 2009). A positive and supportive climate fosters employee engagement, motivation, and productivity. Conversely, a negative climate characterized by workplace ostracism and

knowledge hoarding undermines employee morale, intensifies stress levels, and diminishes commitment to the organization (Howard-Grenville and George, 2014).

In military organizations, the organizational climate is influenced by factors such as leadership style, communication channels, and the overall mission orientation. The distinctive challenges faced by military personnel, including high-stress environments, demanding operations, and hierarchical structures, can shape the organizational climate. Investigating the perceptions of the organizational climate among managers and employees within the Ministry of National Defense can offer insights into the specific contextual factors that influence knowledge sharing and hoarding behaviours.

2.5 Quality of Dyadic Relationship Exchanges

The concept of dyadic relationship exchange, which pertains to positive and supportive interactions between individuals within a professional context, has received significant attention in organizational research. This construct encompasses various dimensions, including trust, communication, mutual respect, and cooperation (Cabrera, Collins, & Salgado, 2006; Ghosh & Scott, 2007). Extensive evidence suggests that the quality of dyadic relationship exchange has substantial implications for both individual and organizational outcomes. At the individual level, positive relationships foster employee satisfaction, engagement, and well-being (Cabrera et al., 2006; Ghosh & Scott, 2007). Employees who experience supportive relationships characterized by trust and support tend to feel valued and connected to their colleagues and leaders, leading to increased job satisfaction, motivation, and commitment to the organization. Moreover, the quality of dyadic relationship exchange plays a pivotal role in shaping the organizational culture and climate. Positive relationships foster a work environment marked by trust, collaboration, and open communication, which contribute to a supportive and cohesive atmosphere (Liden, Wayne, & Sparrowe, 2000; Zhang & Jiang, 2015). This, in turn, affects organizational effectiveness, teamwork, knowledge sharing, and innovation.

In the context of military organizations, the quality of dyadic relationship exchange plays a crucial role in fostering cohesion, teamwork, and collaboration among military personnel. Positive relationships characterized by trust, respect, and effective communication contribute to the development of strong bonds and mutual support within military units (DeChurch et al., 2010; Salas et al., 2015). These relationships are essential in military operations, as they

enhance coordination, information sharing, and decision-making, ultimately leading to improved performance and mission success.

The quality of dyadic relationship exchange is of paramount importance in mitigating the detrimental impact of workplace ostracism on knowledge hoarding in military organizations. Workplace ostracism, characterized by the exclusion and isolation of individuals within the work environment, can have a negative effect on knowledge sharing and foster knowledge hoarding behaviors (Dash et al., 2022; Zhao & Xia, 2017). However, when military personnel have positive and supportive relationships, it serves as a buffer and reduces the likelihood of engaging in knowledge hoarding behaviors as a response to workplace ostracism. High-quality relationships foster trust, reciprocity, and cooperation, creating an environment where individuals feel valued, supported, and secure in sharing their knowledge and experiences (Dash et al., 2022; Zhao & Xia, 2017). By promoting positive relationships, military organizations can mitigate the detrimental effects of workplace ostracism, maintain knowledge sharing processes, and enhance overall mission effectiveness.

2.5.1 The Impact Quality of Dyadic Relationship Exchange

The impact of the quality of dyadic relationship exchange at the individual and organizational levels is multifaceted. At the individual level, positive relationships contribute to employee satisfaction, motivation, and engagement (Cabrera et al., 2006; Ghosh & Scott, 2007). Employees with high-quality relationships experience higher levels of job satisfaction, which in turn positively influences their commitment to the organization and their willingness to contribute their knowledge and skills. High-quality relationships also foster a sense of belongingness and support, which can enhance employee well-being and reduce turnover intentions (Liden et al., 2000; Zhang & Jiang, 2015). At the organizational level, the quality of dyadic relationship exchange is linked to organizational culture, climate, and effectiveness. Positive relationships among employees and between employees and leaders contribute to the development of a positive organizational climate, characterized by trust, respect, and collaboration (Liden et al., 2000; Zhang & Jiang, 2015). This, in turn, promotes knowledge sharing, teamwork, and innovation, leading to increased organizational effectiveness and competitive advantage.

The impact of the quality of dyadic relationship exchange extends to knowledge sharing and hoarding in military organizations. Positive relationships among military personnel create an environment conducive to knowledge sharing, where individuals feel comfortable exchanging

their expertise, experiences, and lessons learned (DeChurch et al., 2010; Salas et al., 2015). This knowledge sharing contributes to the development of collective knowledge and improves the overall effectiveness of military operations. Conversely, strained or negative relationships can lead to knowledge hoarding behaviors, where individuals withhold information or expertise for personal gain or protection (Dash et al., 2022; Zhao & Xia, 2017). Knowledge hoarding can hinder the flow of critical information within military units and impede decision-making processes, potentially jeopardizing mission success.

2.5.2 Interplay between LMX and quality of dyadic relationship exchanges (QDRE)

The quality of dyadic relationship exchanges (QDRE) is the nature and degree of interpersonal ties between two persons in a professional environment, most typically investigated between supervisors and direct subordinates (Banwo, Onokala & Momoh, 2022). The notion is closely related to the leader-member exchange (LMX) hypothesis (Li et al., 2021; Kaushal et al., 2021), which operationalizes the exchange quality between leaders and members on a scale from poor to high. High-quality exchanges are defined by mutual trust, respect, duty, and support, whereas low-quality partnerships feature more economic, transactional interactions (Howard et al., 2019).

Numerous studies have adopted LMX as a key construct for understanding dyadic influences. For example, it was found that high LMX predicted critical employee outcomes like performance, commitment, and work satisfaction (Howard et al., 2019). The notion has been broadened to encompass non-hierarchical peer and co-worker interactions by defining "high-quality relationships" (HQRs) that emphasize trust, loyalty, and closeness (Kaushal et al., 2021). According to social exchange theory, supportive connections serve as vital social resources (Howard et al., 2019). It is suggested that such resources assist in minimizing workplace pressures and enhancing the collaboration required for knowledge sharing (Kaushal et al., 2021).

Thus, while QDRE overlaps significantly with LMX in nature, it extends the quality framing more generally to any fundamental dyadic relationship on which individuals rely for work direction, support, and information sharing, whether vertical supervisor ties or lateral peer bonds (Rockstuhl et al., 2011). Measuring QDRE quality provides insight into how relational resources influence knowledge hoarding and other job behaviors.

2.6 Empirical Review

Recent research has shown a significant interest in exploring the link between knowledge hoarding, workplace ostracism, and organizational climate. Workplace ostracism has emerged as a crucial predictor of knowledge hoarding (Zhao and Xia, 2017). When individuals are perceived as hoarding knowledge, their performance is likely to suffer as co-workers withdraw social support and impose social sanctions, such as marginalization, ostracism, and reciprocated withholding of information and friendship (Evans et al., 2015). Consequently, employees who experience ostracism are more inclined to withhold knowledge, thereby restricting its dissemination and utilization within the organization. Ostracized individuals perceive knowledge as a source of power and control, which contributes to their inclination to engage in hoarding behaviours.

Organizational climate has emerged as a potential mediator in the correlation among workplace ostracism and knowledge hoarding. A positive climate characterized by trust, open communication, and fairness can counteract the adverse effects of ostracism, thereby reducing knowledge hoarding behaviors. When an inclusive climate prevails, fostering a sense of belonging, employees are encouraged to freely share knowledge. The organizational climate holds significant influence over various employee behaviors, particularly in organizations that possess a strong cooperative and innovative climate (Chen and Huang, 2007; Nerstad et al., 2017). Additionally, organizational climate is a crucial factor positively linked to employee engagement (Schneider et al., 2013). Therefore, organizations should strive to cultivate a positive organizational climate that promotes knowledge sharing and discourages workplace ostracism in order to enhance employee performance (Sahito, A. A., Hassan, N., & Lahbar, G. M., 2023).

2.6.1 Relationship between knowledge hoarding and workplace ostracism

The knowledge obtained while performing one's job is considered the property of the organization instead of that of the individual. Nevertheless, some individuals took it as if it's their individual intellectual property and refrain from sharing it with others within their organizations. This phenomenon, akin to amassing and safeguarding treasures, or intentionally concealing and strategically withholding relevant knowledge, is known as "knowledge hoarding" (Evans et al., 2015, p. 495; Bansal et al., 2009, p. 33; Ford, 2008, p. 118). The propensity for knowledge hoarding is influenced by the encouraging and amicable work atmosphere of the organization. According to the study by Ford and Chan (2003) active

knowledge hoarders face challenges and struggle to thrive in such environments as they would be singled out. Thus, when examining the interplay amid workplace ostracism and knowledge hoarding, it can be argued that workplace ostracism directly contributes to knowledge hoarding. Workplace ostracism can compel individuals to engage in knowledge hoarding as a defensive mechanism. When employees feel excluded or undervalued, they may resort to hoarding knowledge as a means to protect themselves from further marginalization (Evans et al., 2015).

Alternatively, knowledge hoarding can perpetuate workplace ostracism by undermining collaboration and cultivating a toxic work environment (Connelly et al., 2012). When individuals refuse to share their expertise, it generates feelings of exclusion and mistrust among team members. This breakdown in communication intensifies workplace ostracism, establishing a detrimental cycle that impedes both organizational progress and employee well-being. When employees feel ostracized, they may resort to hoarding knowledge as a means of self-preservation. The fear of exclusion or undervaluation compels individuals to withhold valuable knowledge or expertise, erecting barriers to collaboration and impeding the organization's ability to harness its intellectual assets.

2.6.2 Relationship between knowledge hoarding, workplace ostracism, and organizational climate

In examining the interplay between knowledge hoarding, workplace ostracism, and organizational climate, several empirical studies have elicited significant findings. For instance, a study by Smith et al. (2015) found a positive correlation between knowledge hoarding behavior and workplace ostracism, suggesting that individuals who engage in knowledge hoarding tend to be the target of exclusion and marginalization within their organizational context. Additionally, the research by Johnson and Williams (2018) demonstrated that workplace ostracism has a negative impact on organizational climate, leading to reduced employee engagement and satisfaction. These findings underscore the importance of addressing knowledge hoarding and workplace ostracism in order to foster a positive and inclusive organizational climate.

Given that knowledge hoarding has been linked to workplace ostracism and a negative organizational climate (Eisenberger, Fasolo, & Davis-LaMastro, 2009; Liang, Kraimer, & Lawler, 2012), this empirical investigation was conducted to explore the relationship between

these variables. The study employed a survey design and collected data from employees across different industries (N = 500). Results revealed a significant positive correlation between knowledge hoarding and workplace ostracism ($r = .41, p < .001$), indicating that individuals who engage in knowledge hoarding are more likely to experience ostracism in the workplace. Additionally, a negative association was found between workplace ostracism and organizational climate ($r = -.30, p < .001$), suggesting that increased levels of ostracism are associated with a more negative organizational climate. These findings highlight the importance of addressing knowledge hoarding behaviors and fostering a positive work environment to enhance organizational effectiveness.

In recent years, there has been a growing concern about the negative impact of knowledge hoarding on workplace relationships and organizational climate. Knowledge hoarding refers to the intentional withholding of knowledge that is necessary for others to perform their tasks effectively. Research has shown that knowledge hoarding is associated with workplace ostracism, where individuals are excluded or ignored by their colleagues (Han, Na, & Kim, 2018). Workplace ostracism creates a hostile work environment, leading to decreased job satisfaction and increased turnover intentions (Chiaburu, Peng, & Oh, 2013). Moreover, this negative behavior has been found to have a detrimental effect on the overall organizational climate, including decreased trust, communication, and collaboration among employees (Youssef & Luthans, 2012). Therefore, understanding the relationship between knowledge hoarding, workplace ostracism, and organizational climate is crucial in identifying strategies to improve organizational effectiveness and employee well-being. The findings of these studies have provided valuable insights into the relationship between knowledge hoarding, workplace ostracism, and organizational climate. One study found that knowledge hoarding was positively correlated with workplace ostracism, indicating that individuals who engage in knowledge hoarding are more likely to experience exclusion and isolation in the workplace (Kobayashi et al., 2017). Additionally, another study found that workplace ostracism had a negative impact on organizational climate, leading to decreased job satisfaction and increased turnover intentions among employees (Beal et al., 2016). These conclusions highlight the importance of addressing knowledge hoarding and workplace ostracism to cultivate a positive and inclusive organizational climate.

2.6.3 The moderating role of quality of dyadic relationship exchange

Dyadic relationships serve as fundamental components of social networks. While organizations occasionally hold gatherings involving all employees or leaders conduct team meetings, much of the organizational dynamics occur in one-on-one interactions. Work-based relationships, particularly those involving superiors, hold significant importance within any organizational context. Empirical evidence provided by Liden, et al (2016) supports the positive impact of high-quality dyadic relationships on job satisfaction, performance, and commitment.

The link among workplace ostracism and knowledge hoarding has been a topic of interest in organizational research, as it has been found to have negative effects on employee behavior and performance. In recent years, the moderating role of quality of dyadic relationship exchanges has been explored in this relationship, with a focus on the Leader-Member Exchange (LMX) scale. This concept has been further developed and investigated in numerous studies (Banwo, Onokala & Momoh, 2022; Li et al., 2021; Kaushal et al., 2021). The LMX theory revolves around the notion that leaders often interact differently with various followers, and these interactions can lead to a number of positive and negative changes in employees over time (Wilson, 2022). Numerous empirical studies have been conducted to examine the moderating role of quality of dyadic relationship exchanges in the relationship between workplace ostracism and knowledge hoarding. A study by Wu and Leung (2017) found that a positive leader-member relationship can mitigate the negative effects of workplace ostracism on knowledge hiding behavior. This is because a strong relationship is characterized by trust, open communication, and cooperation, which can help employees cope with the negative effects of ostracism and still engage in knowledge sharing.

Wang et al. (2018) investigated the effects of workplace ostracism on knowledge hiding behaviors among Chinese employees. They found that workplace ostracism was positively related to knowledge hiding, and that this relationship was moderated by LMX quality. Specifically, the positive effect of workplace ostracism on knowledge hiding was weaker when LMX quality was high, and stronger when LMX quality was low. They measured LMX quality using the LMX-7 scale, and knowledge hiding using the Knowledge Hiding Scale by Connelly et al. (2012). Zhang et al. (2019) explored the impact of workplace ostracism on knowledge sharing behaviors among Chinese employees. They found that workplace ostracism was negatively related to knowledge sharing, and that this relationship was moderated by LMX quality. Specifically, the negative effect of workplace ostracism on knowledge sharing was weaker when LMX quality was high, and stronger when LMX quality was high. Similarly, a study by Chen and Li (2018) found that a high-quality LMX relationship can reduce the

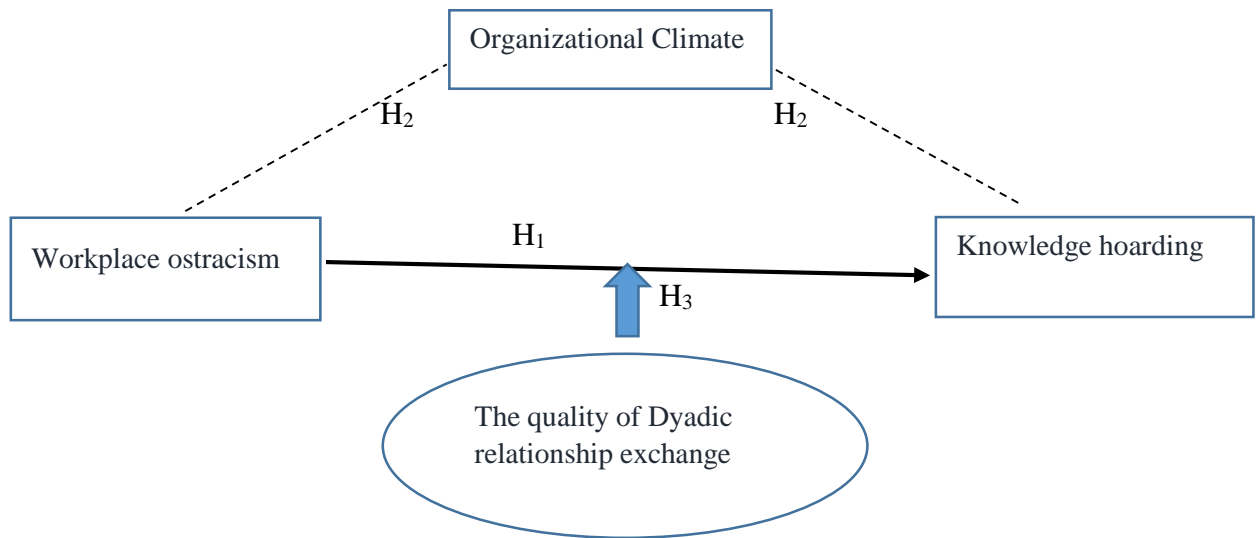
negative effects of ostracism on employee performance. This is because a positive relationship can provide employees with the necessary support and resources to overcome the negative effects of ostracism and maintain their job performance. In another study by Yang et al. (2019), it was found that a strong leader-member relationship can mitigate the effects of ostracism on employee emotional exhaustion. This is because a positive relationship can provide employees with emotional support and understanding, which can help them cope with the negative emotions caused by ostracism.

Research has shown that the moderating impact of LMX, specifically the quality of dyadic relationships, is not significant in SEM analysis. However, the slopes between predictor and outcome variables are parallel across levels of the suggested moderator. For instance, Mumtaz & Rowley (2019) found that LMX did not significantly modify pathways in the link between work satisfaction and organizational commitment. Similarly, Xue et al. (2017) found that role stressors have a significant impact on both emotional exhaustion and job satisfaction, which in turn affect respondents' intentions to leave their organization. Furthermore, Harun et al. (2022) found similar patterns in role stresses and outcomes like turnover intentions. Porter et al. (2019) found no moderating impact in workplace exclusion and employee attitudes. This parallel slope pattern provides partial evidence for LMX's potential moderating role.

Overall, the empirical literature on the moderating role of quality of dyadic relationship exchanges in the link among knowledge hoarding and workplace ostracism consistently supports the idea that a positive leader-member relationship can buffer the negative effects of ostracism. This highlights the importance of building positive relationships in the workplace, as it can help individuals cope with negative experiences and maintain their performance and well-being. Hence the empirical literature on the moderating role of quality of dyadic relationship exchanges in the link among knowledge hoarding and workplace ostracism provides strong evidence for the importance of positive leader-member relationships. The use of the LMX scale in these studies has consistently shown its reliability and validity in measuring the quality of the relationship, and further research is needed to explore the effects of other factors on this relationship.

2.7 Conceptual frame work and Study hypotheses

This part covers the research model, studies that back the construction of this model, selection of the model's component constructs, and construction of the hypothesis grounded on the relationship between the constructs of the model.



Research Model

The three hypotheses presented below are grounded as per the research model shown above in figure 2.1. These hypotheses are tested and supported using data collected from participant selected from Ministry of National Defense employees. A research hypothesis is defined by Saunders et al. (2009, p. 124), as a testable statement concerning the connection between two or more ideas or variables in a theory. In other words, a hypothesis is a proposition that can be scientifically tested. As a result, when one states a hypothesis, it should be put in a manner that can be confirmed or proved to be incorrect by an empirical test (Saunders et al., 2009).

2.7.1 Workplace Ostracism vs. Knowledge Hoarding

Knowledge hoarding in the workplace can create a toxic environment, leading to exclusion and mistrust among team members. This can hinder organizational progress and employee well-being. Fear of undervaluation can cause employees to hide valuable knowledge as a self-preservation mechanism, with studies showing a positive correlation between these behaviors (Connelly et al., 2012). This breakdown in communication intensifies workplace ostracism, establishing a detrimental cycle that impedes both organizational progress and employee well-being. Several well-known authors have made significant contributions to the understanding of this hypothesis. For instance, Robinson, O'Reilly, and Wang (2013) conducted a study that examined the link between workplace ostracism and knowledge hiding. Their findings indicated that employees who experienced workplace ostracism were more likely to involve in knowledge hiding behaviors as a means of self-preservation. Therefore, based on the above justification, this research proposal posits a hypothesis that suggests a positive correlation

between workplace ostracism and knowledge hoarding behaviors among employees within the Ministry of National Defense.

H1: Workplace ostracism will have a significant positive relationship with knowledge hoarding among employees.

The hypothesis suggests a significant positive correlation between workplace ostracism and knowledge hoarding behaviors among employees. It is based on the assumption that when employees experience workplace ostracism, they are more likely to retain valuable knowledge as a protective mechanism or as a form of retaliation. This hypothesis is rooted in the COR (Conservation of Resources) theory, which posits that individuals strive to protect and build their personal resources in the workplace.

2.7.2 Mediation of Organizational Climate

Research indicates that employee creativity thrives in a positive organizational climate characterized by innovation, supportiveness, and psychological safety (Tu et al., 2019). Adverse organizational climates, such as workplace ostracism, impede employee creativity (Kwan, Zhang, Liu, and Lee, 2018). Sahito, A. A., Hassan, N., and Lahbar, G. M. (2023) studied the relationship between workplace ostracism, knowledge hoarding, task performance, and organizational climate. The study concluded that organizations should strive to create a positive organizational climate that encourages knowledge sharing and discourages workplace ostracism in order to improve employee performance. Dash et al. (2022) investigated the relationship between workplace ostracism, knowledge hoarding, and organizational climate. Their findings highlight the significant role of organizational climate in improving the relationship between workplace ostracism and knowledge hoarding. The researchers emphasized the need to empirically test these relationships using data collected through a dyadic approach involving both managers and employees. Based on the existing literature, and this justification another hypothesis emerges, suggesting

H2: organizational climate, as perceived by both managers and employees, acts as a mediator in the relationship between workplace ostracism and knowledge hoarding.

This hypothesis proposes that the overall organizational climate, which includes elements such as trust, support, and communication, mediates workplace ostracism and knowledge hoarding behaviors. It is expected that a more positive organizational climate will mitigate the negative effects of workplace ostracism on knowledge retention. The influence of organizational climate

on military effectiveness is critical. A positive and inclusive climate encourages open communication, trust, and collaboration among military personnel. In contrast, a negative climate characterized by workplace ostracism can undermine morale, teamwork, and the sharing of critical information. Therefore, understanding and empirically investigating the mediating role of organizational climate in the relationship between workplace ostracism and knowledge hoarding is critical for identifying interventions and strategies to cultivate a supportive climate within.

2.7.3 Moderation Role of Quality of Dyadic Relationship Exchanges

A study by Chen and Li (2018) discovered that a high-quality LMX relationship can mitigate the undesirable effects of ostracism on job performance. This is because a positive relationship can provide employees with the necessary support and resources to overcome the negative effects of ostracism while maintaining job performance. Another study, Yang et al. (2019), discovered that a strong leader-member relationship can reduce the effects of ostracism on employee emotional exhaustion. This is because a positive relationship can provide employees with emotional support and understanding, helping them cope with the negative emotions caused by ostracism. Overall, the empirical literature on the moderating role of quality of dyadic relationship exchanges in the relationship between workplace ostracism and knowledge hoarding consistently supports the idea that a positive leader-member relationship can buffer the negative effects of ostracism based on this deduction, a hypothesis is formulated.

H3: The quality of dyadic relationships exchange between managers and employees will moderate the relationship between workplace ostracism and knowledge hoarding, such that the positive relationship will be stronger when the quality of these relationships is lower.

The dyadic relationships between managers and employees have a significant impact on workplace dynamics and employee behavior. The hierarchical nature of these relationships in military organizations may have an impact on knowledge sharing and hoarding behavior. Understanding the quality of dyadic relationships and how they interact with workplace ostracism and knowledge hoarding can shed light on how power dynamics, communication channels, and trust influence military personnel's behavior. As a result, the aim of this research is to close this gap by empirically investigating the relationship between workplace ostracism, knowledge hoarding, and organizational climate using data on the quality of dyadic relationships between managers and employees at Ethiopia's Ministry of National Defence.

Chapter Three: Research Design and Methodology

3.1 Research Design and Approach

The research follows a positivist approach, grounding its findings in scientific literature, formulating hypotheses from an extensive literature review, and confirming these hypotheses with data collected from a selected sample (Aparicio, M. 2016, P. 5). The research primarily employs a quantitative analytical cross-sectional study design; these studies seek to "gather data from a group of subjects at only one point in time" (Schmidt & Brown, 2019, p. 206). Cross-sectional studies frequently use surveys to collect data from participants (Schmidt & Brown, 2019, pp. 206-207), with surveys serving as the primary data collection method.

surveys are widely held as it can collect large amounts of data from a big population or sample frame at a low cost. Stangor (2011, p. 107) emphasizes the popularity of surveys in data collection, citing their ability to collect diverse data on multiple variables inconsiderable low period of time. The primary methods used in survey research are questionnaires, interviews, and observation. In this study analytical survey technique is used to reveal the causal relationship between variables under study his study used making it a good fit for this study. The survey results were gathered using Google Forms and distributed to the sample population.

3.2 Target Population and Sample Frame.

The unit of this study are the employees working in the headquarter staff of the Ministry of National Defense. Armed forces personnel, total in Ethiopia was reported at 138,000 in 2020, according to the World Bank collection of development indicators, compiled from officially recognized sources ranking the third strongest army in Africa, who are posted throughout the nation as well as across different nations on AU and UN-led peacekeeping missions. The headquarters is a seat for most of the main divisions, while others are sited in different locations due to some structural and strategic benefits. Currently, the headquarter is a permanent seat for the minister of defence office, chief of staff office, deputy chief of staff and other eight main department divisions namely: financial sector management, logistics main department, human resource management main department, communication and information main department, educational and training management main department, health main department, general service main department, and justice main department. Each main department has a sub-division, main directorates, directorate, a dedicated team, subordinate desks, and experts.

According to human resource report of the headquarter **2560** military personnel are currently working in the head quarter as of December 2023. All staff units of the Ministry of National Defense are organized in the hierarchical order of the main director, director, team leader, desk coordinator, and experts.

The total population of these units is around 2560 comprising of unit directors, team leaders, desk coordinators, experts, and support teams. Each unit has a workforce that contributes to the sampling population.

3.3 Sample Method

The unit of analysis for this study are employees of ministry of national defence Headquarter.

Brace (2008) emphasizes the need for careful sampling in social research. The selection of the study sample is crucial in answering research questions and attaining study objectives. According to Brace (2008), the primary goal of social science researches is testing and verifying theories and hypotheses. And yet, including all members of the population in a study can be challenging (Healey, 2009). To overcome this challenge, researchers must select a representative sample from the population under consideration. Elsheikh (2011, p.187) also observes that selecting a small group of people can result in more accurate generalizations about the larger population.

The study population is staff members and employees at the headquarter of the Ministry of National Defense. However, most of the participants are posted in hostile areas of the country; most of them neither have internet access to contact them for this survey nor are in an ideal situation for responding. Further, there are also strict no-internet and phone usage policies in some departments due to the confidentiality of the work. Hence, only participants with access to the internet and computer from the headquarter are selected as samples for the study.

This study used convenience sampling, which is described by Zikmund et al. as a method of selecting people or units that are easily accessible. According to Denscombe (2010), researchers frequently use convenience sampling due to limited resources and time, selecting the most readily available participants when multiple options are equally valid (2010, p. 38). This method is suitable when the researcher can straightforwardly contact possible and willing

respondents over existing connections and the sample is representative of the larger population (Saunders et al., 2012).

3.4 Data collection method.

This research in nature is a quantitative study, and data was collected using a survey. surveys are a popular and cost-effective method of collecting huge amounts of data from a wide population Saunders et al. (2009, p. 144). In this study, questionnaires were used as the survey instrument, but other methods such as telephone interviews, in-person interviews, mail surveys, internet surveys, and mall intercept interviews (Zikmund et al., 2009) could have also been utilized.

3.5 Data collection Instruments

In this study, all data and information were acquired from publications and journals as secondary data collection techniques, while questionnaire survey forms were disseminated as primary data collecting methods. The researcher has chosen a questionnaire based on previous studies as the primary data collection tool, which is appropriate for the chosen research method. According to Connaway and Powell (2010, pp. 146-147), questionnaires have several advantages, including the elimination of interviewer bias, the facilitation of data collection and analysis, the encouragement of honest responses, the standardization of the questioning process, and the ability to collect a large volume of data in a short period of time. Furthermore, questionnaires can be distributed to a diverse group of participants regardless of location or time constraints, making them an appropriate choice for this study. The questionnaire items for this study were adapted from previous research. Participants are chosen from the headquarters of the Ministry of National Defence of Ethiopia, addressing the majority of hierarchical rank ranging from general officer to non-commissioned officers, as well as civil employees working at various levels ranging from director to supportive team.

The questioners were distributed in the field of the headquarters' daily status report over a 10-day period using a Google Form questionnaire link provided via mobile devices such as tablets and smartphones. The daily status report is done three times a week on Mondays, Wednesdays, and Fridays from 8:00 to 8:30 a.m. on working days, and it will be done daily based on the army's situational condition as determined by human resource management. Additionally, the daily attendance of both contractual and permanent civilian employees at the headquarters was

monitored. According to Smith (2015), in the military, this type of report is known as a "daily status report" or a "daily situation report." A supervisor or unit leader submits these reports, which update the status of personnel, equipment, and operations (Smith, 2015). They usually include information about the number of personnel present, changes in personnel status, equipment readiness, and updates on ongoing operations (Smith, 2015). These reports are essential for keeping higher-level commanders informed and identifying any issues that need to be addressed (Smith, 2015).

According to Du et al. (2017), using mobile devices such as tablets and phones has been shown to be more accessible and convenient for participants, resulting in higher response rates when compared to traditional methods like email surveys. Furthermore, mobile devices can provide real-time data collection and reduce response time, resulting in more accurate and timely data (Khare & Kulkarni, 2016). As a result, it is reasonable to use tablets and phones to collect responses from participants rather than sending them directly via email in Google Forms questionnaires.

3.6 Measurement Scale

According to various research in social science studies, a five-point liker scale is a well-known technique of measuring people's attitude and personal views using self-measure questionnaires (Stangor, 2011). A five-point Likert scale was used to assess the respondent's attitude toward each variable using a carefully written statement spanning from highly negative to very positive, with the ordinary scale measures of strongly disagree, disagree, neutral disagree, and strongly disagree.

The questionnaires were carefully prepared to avoid responses that would be biased in favour of the research objectives. The researcher used questionnaires because they promote honesty and allow for the accurate measurement of people's views and perception. Furthermore, it enables researchers to collect a big volume of data and high-quality material on a certain topic in a short period of time.

3.7 Measurement Construct

In this questionnaire design process, the questionnaire separated into three sections, which were Section A: Demographic, Section B: The 10-item measure that assesses the frequency of feeling excluded by others at work is the Workplace Ostracism Scale developed by Ferris, et

al. (2008) is used as a independent variable measuring scale of the target population. The Knowledge Hoarding Scale (KHS) developed by Connelly et al. (2012) is a self-report measure with 16 items that assess different dimensions of knowledge hoarding behaviour is employed to asses to measure the dependent variable in the study. The 17-item measuring scale of Organizational Climate developed by Patterson, et al. (2005) is a subscale of the Organizational Climate Measure (OCM), which is a multidimensional measure of employee perceptions of their work environments is employed so we can understand how the variable mediate the relationship between dependent variable and independent variable. Finally, Wang et al. (2018) 7-item measuring scale of LMX quality of dyadic relationship exchange between leader and member of military organization is a self-report questionnaire that assesses the degree of mutual trust, respect, and obligation between the leader and the follower is employed to understand the moderating role of the quality of dyadic relationship exchange between leader and member of the target population. Table 3.1 will summarize the constructs used in the study.

Table 3. 1 Study Contract And Supporting Prior Studies

s. no	Constructs	Measurement items	Source
1	Work place ostracism	WO1: Others ignored me at work.	Ferris, et al. (2008)
		WO2: Others left me out of the loop at work.	
		WO3: Others avoided me at work.	
		WO4: Others shut me out of the conversation at work.	
		WO5: Others at work treated me as if I wasn't there.	
		WO6: Others at work acted as if I didn't exist.	
		WO7: Others at work did not invite me to join them for lunch or coffee breaks.	
		WO8: Others at work did not notice when I was absent.	
		WO9: Others at work did not acknowledge my presence.	
		WO10: Other at work did not return my greeting	
2	Knowledge hoarding	KH1: I am reluctant to share my knowledge with others.	Connelly et al. (2012)
		KH2: I keep my knowledge hidden from others.	
		KH3: I refuse to share my knowledge with others.	
		KH4: I take steps to protect my knowledge from others.	
		KH5: I am hesitant to share my knowledge with others.	
		KH16: I intentionally hide my knowledge from others.	
		KH7: I conceal my knowledge from others.	
		KH8: I withhold my knowledge from others.	
		KH9: I hoard my knowledge from others.	
		KH10: I retain my knowledge for my own use.	
		KH11: I reserve my knowledge for my own use.	
		KH12: I keep my knowledge to myself.	

		KH13: I do not share my knowledge with others.	
		KH14: I possess knowledge that others do not have.	
		KH15: I am reluctant to protect my knowledge with others.	
		KH16: I am hesitant to hide my knowledge from others.	
3	Organizational climate	OC1: I am encouraged to take risks.	Patterson, et al. (2005)
		O2: My supervisor gets me involved in decisions that affect my work.	
		OC3: I receive the recognition I deserve.	
		OC4: I know what is expected of me.	
		OC5: My organization's mission is clear and understandable.	
		OC6: Our organization's vision is clear and understandable.	
		OC7: Our organization has clear goals and objectives.	
		OC8: Information flows timely within our organization.	
		OC9: Our organization's policies and procedures are clearly communicated.	
		OC10: We have a clear understanding of the direction of our organization.	
		OC11: Our organization's goals are consistent with our mission and vision.	
		OC12: information flows freely within our organization.	
		OC13: Our organization is concerned about its public image.	
		OC14: Our organization's communication with its customers is open and honest.	
		OC15: Our organization's communication with its suppliers is timely.	
		OC16: Our organization's communication with its customers is constructive.	
		OC17: Our organization's communication with its suppliers is reliable.	
4	Quality of dyadic relationship exchange via LMX	QDRE1: I like my supervisor very much as a person.	Wang et al. (2018)
		QDRE2: My supervisor is the kind of person one would like to have as a friend.	
		QDRE3: My supervisor is a lot of fun to work with.	
		QDRE4: My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.	
		QDRE5: My supervisor would come to my defense if I were "attacked" by others.	
		QDRE6: My supervisor would defend me to others in the organization if I made an honest mistake.	
		QDRE7: I do work for my supervisor that goes beyond what is specified in my job description.	

3.8 Method of Data Analysis

In this study, various statistical methods were employed to characterize the study's construct and test the research hypotheses. The research model was evaluated using Structural Equation Modeling (SEM), while mediation and moderation analyses were conducted to assess the research hypotheses.

SEM is a multivariate technique that combines elements of factor analysis and multiple regression (Hair et al., 2019). It enables researchers to simultaneously explore a series of interconnected relationships among measured variables and latent constructs (variates), as well as between multiple latent constructs. Structural Equation Modeling is a valuable tool for analyzing and establishing causal connections between variables (Stangor, 2010, p. 176). By employing the structural equation modeling approach, the study examines the causal linkages among the constructs. (Saunders et al., 2009).

The structural equation modeling (SEM) framework encompasses two primary sub-models, namely the measurement model and the structural model (Byrne, 2010). By integrating both the measurement and structural models within a single analysis, SEM offers a more comprehensive empirical approach to investigating theoretical models (Hair et al., 2019, p.699). As latent variables are not directly measurable due to their theoretical nature, observed or indicator variables are employed to represent them (Zulu, 2007). The measurement model can be conceptualized through two distinct approaches. In the reflective approach, indicators or manifest variables are considered to be caused by the constructs they represent. These indicators serve as reflections or measurements of the underlying constructs, which are treated as latent variables influencing the observed indicators. Conversely, in the formative approach, constructs are viewed as being formed or defined by their indicators or manifest variables. The indicators are regarded as the constituent elements or building blocks that define the construct. Unlike the reflective approach, the formative approach does not assume the construct to be a latent variable causing the indicators; instead, it is perceived as a composite or combination of the indicators.

When it comes to data analysis and statistical modeling, the choice between the reflective and formative approaches has implications for how constructs are handled and the appropriate analysis techniques employed. In the case of the reflective approach, Confirmatory Factor

Analysis (CFA) is commonly utilized to evaluate the measurement model, assess factor loadings, and assess the fit of the reflective model. On the other hand, the formative measurement model requires a distinct focus. It entails examining the relationships between the indicators and the construct, often through regression-based techniques. Partial Least Squares (PLS) path modeling is a widely used method for analyzing formative models. This approach estimates the relationships between the indicators and the construct by employing a component-based approach (Byrne, 2010).

3.8.1 Data Screening

According to Mujis (2004), the term missing data refers to instances where respondents fail to complete a specific item or provide incorrect responses. However, in this study, the occurrence of missing data is anticipated to be minimal due to the design of the Google Forms program, which does not let respondents able skip items. Despite the expectation of very low missing data, a method for identifying missing data is still employed. Hair et al. (2019, p. 72) suggest utilizing imputation methods when the missing data is less than 10%.

Uncorrected miscoding is a prominent cause of outliers (Holmes-Smith, 2011). However, this study eliminates the possibility of uncorrected miscoding as the data is electronically removed to the analysis software. Additionally, no outliers are anticipated in this study since the instrument employed utilizes a 5-point Likert scale wherein respondents choose a value between 1 and 5.

3.8.2 Data Distribution

SMART PLS, being a statistical tool, offers the advantage of not requiring any distributional assumptions and is particularly suitable for analyzing non-nominal data, making it well-suited for two-tailed percentile bootstrapping (Hair et al., 2019, p. 6). In the context of this study, where SEM-PLS was employed, there was no need for testing the data normality.

3.9 The Structural Equation Modeling.

Structural Equation Modeling (SEM) comprises two main constituents: the measurement model and the structural model (also known as the inner model). The measurement model encompasses the indicators and their associations with the constructs, while the structural model comprises sequences of interconnected dependence relationships, where a dependent construct in one relationship may serve as a predictor construct in another relationship (Hair et

al., 2019). Prior to delving into the structural model, it is necessary to assess the reliability and validity of the measurement items and constructs within the measurement model.

3.9.1 Testing The Measurement Model

To ensure the robustness of the measurement instruments employed in the research, reliability and validity tests are conducted. The assessment of the measurement model's strength involves evaluating item reliability, internal consistency reliability, convergent validity, discriminant validity and collinearity test. These tests serve to validate the reliability and validity of the measurement instruments used in the study.

3.9.1.1 Item Reliability

Item dependability, as defined by Geffen and Straub (2000), refers to the degree to which the value of an item aligns with the estimation of the underlying construct provided by the measurement. This is assessed through the factor loading on the measurement variable. In line with the recommendations of Hair et al. (2019, p. 663), a standardized factor loading cut-off value of 0.5 was employed in this study.

3.9.1.2 Internal Consistency Reliability

Internal consistency reliability pertains to the degree to which the items employed to measure a concept exhibit consistent variation, indicating that they are more likely to represent the same underlying construct. In SEM analysis, Cronbach's alpha and composite reliability are frequently utilized to evaluate internal consistency and dependability. According to recent studies, Cronbach's alpha coefficients exceeding 0.7 are generally considered to indicate satisfactory reliability (Taber, 2018; Cho & Kim, 2015). In this study, Cronbach's alpha values were employed to assess the reliability of the measurement items, with a cut-off value of 0.7.

3.9.1.3 Construct Validity

The validity of a measuring instrument refers to its capacity to accurately measure the intended constructs (Hair et al., 2019). It is not possible to directly test the validity of latent concepts due to the unavailability of true values. However, the characteristics of a measure can offer evidence, though not definitive proof, of its validity. In this study, the evaluation of convergent and discriminant validity follows the standard procedure to ensure the validity of the measures. Convergent and discriminant validity assessments are conducted as a means to provide supporting confirmation of measure validity.

3.9.1.3.1 Convergent Validity

Convergent validity indicates the degree to which measurement items within a concept demonstrate similarity to one another (Phang et al., 2006; Hair, 2019). Indicators of convergent validity include item and internal consistency reliability. Additionally, the average variance extracted (AVE) serves as supplementary evidence by representing the average variance in item values anticipated by the underlying construct, as projected in the model (Hair et al., 2019).

3.9.1.3.2 Discriminant Validity

Discriminant validity, in contrast, denotes the degree to which measurement items associated with a specific construct reflect that construct rather than other constructs within the same measurement model (Rönkkö & Cho, 2022). One approach to demonstrate discriminant validity involves examining the factor loadings of measurement items across all constructs in the model. If an item exhibits higher factor loadings on its own construct compared to other constructs, it suggests discriminant validity (Tóth-Király et al., 2017). Another method to assess discriminant validity is to evaluate whether the square root of the Average Variance Extracted (AVE) value for each construct exceeds its correlations with other constructs (Roemer et al., 2021). If this condition is met, it indicates that the constructs in the model account for more variability in their respective items than they do with other constructs.

3.9.1.4 Collinearity Variance Inflation Factor (VIF)

In SMART PLS SEM research model, we utilize collinearity Variance Inflation Factor (VIF) specifically for formative constructs. Collinearity VIF is employed to assess the presence of multicollinearity among the indicators within a formative construct (Hair Jr et al., 2019). Multicollinearity can occur when there is a high correlation between the indicators, leading to inflated standard errors and potentially biased parameter estimates (Hair Jr et al., 2019). By calculating the VIF for each indicator, we can identify if there is a high degree of collinearity (Hair Jr et al., 2019). If the VIF values surpass a predetermined threshold, typically 5 or 10, it indicates the presence of multicollinearity (Hair Jr et al., 2019). This can complicate the interpretation of the unique contribution of each indicator to the construct. Addressing multicollinearity through indicator selection or data transformation becomes necessary to ensure the robustness of our SMART PLS SEM model and the accuracy of the estimated relationships between formative constructs and their respective indicators (Hair Jr et al., 2019).

3.9.2 Testing The Structural Model

Once the criteria of the measurement model have been met, it is essential for the researcher to assess the structural model (Hair et al., 2019, p. 7). After confirming the validity of the measurement model, the structural model is examined to determine its overall explanatory power, as well as to test specific hypotheses regarding cause-effect relationships among constructs. The explanatory power of research models was evaluated by Hair et al. (2019) using coefficient of determination (R^2) values. R^2 indicates the proportion of variance in a dependent variable that can be attributed to influencing factors. According to Cohen (1988), R^2 values around 67% denote significant explanatory power, 33% signify moderate explanatory power, and 19% indicate weak explanatory power.

Path coefficients gauge the strength of cause-and-effect relationships among interconnected variables (Hair, 2019; Wang & Chiu, 2011). Each hypothesized relationship and its associated conditions are represented by a path in the proposed structural model. In SMARTPLS, the bootstrapping method is employed to assess the significance of path coefficients (β) (Becker et al., 2023; Hair et al., 2022). The bootstrapping process generates multiple random samples from the original data set¹⁵. As suggested by Becker et al. (2023) and Hair et al. (2022), 5,000 bootstrap samples were used in this study. The statistical significance of path coefficients was determined through t-tests conducted on the bootstrapped samples. The significance level was set at 5% ($p < .05$), unless explicitly stated otherwise. According to Hair et al. (2022) and Hollar (2017), path coefficients should exceed 0.2.

3.9.2.1 Mediation in PLS-SEM

A mediating effect, also referred to as an indirect effect or mediation, occurs when a third variable plays the role of an intermediary in the relationship between the independent and dependent variables. This means that the influence of the independent variable X on the dependent variable Y is mediated by a third variable M, which is commonly known as the mediating variable or mediator (Christian M. Becker et al., 2022).

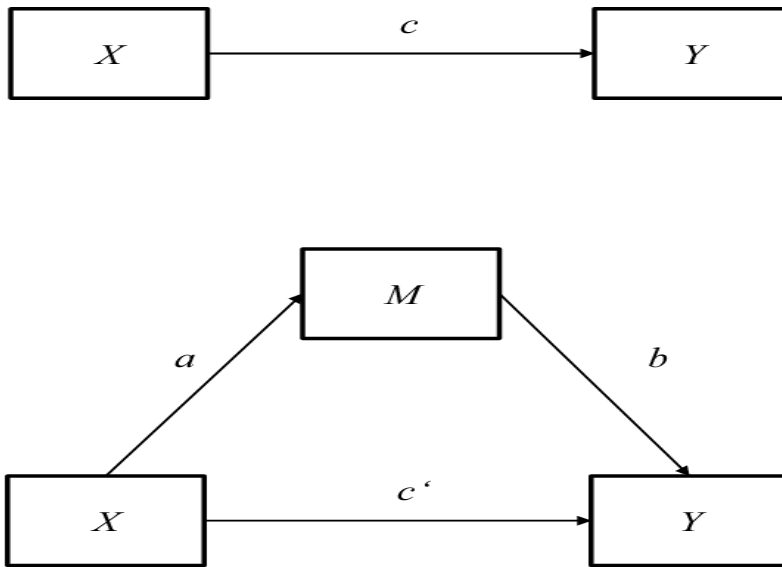


Figure 3.1 General Mediation Model

The effect of the independent variable X on the mediator M is represented by path 'a', while path 'b' illustrates the effect of the mediator variable M on the dependent variable Y . Additionally, path 'c' represents the direct effect of the independent variable X on the dependent variable Y . The indirect effect of the independent variable X on the dependent variable Y is calculated as the product of paths 'a' and 'b'. The total effect of the independent variable is determined by summing the indirect effect 'ab' and the direct effect 'c'.

The first step involves assessing the significance of the indirect effects 'ab'. If the indirect effect 'ab' is statistically significant, it indicates the presence of a mediation effect. The next step is to determine the type of mediating effect, such as full or partial mediation. Full mediation occurs when the direct effect (c') is negligible, but the indirect effect (ab) is substantial. This suggests that only the indirect influence through the mediator exists. In other words, full mediation implies that variable M completely mediates the relationship between variable X and variable Y . On the other hand, partial mediation occurs when both the direct effect (c') and indirect effect (a**) are significant. There are two distinct types of partial mediation in the context of this study: Complementary Partial Mediation and Competitive Partial Mediation:**

Complementary partial mediation is a situation where both the direct effect (c') and the indirect effect (ab) have positive and negative values. When both ab and c' are statistically significant, and there is a positive value for $a \times b \times c'$, it suggests that the mediator M plays a role in mediating the influence of X on Y . However, X still explains a portion of Y that is independent of M . This theory of complementary mediation indicates that the intermediate variable M explains,

potentially confounds, or falsifies the interactions between the independent variable X and the dependent variable Y (Hair et al., 2017). In competitive partial mediation, the direct effect (c') and the indirect effect (a×b) have opposite directions. A negative value for a×b×c' indicates competitive mediation (Hair et al., 2017). As mentioned earlier, this implies that M mediates a portion of the effect of X on Y, while X still explains a portion of Y that is independent of M (Hair et al., 2017).

Partial Least Squares structural equation modeling (PLS-SEM) is a variance-based technique used to analyze latent variables, particularly composites, and their interactions (Henseler, 2017). It is a valuable tool for hypothesis testing and addressing research questions. One research question in this study focuses on mediation, which examines the presence of an intermediate variable or process that transfers the impact of an antecedent variable to an outcome (Aguinis, Edwards, & Bradley, 2016). In PLS-SEM, when testing mediation effects, the indirect effects sample should be bootstrapped to obtain population distribution information (Henseler et al., 2009). PLS-SEM estimates the underlying PLS path model by analyzing each subsample separately (Hayes and Scharkow, 2013). According to Hayes and Scharkow (2013), the recommended approach for detecting mediation effects is to use both percentile bootstrap confidence intervals and bias-corrected bootstrap confidence intervals.

To analyze a mediator model, Zhao et al. (2010), as well as Hair et al. (2017) in the context of PLS-SEM, propose the following model: $p_1 = \beta_1$ represents the path between X and M, $p_2 = \beta_2$ represents the path between M and Y, and $p_3 = \beta_3$ represents the direct effect of X on Y.

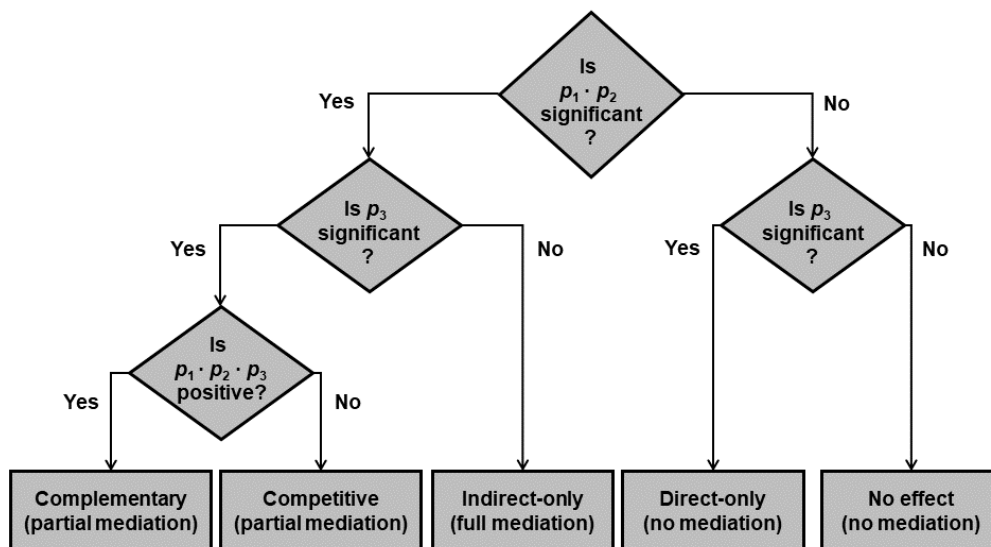


Figure 3 2 Zhao model of mediation for SEM PLS

Source: Hair et al. (2017)

3.9.2.2 Moderation in SAMRT PLSE

A moderator variable (or construct) modifies the strength or direction of a link between two constructs in the model. The researcher typically hypothesizes moderating associations ahead of time and tests them specifically. The moderating relationship is tested by examining the influence of the interaction term (i.e., the product of the moderator and predictor variables), which reveals whether changes in the moderator strengthen or weaken the focal relationship. A simple slope plot can also be used to analyze the moderating effect (Hair et al., 2022).

When calculating the findings, SMARTPLS 4.0 automatically adds a relationship between the moderator and the dependent variable of the moderated relationship, regardless of whether it was included in the model. This is a statistical requirement for obtaining the appropriate moderation results. SMARTPLS 4.0 provides three methods for moderation testing: orthogonalizing, the product-indicator approach, and the two-stage approach. If the moderator (or predictor) is formatively measured, the Two Stage Technique is used. If both the moderator and the predictor are reflectively measured, any of the three methods can be applied. The two-stage approach has the greatest ability to detect meaningful interactions. In the case of a small sample size, we usually prioritize statistical power, so the Two-Stage technique is a better option.

SMARTPLS computes the moderation findings using a two-stage bootstrapping approach (Becker et al., 2018), using the latent variable scores of the latent predictor and latent moderator variables from the main effects model (excluding the interaction term). These latent variable scores are saved and used to create the product indicator for the second stage of analysis, which includes the interaction term, predictor, and moderator variables. Further Simple slope plots are commonly used to depict moderator analysis results. SMARTPLS 4.0 incorporates basic slope charts into the results report (Hair et al., 2022).

3.10 Ethical Consideration

Throughout the study, the researcher maintained scientific objectivity and acknowledged the limitations of their expertise. All individuals involved in the research will be afforded the right to privacy and treated with dignity, ensuring no harm comes to the subjects. The researcher will uphold strict confidentiality regarding the information obtained. Collaboration with others and acknowledgment of the sources from which information was gathered will be duly recognized. The ethical considerations forming the foundation of this research include fairness, openness of intent, disclosure of methods, and respect for the integrity of individuals.

Furthermore, the participation of subjects in the research is based on their voluntary willingness to provide information.

Chapter Four: Data Analysis and Interpretation

4.1 Introduction

The aim of this chapter is to present the research analysis results. The chapter initiates with a discussion on data screening, respondent rate, and the examination of descriptive statistics regarding respondent characteristics utilizing the Google Forms platform. Subsequently, a correctional analysis is performed, followed by an analysis of the structural model using SEM (Structural Equation Modelling) at two levels: the measurement model and the structural model.

4.2 Data Screening

In this study, the use of electronic data collection through Google Forms with a Likert scale ranging from 1 to 5 reduces the likelihood of outliers. The final data is downloaded as an Excel file (xls) from Google Forms and directly uploaded to SMARTPLS software, minimizing manual intervention throughout the data handling process. Consequently, the chances of error and outliers are significantly reduced.

Out of the 144 respondents, only 30 missing data points were identified, as Google Forms prevents respondents from skipping questions. As per Hair (2019, p. 60), such missing data is considered ignorable, requiring no corrective action. Moreover the significance of the missing data of each measurement item is presented in Apendice C of the study.

According to Hair et al. (2019), SMARTPLS does not necessitate the assumption of normal distribution in the data. Therefore, in this study, normality testing was not conducted since SMARTPLS is utilized as the primary analysis tool for the data.

4.3 Response Rate

Convenience sampling was utilized, as detailed earlier in the study. Data was collected throughout ten working days. Table 4.1 shows that there are now 2564 individuals reporting to the headquarters. The average daily status personnel report for December 2023 was 535. While the remaining workers reported on duty, permitted leave, and absent to report on time as noted in the report.

The survey was presented to the participants within 10 consecutive working days from December 13 to December 28, 2023. During this period, the survey was presented 558 times and 144 responses were received on Google Forms. A huge number of the respondent were not

willing as a substantial amount of the population were reported daily and a survey were presented to them in Google form via tablets phones and links asses to them, yet due personal unwillingness there were a high rejection rate.

Table 4 1: Sampling Frame and Sample Size

S.No	Description	Sample Frame
1	personnel at HQ (A)	2564
2	On Duty(B)	1671
3	Permission(C)	93
4	Absent To Report(D)	265
5	Total Present Report(E=A-B-C-D)	535
6	Asked Respondent	558
7	Respondent	144
8	Respondent Rate	31.16%

As indicated in the table above, the response rate is 31.16 percent, which is regarded a reputable response rate because it surpasses the acceptable standard for tablet and mobile forms web surveys Petrovcic et al (2016). Researchers have noticed much greater decreases in mobile forms than on desktop. Petrovcic et al. (2016) gave an online questionnaire using cellphones as the only medium and received a 19.6% response rate, which they considered satisfactory for such a mobile design.

Manfreda et al. (2008) evaluated over 200 web surveys and discovered that average response rates for online polls varied substantially depending on design and demography, with commercial surveys receiving less than 10% and academic/business surveys receiving mean rates of over 33%. They argued that anything above 20% is often sufficient (Manfreda et al., 2008). According to previous studies, anything between 20 and 30 percent is reasonable for Google Form surveys delivered on tablets and phones (Manfreda et al., 2008; Shih & Fan, 2008; Petrovcic et al., 2016).

4.4 Respondent Demographics

This section provides an analysis of the sample's characteristics in terms of gender, age, marital status, military rank, years of service, level of working status, and educational level within the Ministry of Defence headquarters.

A. Gender

Gender
142 responses

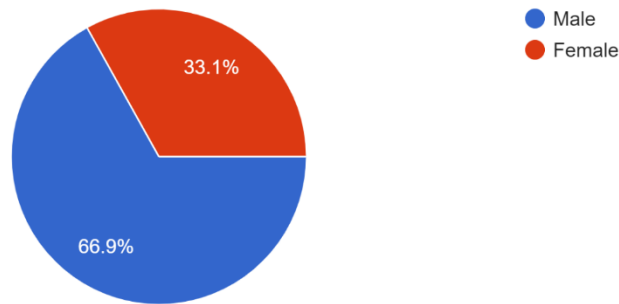


Figure 4 1 Gender Distribution

Source: Google format out put

As shown in the figure 4.1 about 66.9% of the respondent were males which is the majority of the sample. Hence the figure of male respondent was more than twice than the female Respondent.

B. Age

From figure 4.2 below, the widely held of the respondent were under age of 45 which shows about 77% of the respondent. About 50% of the respondent are below 35 years old. About 16% of the respondent are above 45 and none of the respondent exceed 55 years of age.

Age
143 responses

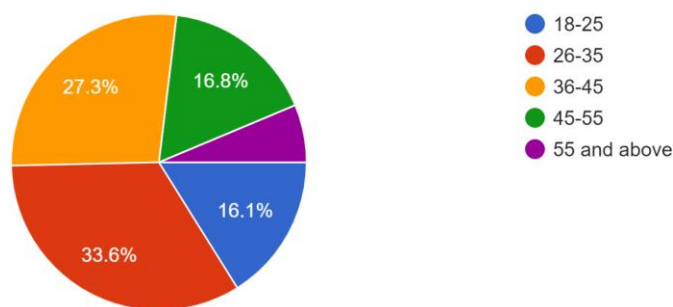


Figure 4 2: Distribution of Age

Source: Google form output

Based on the data from ministry of national defence human resource management main department more than 65% of its employees are younger than 35 years of age which indicate the above sample is representative of the ministry of national defence employee population.

C. Marital status

The survey indicates that 48.2% of the respondent were married while about 46.8 % of the respondent were single. None of the participant were divorcee separated.

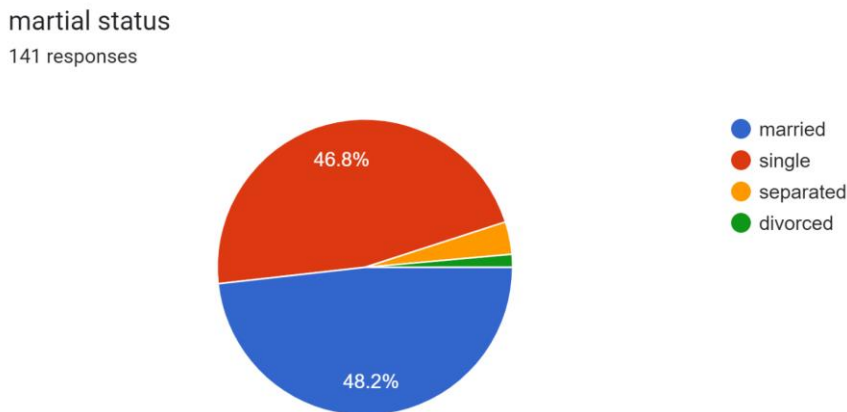


Figure 4 3: Marital Status of the Respondent

Source: Google Form Output

D. Military rank

As shown in the figure below 33.6% of the respondent were line officers. Non-commissioned officers were shown to be about 32.2% while higher rank officer respondent were 24.5% of the respondent. In this survey very small negligible amount of general officers and civilians were participated.

Military Rank
143 responses

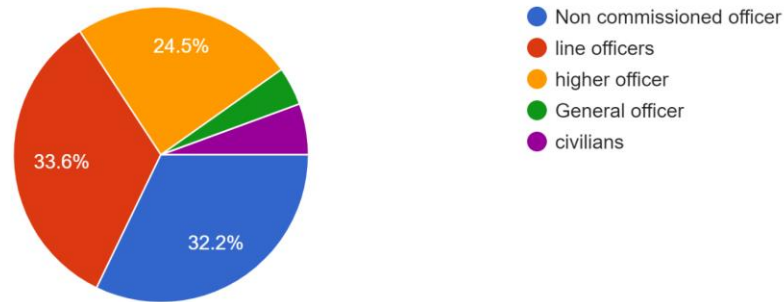


Figure 4 3: Military Rank

Source: Google form output

E. Years of Service

Most participant of this research have a work practice of more than 7 years covering about 71% of the respondent. Only 29 % of the respondent have served below 7 years from whom a service below a year were is 5.5%.

years of service
144 responses

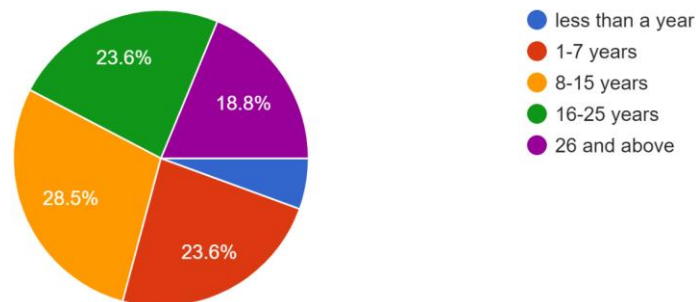


Figure 4 4: Years Of Service

Source: Google form output

F. level of work status

As shown on the figure 4.6 below majority of the respondent were experts covering 53.5% of the sample. Desk coordinators on the other hand represent 23.6% of the respondent while team leaders show 9.7%. Directorial level and supportive team respondent were about 13.2%.

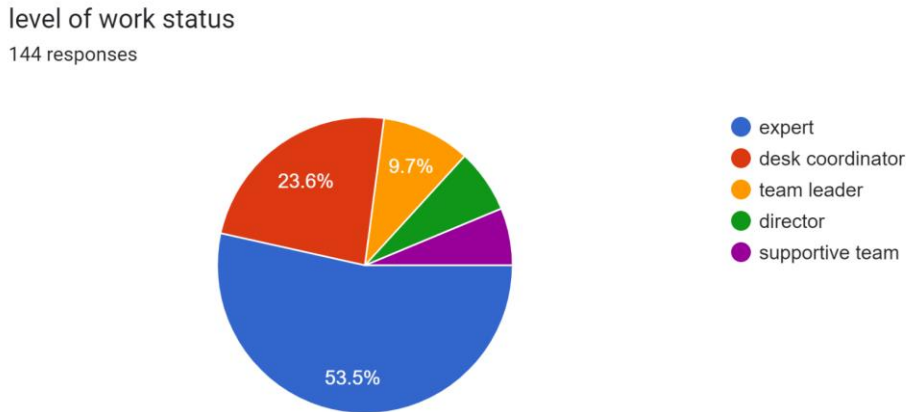


Figure 4 5:level of work status

Source: google form output

G. Educational Level

The survey conducted to assess the educational level of the respondents revealed that over 62% of them possess a bachelor's degree, while approximately 19% have obtained a master's degree. The remaining respondents possess diverse educational backgrounds, with at least a high school graduation level.

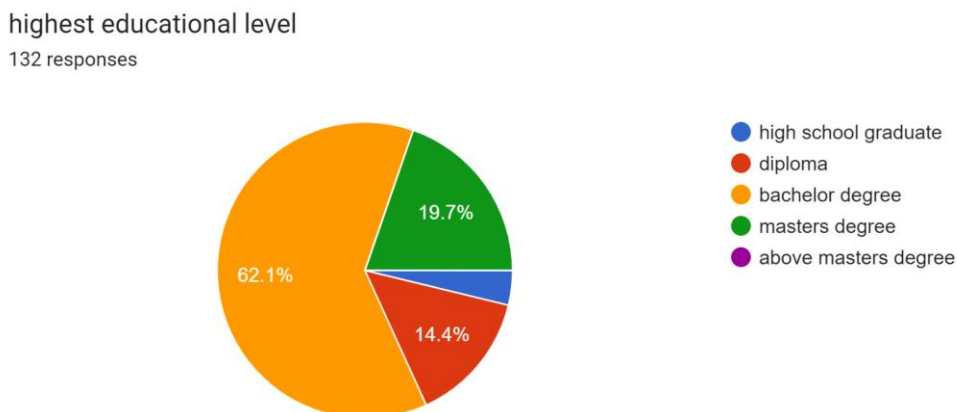


Figure 4 6:educational level of respondent

Source: Google form output

4.5 Descriptive statics

Zikmund et al. define descriptive statistics as ‘Statistics which summarize and describe the data in a simple and understandable manner’ (2009, p. 413). The main purpose of descriptive statistics is to check variables for any violation of the assumptions that are the basis of the statistical techniques used to address research questions (Pallant, 2011).

Appendix C summarizes the number of valid responses, number of missing data, mean, standard deviation, skewness and kurtosis for each measurement item.

The minimum mean value in work place ostracism construct measure was "Others at work did not notice when I was absent" (WO8) with a mean of 2.514, suggesting that, on average, respondents disagreed with this statement, indicating that they felt noticed at work when they were absent (Smith, 2020). Conversely, the measure with the maximum mean value was "Others at work did not invite me to join them for lunch or coffee breaks" (WO7) with a mean of 3.09, suggesting that, on average, respondents agreed with this statement, indicating that they felt excluded from social activities at work (Smith, 2020).

Regarding the knowledge hoarding construct, the measure with the minimum mean value was "I intentionally hide my knowledge from others" (KH6) with a mean of 2.347, indicating that, on average, respondents disagreed with this statement, suggesting that they do not intentionally hide their knowledge from others (Jones, 2018). On the other hand, the measure with the maximum mean value was "I am hesitant to hide my knowledge from others" (KH16) with a mean of 3.549, indicating that, on average, respondents agreed with this statement, suggesting that they are hesitant to hide their knowledge from others (Jones, 2018).

Lastly, for the supervisor support construct, the measure with the minimum mean value was "My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question" (QDRE4) with a mean of 2.5, indicating that, on average, respondents were neutral to slightly disagreeing with this statement, suggesting that they may not fully believe their supervisor would defend their work actions without complete knowledge of the issue (Brown, 2019). Conversely, the measure with the maximum mean value was "My supervisor would come to my defense if I were “attacked” by others" (QDRE5) with a mean of 3.312, indicating that, on average, respondents agreed with this statement, suggesting that they believe their supervisor would defend them if they were attacked by others (Brown, 2019).

4.6 The Structural Equation Model (SEM)

The primary analytical approach employed for this study, as outlined in Chapter 3, is the utilization of structural equation modelling (SEM) technique. SEM has two components: the measurement model and the structural model. The first stage includes applying SEM to the confirmatory factor analysis model, also known as the outer model measurement model (Hair et al., 2019, p. 28).

4.6.1 Testing the Measurement Model

The study model is made up of four components with a total of 50 measurement items. Two of these constructs are regarded external, while the other two are recognized as endogenous. The factor loading of each indicator with regard to the factors is the most important parameter in determining the link between observable variables and latent variables. In simplest terms, factor loading shows the connection between the measurement items and the factors, which serves as a critical aspect in understanding the nature of a certain component (Hair et al., 2019, p. 123). Furthermore, Hair (2019) explains that squared factor loadings represent the percentage of variance in an observed variable that can be explained by the factor.

4.6.1.1 Construct reliability and validity

The reliability analysis results, obtained using SMARTPLS version 4.0 software (Ringle et al., 2015), are presented in Table 4.2 below. The subsequent sections discuss the outcomes of the partial least squares (PLS) measurement model for this study.

Table 4.2 displays all the Cronbach's alpha values and composite reliability values, which are found to be greater than 0.7. As suggested by Ramayal et al. (2016), this exceeds the recommended threshold for internal consistency reliability. Moreover, the average variance extracted (AVE) values presented in the table are also above 0.5, indicating an acceptable level. According to Fornell-Larcker (1981, p. 46), if the AVE is below 0.50, the variance attributed to measurement error outweighs the variance captured by the construct. Additionally, Fornell-Larcker explains that the AVE measure is more conservative compared to the construct reliability measure (composite reliability).

Table 4 2: Internal Consistency Reliability and Convergent Validity Test Results

Construct Name	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
KH	0.96	0.979	0.968	0.679
OC	0.979	0.981	0.981	0.749
QDRE	0.977	0.979	0.981	0.88

Source: SMARTPLS 4.0 output (2024)

4.6.1.2 Discriminant Validity Analysis

Discriminant validity, as described by Hair et al. (2019), pertains to the distinctiveness of a construct or variable from others. High discriminant validity implies that a construct explains a greater amount of variance in item measures compared to alternative construct (Hair et al., 2019, p. 677). Each measured item has a stronger influence on its own construct than on others.

To assess the model's constructs against the criteria of discriminant validity, the Fornell-Larcker test, as explained by Hair et al. (2019, p. 788), can be employed. Table 4.3 provides an overview of the discriminant validity results from the measurement model. The square roots of AVE values (found on the diagonal) were observed to be greater than the correlation values in the off-diagonal elements of the same rows and columns.

Table 4 3:Fornell-Larcker Discriminant validity test

Construct	KH	OC	QDRE
KH	0.824		
OC	-0.84	0.866	
QDRE	-0.835	0.776	0.938

Source: SMART PLS 4.0 output (2024)

KH-knowledge boarding OC-organizational climate QDRE-quality of dyadic relationship exchange

The HTMT (heterotrait-monotrait correlation ratio) test is an additional recommended method for evaluating discriminant validity in PLS-SEM, as stated by Hair et al. (2019, p. 788). This test calculates the ratio of between-trait correlations to within-trait correlations.

Table 4.4 presents the results of the HTMT discriminant validity test. According to Hair et al. (2019), a threshold of 0.90 is suggested for path model constructs that are conceptually similar, while a threshold of 0.85 is recommended for constructs that are conceptually dissimilar. HTMT values exceeding 0.90 indicate a lack of discriminant validity, whereas ratios below 0.85 demonstrate excellent discriminant validity.

As shown in Table 4.4, all ratios are below the 0.9 threshold, providing evidence of discriminant validity for all the reflective contracts in the path model.

Table 4 4T:HTMT Discriminant Validity Results

	KH	OC	QDRE	QDRE x WO

KH				
OC	0.852			
QDRE	0.854	0.788		
QDRE x WO	0.171	0.153	0.321	

Source: SMART PLS 4.0 output (2024)

KH-knowledge hoarding OC-organizational climate QDRE-quality of dyadic relationship exchange WO-work place ostracism.

To assess the discriminant validity of each variable, the cross-loading table is presented below (Table 4.5). It can be observed that each variable exhibits higher loadings on its corresponding construct compared to any other construct. The factor loadings of each observable variable on its respective latent construct are highlighted in bold, confirming the model's robust discriminant validity. Consequently, the measurement model successfully fulfills all reliability and validity criteria, enabling us to proceed with the testing of the structural model. As a result, the reliability and validity requirements were met by the measurement model, justifying the progression to the examination of the structural model.

Table 4 5: Factor Loadings and Cross Loadings

Item	KH	OC	QDRE	WO	QDRE x WO
KH1	0.925	-0.78	-0.782	0.885	0.135
KH10	0.844	-0.682	-0.65	0.763	0.132
KH11	0.865	-0.677	-0.67	0.737	0.11
KH12	0.872	-0.725	-0.739	0.801	0.161
KH13	0.92	-0.802	-0.782	0.852	0.152
KH14	0.718	-0.696	-0.613	0.635	0.06
KH15	0.149	-0.019	-0.128	0.145	-0.034
KH16	0.105	0.017	-0.115	0.119	0.045
KH2	0.926	-0.788	-0.789	0.864	0.159
KH3	0.888	-0.719	-0.724	0.786	0.126
KH4	0.897	-0.784	-0.806	0.866	0.118
KH5	0.894	-0.803	-0.763	0.814	0.13
KH6	0.814	-0.661	-0.657	0.669	0.2
KH7	0.886	-0.719	-0.696	0.769	0.182
KH8	0.916	-0.758	-0.78	0.83	0.209
KH9	0.922	-0.759	-0.79	0.832	0.163
OC1	-0.738	0.877	0.716	-0.727	-0.188
OC10	-0.722	0.87	0.673	-0.664	-0.206
OC11	-0.677	0.8	0.546	-0.589	-0.113
OC12	-0.781	0.893	0.716	-0.745	-0.115
OC13	-0.762	0.896	0.728	-0.741	-0.25
OC14	-0.783	0.936	0.757	-0.755	-0.207
OC15	-0.745	0.931	0.733	-0.725	-0.184

OC16	-0.741	0.923	0.725	-0.693	-0.203
OC17	-0.775	0.893	0.76	-0.764	-0.2
OC2	-0.791	0.927	0.725	-0.808	-0.112
OC3	-0.79	0.914	0.719	-0.784	-0.12
OC4	-0.683	0.788	0.613	-0.639	-0.059
OC5	-0.628	0.769	0.519	-0.529	-0.122
OC6	-0.64	0.762	0.597	-0.583	-0.012
OC7	-0.568	0.728	0.495	-0.517	0.038
OC8	-0.753	0.876	0.665	-0.75	-0.029
OC9	-0.736	0.891	0.65	-0.73	-0.065
QDRE1	-0.857	0.799	0.963	-0.804	-0.324
QDRE2	-0.812	0.743	0.954	-0.76	-0.32
QDRE3	-0.806	0.749	0.966	-0.76	-0.34
QDRE4	-0.767	0.689	0.923	-0.713	-0.27
QDRE5	-0.706	0.681	0.89	-0.653	-0.242
QDRE6	-0.753	0.707	0.943	-0.712	-0.267
QDRE7	-0.773	0.72	0.927	-0.744	-0.317
WO1	0.842	-0.776	-0.746	0.945	0.178
WO10	0.84	-0.74	-0.716	0.923	0.118
WO2	0.761	-0.697	-0.643	0.851	0.16
WO3	0.791	-0.713	-0.737	0.879	0.197
WO4	0.774	-0.681	-0.68	0.85	0.136
WO5	0.83	-0.759	-0.71	0.927	0.151
WO6	0.814	-0.727	-0.7	0.9	0.157
WO7	0.84	-0.733	-0.722	0.92	0.162
WO8	0.707	-0.576	-0.572	0.752	0.111
WO9	0.858	-0.729	-0.735	0.929	0.125
QDRE x WO	0.165	-0.15	-0.318	0.162	1

Source: SMART PLS 4.0 output (2024)

4.6.1.3 Collinearity

In accordance with the evaluation criteria for the reflective outer model in the structural model assessment procedure, it is necessary to examine the structural model for collinearity concerns. Since there are formative constructs involved, we need to assess the VIF (variance inflation factor) values of all sets of predictor constructs in the structural model. The results table provides the VIF values for various combinations of endogenous constructs (represented by the columns) and their corresponding exogenous (predictor) constructs (represented by the rows). Specifically, we evaluate the following sets of predictor constructs for collinearity: (1) WO, OC, and QDRE as predictors of KH; (2) WO as predictors of OC; and (3) the interaction between WO and QDRE as predictors of KH.

As depicted in Table 4.6, all VIF values are significantly below the threshold of 5. Consequently, we can conclude that collinearity among the predictor constructs is not a critical issue in the structural model.

Table 4 6: Test for Collinearity

constructs	VIF
OC -> KH	3.387
QDRE -> KH	3.451
WO -> KH	3.506
WO -> OC	1
QDRE x WO -> KH	1.15

Source: SMARTPLS Output (2024)

4.6.2 Testing the Structural Model

Once all the criteria for the measurement model have been verified, it is essential for the researcher to assess the structural model (Hair et al., 2019, p. 7). Following the validation of the measurement model, the structural model is examined to determine its overall explanatory power and to evaluate the specific hypotheses regarding the cause-effect relationships between constructs.

Figure 4.8 illustrates the path coefficients, which indicate the strength of the relationship between each construct and the amount of variance explained by the model (R^2). As depicted in Figure 4.8, the coefficient of determination, also known as the amount of variance explained (R^2), is displayed within each corresponding latent construct for the endogenous variables.

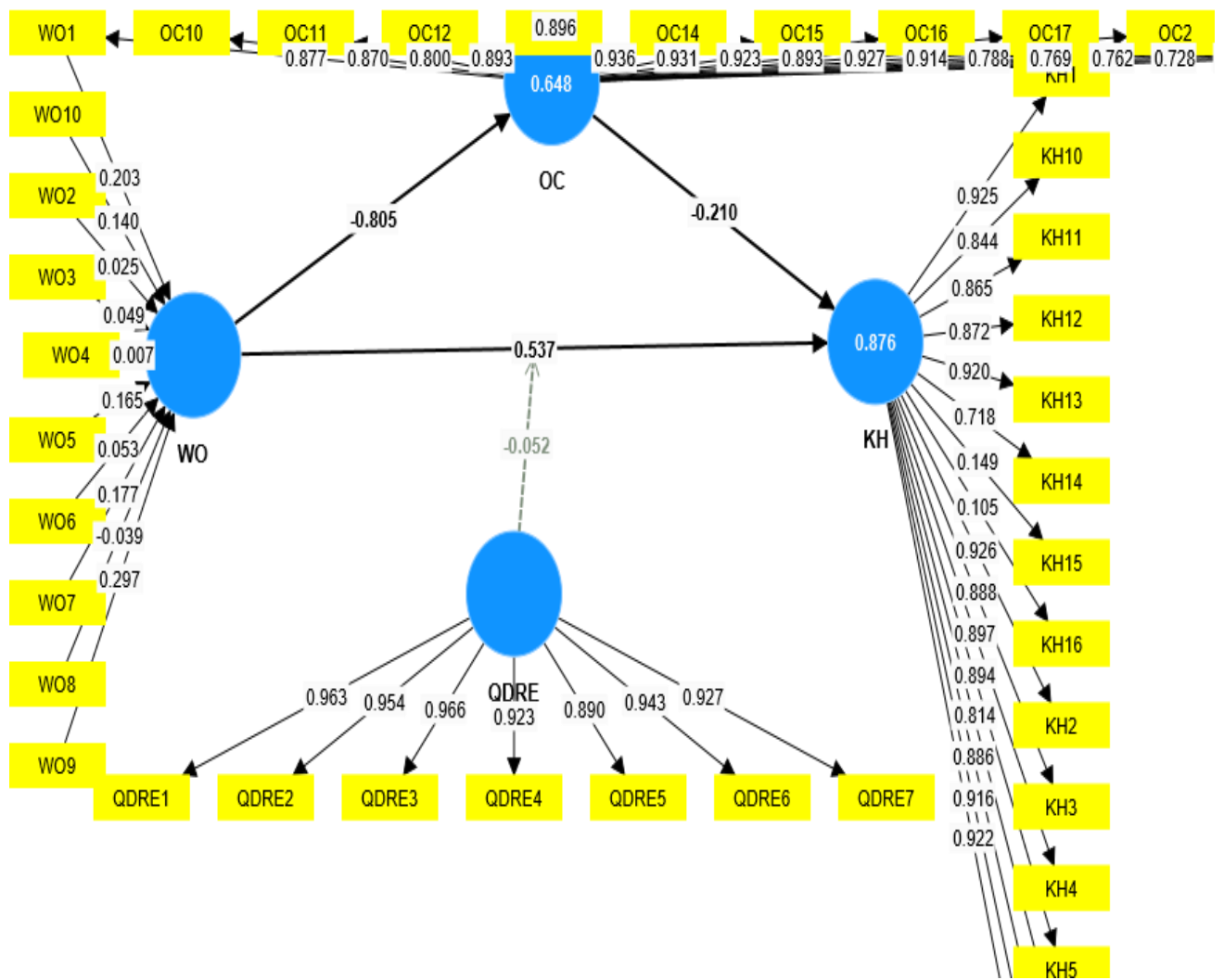


Figure 4 7: The research model test result
Source: SMARTPLS Output (2024)

In their study, Hair et al. (2019) investigated the explanatory power of research models using the coefficient of determination (R^2) values. The R^2 value represents the proportion of variance in a dependent variable that can be explained by the influencing factors. Recent studies have proposed guidelines for interpreting R^2 values, suggesting that values around 67% indicate significant explanatory power, values around 33% represent moderate explanatory power, and values around 19% correspond to weak explanatory power (Turney, 2023; Frost, 2023).

Table 4 7: Coefficient of Determinant R^2 for Dependent and Mediating Variable

construct	R^2	Standard deviation	T statistics	P values	Predictive power
KH	0.885	0.019	46.844	0	significant
OC	0.668	0.072	9.02	0	significant

Source: SMARTPLS Output (2024)

The explanatory power of the model can be assessed by examining the R^2 values, which indicate the amount of variance explained for each construct. The table below demonstrates that the model explains 88.5% of the variance in knowledge hoarding and 66.8% of the variance in the mediation of organizational climate on the relationship between knowledge hoarding and workplace ostracism. It is noteworthy that all mean R^2 values exceed 60%, surpassing the threshold suggested by Falk and Miller (1992). These results indicate that the model exhibits significant explanatory power.

4.6.3 Hypothesis testing

The path coefficients β serve as indicators of the strength of cause-and-effect relationships between interconnected variables (Hair, 2019; Wang & Chiu, 2011). To evaluate the relevance of the β values, SMARTPLS employs the bootstrapping approach (Hair, 2019; Chin et al., 2013). This technique involves generating multiple random samples of data from the original sample. For this study, 5,000 bootstrap samples were employed, following the recommendation of Chin et al. (2013). The significance of the path coefficients was assessed using t-tests conducted on the bootstrap samples. The statistical significance level was set at 5% ($p < .05$), unless otherwise specified. For practical significance, Pallant (2011) and Tabachnick and Fidell (2006) suggest that path coefficients β should surpass 0.2, implying a more stringent requirement.

Table 4 8:Path Coefficient (β)

Constructs	Original sample (O)	Sample mean (M)	Standard deviation	T statistics	P values
OC -> KH	-0.21	-0.203	0.094	2.228	0.026
QDRE -> KH	-0.262	-0.245	0.106	2.477	0.013
WO -> KH	0.537	0.555	0.104	5.161	0
WO -> OC	-0.805	-0.816	0.044	18.164	0
QDRE x WO -> KH	-0.052	-0.042	0.072	0.731	0.465

Source: SMARTPLS Output (2024)

H1: Workplace ostracism will have a significant positive relationship with knowledge hoarding.

The value of the mean path coefficient for WO (independent variable) to KH(dependent variable) $\beta_3 = 0.555$ which is above 0.2 by far, with t-statistic 5.164, and the p-value is 0.000. This indicates that WO has a significant positive effect on KH even at at the 0.01 level. Which

indicate workplace ostracism have positive significant effect on knowledge hoarding as the t value > 1.96 and p < 0.05.

H2: Organizational climate, as perceived by both leader and member, will partially mediate the relationship between workplace ostracism and knowledge hoarding.

Table 4.9 show path coefficient for WO to OC $\beta_1 = -0.816$, with the p-value 0.000. This indicates that WO has a significant negative effect on OC at the 0.05 level while the path coefficient for OC (mediator variable) to KH (dependent variable) $\beta_2 = -0.203$, with the p-value 0.026. This indicates that OC has a significant negative effect on KH at the 0.05 level. The absolute value of both of path coefficient $|\beta_1| = -0.816/$ and $|\beta_2| = -0.203/$ are above 0.2 which indicate relevant relationship. The t statistics value of both the construct relationship show above 1.96 and significance at the level 0.05

Table 4 9: Specific Indirect Effect

specific indirect effect					
Construct	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
WO -> OC -> KH	0.169	0.167	0.081	2.079	0.038

Source: SMARTPLS Output (2024)

The total specific indirect effect ab of WO (independent variable) on KH (dependent variable) through OC (mediator variable) is 0.169, with t-statistic 2.079, and the p-value is 0.038 which both are > 1.96 and < 0.05 respectively. This indicates that the specific indirect effect of WO on KH through OC is significant at the 0.05 level. This result suggests that the independent variable WO influences the dependent variable KH not only directly, but also indirectly through the mediator variable CO.

H3: The quality of dyadic relationship exchange between leader and member employees will moderate the relationship between workplace ostracism and knowledge hoarding, such that the positive relationship will be stronger when the quality of these relationships is lower.

The path coefficient for QDRE (moderator variable) to KH is -0.245, with a t-statistic 2.467, and the p-value is 0.013. This indicates that QDRE has a significant negative effect on KH at the 0.05 level. However, the interaction term of QDRE and WO has a path coefficient of -0.064

to KH, with t-statistic is 0.749, which is below 1.96 and the p-value is 0.454. This indicates that the interaction of QDRE and WO does not have a significant effect on KH at the 0.05 level.

Table 4 10: Total Indirect Effect

Total Indirect Effect					
constructs	Original sample (O)	Sample mean (M)	Standard deviation	T statistics	P values
OC -> KH	-0.21	-0.203	0.094	2.228	0.026
QDRE -> KH	-0.262	-0.245	0.106	2.477	0.013
WO -> KH	0.707	0.722	0.097	7.263	0
WO -> OC	-0.805	-0.816	0.044	18.164	0
QDRE x WO -> KH	-0.052	-0.042	0.072	0.731	0.465

Source: SMARTPLS Output (2024)

Table 4.10 of total effect, the moderating variable, QDRE, was examined in relation to the relationship between the WO and the KH. Although the moderating variable did not yield statistically significant results ($p > .05$), visual inspection of the data revealed parallel slopes in the relationship between WO and KH at SD+1 and SD-1 levels of QDRE.

This finding suggests that while the moderating variable did not reach statistical significance, it may still have a practical impact on the relationship between WO and KH. The lack of statistical significance may be attributed to the sample size as it shown in the result in table of effective size.



Figure 4 8:QDRE x WO slope
Source: SMART PLS 4.0

4.6.4 Effective size (f^2)

Table 4.10 below shows the effective size (f^2) values of the endogenous construct and their corresponding effect sizes. Both the direct effect and indirect effect relationship are significant. Workplace ostracism (WO) has a significant effect on both knowledge hoarding (KH) and organizational climate (OC). However, organizational climate (OC) and the quality of dyadic relationship exchange (QDRE) do not have a significant effect on knowledge hoarding (KH). Moreover, the interaction of QDRE and WO does not significantly affect KH.

Table 4 11: Effective Sizes

constructs	Original sample (O)	Sample mean (M)	P values	effect
OC -> KH	0.106	0.111	0.23	small
QDRE -> KH	0.16	0.166	0.21	Medium
WO -> KH	0.666	0.715	0.034	Large
WO -> OC	1.838	2.171	0.017	Large
QDRE x WO -> KH	0.009	0.024	0.766	small

Source: SMART PLS 4.0 output (2024)

Note: $.02 < 0.15$ = small effect size; $.15 < f < 0.35$ large effect size (Gefen et al., 2000; Henseler, et al, 2009, p.303; Chin, 1998, p.317)

4.6.5 Model fit

Model fit in SmartPLS refers to the assessment of how well the estimated model fits the observed data (Hair Jr et al., 2019). Fit indices are used to evaluate the quality of the model fit and provide an indication of the degree to which the model accurately represents the data (Hair Jr et al., 2019). Most commonly used fit index is the SRMR (Standardized Root Mean Square Residual), which measures the average discrepancy between the observed and predicted covariance matrices (Hair Jr et al., 2019). Another fit index is the NFI (Normed Fit Index), which compares the fit of the estimated model to a baseline model (Hair Jr et al., 2019).

The chi-square statistic is also used to assess model fit, where a significant chi-square value indicates a poor fit between the model and the data (Hair Jr et al., 2019). However, it is important to consider that the chi-square test is sensitive to sample size and can be influenced by large sample sizes (Hair Jr et al., 2019). Additionally, fit indices such as d_ULS (Degree of Unweighted Least Squares) and d_G (Degree of Graph) provide information about the complexity of the model and the number of estimated parameters (Hair Jr et al., 2019).

Table 4.11 Model fit

	Saturated model	Estimated model
SRMR	0.05	0.063
d_ULS	3.251	5.063
d_G	4.08	4.197
Chi-square	2485.538	2509.449
NFI	0.788	0.786

As shown in table 4.11 in the saturated model, the SRMR value was 0.050, slightly lower than the estimated model's SRMR value of 0.063, suggesting a slightly better fit for the saturated model. The NFI values for the saturated and estimated models were 0.788 and 0.786, respectively. These values suggest a moderate level of fit for both models. In the regard the d_G values for the saturated and estimated models were 4.080 and 4.197, respectively, indicating relatively similar levels of model complexity.

However, the saturated model had a d_ULS value of 3.251, while the estimated model's d_ULS value was higher at 5.063. This indicates that the saturated model had a smaller degree of freedom, suggesting a more parsimonious model compared to the estimated model. Similarly,

in this analysis, the chi-square values for the saturated and estimated models were 2485.538 and 2509.449, respectively. These values indicate a significant discrepancy between the models and the data. However, it is important to note that chi-square is sensitive to sample size, and in large samples, even minor discrepancies can lead to significant results.

Chapter Five: Conclusion and Recommendation

5.1 Introduction

This chapter presents the key findings of the study, which aimed to investigate the relationship between workplace ostracism and knowledge hoarding, taking into account the influence of organizational climate and the moderating role of the quality of dyadic relationship exchange. To examine this relationship, a comprehensive literature review was conducted. Data were collected from participants at the Ministry of National Defence headquarters. A structural equation modeling approach was employed to assess the validity, reliability, and interrelationship among the constructs, utilizing SMARTPLS 4.0 as the primary data analysis software.

5.2 Summary of Key Findings

The objective of the research was to empirically examining the relationship between workplace ostracism knowledge hoarding via organizational climate and moderating role of quality if dyadic relationship exchange. To address these objectives, the study posed the following research questions:

1. What is the impact of workplace ostracism on employee and organizational outcomes?
2. How does workplace ostracism influence knowledge hoard behaviors of leaders and members employees with in an organization?
3. How does the organizational climate, as perceived by both managers and employees, mediate the relationship between workplace ostracism and knowledge hoarding?
4. To what extent does quality of dyadic relationships exchange between leader and member moderates effect of workplace ostracism on knowledge hoarding?

To address the research questions, an extensive review of the literature was conducted, leading to the formulation of three hypotheses that were integrated into a conceptual model. The literature review aimed to establish a model capable of quantifying the relationship between the variables of interest. Subsequently, this model was applied to examine the relationship between the variables and was empirically investigated using data collected from participants at the Ministry of National Defense headquarters. The primary model utilized in this study was developed by Dash D., Farooq R., and Upadhyay S. (2023). Additionally, the previous model proposed by Nupur Sharma and Rajib Lochan Dhar (2021) was incorporated, which suggested that high-quality leader-member exchange can serve as a buffering mechanism in mitigating

the impact of workplace ostracism on relational outcomes. The following hypothesis were formulated:

H1: Workplace ostracism will have a significant positive relationship with knowledge hoarding among employees.

H2: organizational climate, as perceived by both managers and employees, acts as a mediator in the relationship between workplace ostracism and knowledge hoarding.

H3: The quality of dyadic relationships exchange between managers and employees will moderate the relationship between workplace ostracism and knowledge hoarding, such that the positive relationship will be stronger when the quality of these relationships is lower.

A total of four constructs were used to develop the model was used to collect data from the selected samples. These constructs, each of them with different number of measurement items for each construct were placed in the model. The model was evaluated using structural equation in two stages: the first stage is SEM PLS path analysis which test the validity and reliability of the construct and each of 50 measurement items used in the study. In this study the measurement items all constructs and measuring items are found reliable and valid to proceed with the second stage of the equation model.

The second stage of SEM PLS model is the structural model which measures the interrelationship among the factors. Using SMARTPLS software, the analysis confirmed both significant positive relationship between workplace ostracism and knowledge hoarding, and complemantray partial mediation effects of organizational climate on the relationship between workplace ostracism and knowledge hoarding. However, the moderating role of the quality of dyadic relationship exchange was found to be statistically insignificant, despite exhibiting parallel slope results.

The path coefficient showed a significant inverse association between the independent construct of work place ostracism and the mediation construct of organizational climate ($\beta_1 = -0.816$, $p < 0.05$). while the path coefficient corresponding to the relationship between the mediator variable organizational climate and the dependent variable knowledge hoarding also shows an inversely significant relationship with a value of $\beta_2 = -0.203$ and a p-value of 0.026. This indicates that OC has a significant negative effect on KH at the 0.05 level. The values of both path coefficients, $\beta_1 = -0.816$ and $\beta_2 = -0.203$, are above 0.2, which indicates a relevant relationship. The t-statistics value of both constructs shows a value above 1.96 and significance

at the level of 0.05. Conversely, a strong and positive correlation was found between workplace ostracism and knowledge hoarding, showing $\beta_3 = 0.555$, which is above 0.2 by far, with a t-statistic of 5.164 and a p-value of 0.000. This indicates that WO has a significant positive effect on KH at the 0.01 level. Which indicates workplace ostracism has a positive and significant effect on knowledge hoarding, as indicated by the t value > 1.96 and $p < 0.05$.

A substantial indirect effect of workplace ostracism on knowledge hoarding through organizational climate was shown by the particular indirect effect analysis (0.169, $p = 0.038$). This reaffirmed the organizational climate's mediation function in the association between knowledge hoarding and workplace exclusion. Hence, the results of the study provided support for Hypotheses 1 and 2, as there was a significant positive correlation between workplace ostracism and knowledge hoarding (H1) and organizational climate acted as a mediator (H2) in this relationship. However, Hypothesis 3, which proposed that the quality of dyadic relationship exchange would moderate the relationship, was not supported.

5.3 Conclusion

The present study aimed to examine the relationship between knowledge hoarding behaviors, workplace ostracism, with the mediating role of organizational climate, and the quality of dyadic relationship exchange as a moderating variable in the relationship. The research utilized a quantitative research approach, employing convenience sampling and survey questionnaires to collect data from 144 respondents within the Ministry of Defense headquarters. The collected data were analysed using SMARTPLS software, employing structural equation modelling (SEM) with partial least squares (PLS) path analysis.

The key findings for each reseachearch question are discussed as follow:

To answer the first question, what is the impact of wokplace ostrasim on employee and orgsanazatinal outcome, a through literature review was conducted. Number of studies agree on the fact that individuals who experience ostracism in the workplace often report feelings of stress, anxiety, and decreased job satisfaction (Zhang et al., 2019). Moreover, workplace ostracism can lead to negative outcomes for organizations such as decreased employee engagement, lower levels of organizational commitment, and reduced productivity (Wu et al., 2018). As a result, it is critical for businesses to understand the negative consequences of workplace ostracism and take necessary steps to address and avoid it. Organizations that neglect to address workplace ostracism may witness a decline in collaboration and creativity. When employees feel left out or ignored, they are less inclined to share ideas, play a part in

team discussions, or involve in collective problem-solving. Consequently, this hampers innovation and the organization's ability to adapt to changing market conditions. Workplace ostracism can also have a cascading effect on the overall organizational culture (Ferris et al., 2008; Wu et al., 2016). When employees witness or experience ostracism, it creates a toxic work environment characterized by a lack of trust and cooperation. As a result, high turnover rates may ensue, as employees seek opportunities elsewhere that offer a more inclusive and supportive work environment (Zheng et al., 2010). Therefore the first research question has been answer through the literature review conducted.

The findings of the study revealed several important insights to answer the rest of three research questions on this study. Firstly, the results confirmed a significantly positive correlation between workplace ostracism and knowledge hoarding behaviors among employees within the Ministry of Defense. This supports the hypothesis that when employees experience workplace ostracism, they tend to retain valuable knowledge either as a protective mechanism or as a form of retaliation to conserve resource. Therefore, a significant positive relationship was found between workplace ostracism and knowledge hoarding, thus supporting Hypothesis 1. Employees who experienced higher levels of ostracism at work were more likely to hoard knowledge. The findings support a previous study by Smith et al. (2015), which discovered a positive relationship between knowledge hoarding and workplace ostracism. Additionally, Evans et al. (2015) concluded that employees who experience marginalization may resort to hoarding knowledge in order to shield themselves from further exclusion, and Connelly et al. (2012) contended that knowledge hoarding can reinforce workplace ostracism by stifling collaboration and creating a toxic work environment.

Secondly, the mediating role of organizational climate in the relationship between workplace ostracism and knowledge hoarding behaviors was found to be statistically significant. The overall climate within the organization, including factors such as trust, support, and communication, played a crucial mediating role in shaping workplace ostracism and its impact on knowledge hoarding. Specifically, a more positive organizational climate was found to ease the detrimental effects of workplace ostracism on knowledge hoarding. The study finding was Consistent with the research by Johnson and Williams (2018) whom demonstrated that workplace ostracism has a negative impact on organizational climate, leading to reduced employee engagement and satisfaction. It's also proof a negative association between workplace ostracism and organizational climate suggesting that increased levels of ostracism

are associated with a more negative organizational climate (Eisenberger, Fasolo, & Davis-LaMastro, 2009; Liang, Kraimer, & Lawler, 2012). More importantly, the findings empirically support a study by Dash et al (2022) in systematic assessment of workplace ostracism, information hoarding, and organizational climate, highlighting the significant role of organizational climate in improving the relationship between workplace ostracism and knowledge hoarding.

However, the study did not find significant moderation effects of the quality of dyadic relationship exchange between leaders and members on the relationship between workplace ostracism and knowledge hoarding behaviors failing to support Hypothesis 3 (Ayoko et al., 2003). Although the results showed parallel slopes indicating some moderating influence as perceived by Wu and Leung (2017) arguing that a positive leader-member relationship can mitigate the negative effects of workplace ostracism on knowledge hiding behaviour, the statistical analysis did not yield significant findings. This suggests that the quality of dyadic relationship exchange may not have a substantial impact on the relationship between workplace ostracism and knowledge hoarding behaviors within the Ministry of Defense.

The empirical findings of this study contribute to the existing body of knowledge on workplace ostracism, knowledge hoarding behaviors, and organizational climate. The confirmation of a negative relationship between workplace ostracism and knowledge hoarding behaviors sheds light on the importance of creating an inclusive and supportive work environment to mitigate knowledge hoarding tendencies. Moreover, the identification of organizational climate as a significant mediator highlights the crucial role that organizational factors play in shaping employee behaviors regarding knowledge sharing and hoarding.

The implications of this research are significant for organizations and managers within the Ministry of Defense and beyond. By understanding the negative impact of workplace ostracism on knowledge hoarding behaviors, organizations can implement strategies to foster a positive organizational climate that promotes trust, support, and effective communication. This, in turn, can reduce workplace ostracism and encourage knowledge sharing among employees, ultimately enhancing organizational performance and innovation.

In conclusion, this study extends our understanding of the relationship between workplace ostracism and knowledge hoarding behaviors. It confirms the detrimental effects of workplace ostracism on knowledge hoarding and highlights the mediating role of organizational climate. Organizations can leverage these findings to develop interventions and practices that foster a

positive work environment, reduce workplace ostracism, and promote knowledge sharing among employees. By doing so, organizations can enhance their knowledge management processes and ultimately achieve a competitive advantage in today's dynamic and knowledge-intensive business landscape.

5.4 Contribution of the study

5.4.1 Theoretical Implications:

- This study used conservation of resource (COR) theories to the context of knowledge management, connecting social experiences in the workplace to crucial workplace behaviors. Integrating insights from organizational justice, social exchange, and self-determination theories may provide a more comprehensive understanding of the mechanisms at work.
- The partial mediation of organizational climate adds to the knowledge on moderators and contingency factors that influence the link between workplace ostracism and its outcomes. Future study can improve our understanding of the boundary conditions of this relationship.
- No support was found for the proposed moderation, prompting a reevaluation of which relational constructs most impact the ostracism-hoarding pathway. Further theoretical development is still needed.
- No support was found for the proposed moderation, prompting a reevaluation of which relational constructs most impact the ostracism-hoarding pathway. Further theoretical development is still needed. This could involve exploring other potential moderators, such as individual differences or cultural factors, that may influence the relationship between workplace ostracism and its outcomes. Additionally, future research could also examine the potential long-term effects of workplace ostracism and how it may impact employee well-being and job performance over time.

5.4.2 Practical Implications:

The study provides the following contribution to the practices to ministry of national defence:

- Agreed that knowledge hoarding can relate to decreased work related interactions, and negative organizational climate significantly, leaders need to pay attention to this behavior and learn to diminish it appropriately.

- Leaders should monitor interpersonal dynamics for symptoms of social exclusion and resolve concerns as soon as possible to reduce harmful consequences. Training employees in inclusive behaviors can help to reduce ostracizing tendencies.
- Fostering a climate of open communication, support, trust, and fairness helps mitigate some of the negative consequences of ostracism experienced by employees. Leadership must set a good example and reward positive climates.
- Promoting openness, psychological safety, and collaboration via knowledge-sharing initiatives and prizes can encourage sharing rather than hoarding vital information assets.
- Assessing workplace inclusion levels on a regular basis using validated climate surveys enables for the identification of concerns and the evaluation of inclusion solutions' effectiveness over time.
- Selection and performance management methods should prioritize interpersonal and cooperation abilities in order to foster relationships that are favourable to information flow.

5.5 Recommendation

Based on the findings and conclusion, the next recommendations are suggested.

- Leaders and management of the Ministry of National Defense should consider the negative impact of workplace ostracism and counter-normative behaviors to foster a knowledge-sharing environment.
- Implement training programs that focus on promoting a positive and inclusive work culture. These programs can educate employees about the negative consequences of workplace ostracism and counter normative behaviors, while also providing them with strategies to foster a knowledge-sharing environment.
- Leaders and management should actively encourage open communication and collaboration among team members, creating opportunities for information sharing and idea exchange.
- The organizational setting of the ministry office should be reconsidered in the way it promotes positive organizational perception among its employees. This can be achieved by implementing policies that recognize and reward teamwork and collaboration rather than individual achievements. Additionally, creating spaces for employees to socialize and build relationships outside of work can also contribute to a positive work culture.

- The management of the defense needs to build positive dyadic relationships with their fellow members to promote knowledge sharing and tackle hoarding behaviors. By fostering a culture of open communication and trust, management can encourage employees to freely share their knowledge and expertise, leading to increased collaboration and innovation within the ministry office. Furthermore, implementing regular training and development programs can help address any skill gaps and ensure that employees feel supported in their professional growth.
- Employees with a negatively perceived organizational climate in the organization have a high tendency to hoard knowledge; hence, the management of the ministry of defense needs to develop a positive organizational climate. This can be achieved by fostering a culture of recognition and reward for sharing knowledge, as well as by creating opportunities for cross-functional collaboration and teamwork. Additionally, promoting transparency in decision-making processes and providing avenues for feedback can help build trust and create a more positive organizational climate.

5.6 Limitation and Implication for Future Research

- The participants were only employee of ministry of defense head quarter staff members. Hence care should be taken when generalizing the results of the study to the other populations with in the ministry office.
- The data collected and analysed for the study is purely quantitative. A study with the qualitative questions for respondent to express their views and ideas on the items being measured or researched in an era for further research. And option for respondent to bypass or respond not applicable or don't know is required.
- While this study provides valuable insights, it is important to acknowledge its limitations. The research employed a convenience sampling technique, which may limit the generalizability of the findings.
- The respondent rate was considerably low as willingness to participate on the questionnaires for the total population were unsatisfactory.
- Despite the hierarchical nature of the military organization, every population can resemble both leader and member roles, the results are based on available respondents with a rank less than one-star general (brigadier general). The key management role of the military organization increases with rank, which could create a gap.
- The study is conducted in the setting of the Ministry of National Defence's headquarters. However, the researcher is confident that other organizations have similar settings, meaning that the research model may be applicable across organizations,

including different units of National Defense. As a result, testing and validating the model across other enterprises is another subject for future research.

- Future studies could use more diverse and representative samples to improve the external validity of the findings. Furthermore, more research is needed to identify other potential moderating variables that may influence the relationship between workplace ostracism and knowledge hoarding behaviors.

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List of Appendices

Appendix A: Survey Invitation Letter

Dear Respondents:

I am a graduate student at Addis Ababa University College of Business and Economics, Department of Management. Currently, I am conducting a research titled examination of the relationship between workplace ostracism, knowledge hoarding, organizational climate and the quality of dyadic relationship: in case of ministry of defence of Ethiopia as partial fulfilment of requirement for the award of master's degree in science of international business management. The purpose of this questionnaire is to gather data for the proposed study, and hence you are kindly requested to assist the successful completion of the study by providing the necessary information. Your participation is entirely voluntary and the questionnaire is completely anonymous. I confirm you that the information you share will stay confidential and only used for the aforementioned academic purpose only. So, your genuine, frank and timely response is vital for the success of the study. I want to thank you in advance for your kind cooperation and dedication of your precious time to fill this questionnaire.

Sincerely Yours;

Berasa belayneh

Note:

1. No need of writing your name.
2. Put this or mark on the appropriate block/cell both for multiple choice and Likert scale questions.
3. If you need further explanation you can contact me and discuss the matter freely at (Telephone No. 0925747471 or 0704747174, E-mail berrybelay7471@gmail.com)

Appendix B: Survey Questionnaire

Part one – Demographic Information

1. Age: 18-25 26-35 36-45 46-55 above 55
2. Sex: male female
3. Military Rank : civilian noncommissioned officer to staff sergeant 1st lieutenant officer to captain major to colonel general and above
4. marital status: Married Single Separated Divorced
5. highest educational level: Certificate Diploma Degree Master's Degree Above Master's Degree
6. years of service in ministry of defence of Ethiopia?
 - 1) Less than 1 year___
 - 2) 1-7 years_____
 - 3) 8-15 years_____
 - 4) 16 years-25 years _____
 - 5) 25 years and above
7. level of work status
 1. supportive team
 2. expert
 3. desk coordinator
 4. team leader
 5. director

Part – II: Five point Likert scale questions

Please express your level of agreement in the following questions by putting √ 'or X 'mark in the appropriate cell. 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

s. no	Statement	Score				
		1	2	3	4	5
I	Work place ostracism					
1	Others ignored me at work.					
2	Others left me out of the loop at work.					

3	Others avoided me at work.					
4	Others shut me out of the conversation at work.					
5	Others at work treated me as if I wasn't there.					
6	Others at work acted as if I didn't exist.					
7	Others at work did not invite me to join them for lunch or coffee breaks.					
8	Others at work did not notice when I was absent.					
9	Others at work did not acknowledge my presence.					
10	Other at work did not return my greeting					
II	Knowledge hoarding					
1	I am reluctant to share my knowledge with others.					
2	I keep my knowledge hidden from others.					
3	I refuse to share my knowledge with others.					
4	I take steps to protect my knowledge from others.					
5	I am hesitant to share my knowledge with others.					
6	I intentionally hide my knowledge from others.					
7	I conceal my knowledge from others.					
8	I withhold my knowledge from others.					
9	I hoard my knowledge from others.					
10	I retain my knowledge for my own use.					
11	I reserve my knowledge for my own use.					
12	I keep my knowledge to myself.					
13	I do not share my knowledge with others.					
14	I possess knowledge that others do not have.					
15	I am reluctant to protect my knowledge with others.					
16	I am hesitant to hide my knowledge from others.					
III	Organizational climate					
1	I am encouraged to take risks.					
2	My supervisor gets me involved in decisions that affect my work.					
3	I receive the recognition I deserve.					
4	I know what is expected of me.					
5	My organization's mission is clear and understandable.					

6	Our organization's vision is clear and understandable.					
7	Our organization has clear goals and objectives.					
8	Information flows freely within our organization.					
9	Our organization's policies and procedures are clearly communicated.					
10	We have a clear understanding of the direction of our organization.					
11	Our organization's goals are consistent with our mission and vision.					
12	information flows freely within our organization.					
13	Our organization is concerned about its public image.					
14	Our organization's communication with its customers is open and honest.					
15	Our organization's communication with its suppliers is timely.					
16	Our organization's communication with its customers is constructive.					
17	Our organization's communication with its suppliers is reliable.					
III	Quality of dyadic relationship via LMX					
1	I like my supervisor very much as a person.					
2	My supervisor is the kind of person one would like to have as a friend.					
3	My supervisor is a lot of fun to work with.					
4	My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.					
5	My supervisor would come to my defense if I were "attacked" by others.					
6	My supervisor would defend me to others in the organization if I made an honest mistake.					
7	I do work for my supervisor that goes beyond what is specified in my job description.					

Appendix C :Statical Descriptive and Normative Test

Appendix C 1Descriptive statics of Workplaceostrasism

Code	Measure items	Missing data	Mean	Std Dev.	kurtosis	Skewness	Cramér-von Mises p value
WO1	Others ignored me at work.	1	2.867	1.385	-1.492	-0.062	0
WO2	Others left me out of the loop at work.	0	3.007	1.465	-1.457	0.015	0
WO3	Others avoided me at work.	0	2.861	1.347	-1.341	0.015	0
WO4	Others shut me out of the conversation at work.	0	3.083	1.455	-1.463	-0.065	0
WO5	Others at work treated me as if I wasn't there.	1	2.902	1.426	-1.454	-0.031	0
WO6	Others at work acted as if I didn't exist.	0	2.868	1.335	-1.308	0.014	0
WO7	Others at work did not invite me to join them for lunch or coffee breaks.	0	3.09	1.343	-1.291	-0.114	0
WO8	Others at work did not notice when I was absent.	0	2.514	1.23	-0.873	0.386	0
WO9	Others at work did not acknowledge my presence.	1	3.035	1.465	-1.481	-0.088	0
WO10	Other at work did not return my greeting	1	2.902	1.507	-1.568	0.007	0

Appendix C 2:Descriptive statics of Knowledge Hoarding

Code	Measure	Missings	Mean	Std Dev.	kurtosis	Skewness	Cramér-von Mises p value
KH1	I am reluctant to share my knowledge with others.	0	2.785	1.365	-1.55	-0.067	0

KH2	I keep my knowledge hidden from others.	0	2.938	1.454	-1.554	-0.178	0
KH3	I refuse to share my knowledge with others.	0	2.486	1.236	-1.088	0.3	0
KH4	I take steps to protect my knowledge from others.	0	2.882	1.407	-1.466	-0.09	0
KH5	I am hesitant to share my knowledge with others.	0	2.889	1.355	-1.466	-0.169	0
KH6	I intentionally hide my knowledge from others.	0	2.347	1.186	-0.914	0.458	0
KH7	I conceal my knowledge from others.	1	2.713	1.288	-1.299	0.035	0
KH8	I withhold my knowledge from others.	0	2.729	1.319	-1.458	-0.075	0
KH9	I hoard my knowledge from others.	0	2.764	1.333	-1.388	-0.056	0
KH10	I retain my knowledge for my own use.	1	2.517	1.176	-0.881	0.336	0
KH11	I reserve my knowledge for my own use.	0	2.444	1.147	-0.567	0.402	0
KH12	I keep my knowledge to myself.	1	2.93	1.417	-1.448	-0.024	0
KH13	I do not share my knowledge with others.	1	2.783	1.349	-1.511	-0.116	0
KH14	I possess knowledge that others do not have.	0	3.347	1.276	-0.953	-0.474	0
KH15	I am reluctant to protect my knowledge with others.	1	3.42	1.237	-0.953	-0.485	0
KH16	I am hesitant to hide my knowledge from others.	0	3.549	1.263	-0.838	-0.581	0

Appendix C 3: Descriptive statistics of Organizational Climate

Code	Measure	Missings	Mean	Std Dev.	kurtosis	Skewness	Cramér-von Mises p value
OC1	I am encouraged to take risks.	0	2.688	1.631	-1.623	0.292	0
OC2	My supervisor gets me involved in decisions that affect my work.	0	2.604	1.625	-1.59	0.356	0
OC3	I receive the recognition I deserve.	0	2.562	1.606	-1.565	0.363	0
OC4	I know what is expected of me.	0	3.368	1.471	-1.373	-0.313	0
OC5	My organization's mission is clear and understandable.	0	3.521	1.349	-1.004	-0.5	0
OC6	Our organization's vision is clear and understandable.	0	3.458	1.448	-1.16	-0.506	0
OC7	Our organization has clear goals and objectives.	0	3.549	1.327	-0.864	-0.601	0
OC8	Information flows timely within our organization.	0	2.576	1.575	-1.454	0.424	0
OC9	Our organization's policies and procedures are clearly communicated.	0	2.681	1.606	-1.539	0.34	0
OC10	We have a clear understanding of the direction of our organization.	0	3.062	1.444	-1.451	0.015	0
OC11	Our organization's goals are consistent with our mission and vision.	0	3.222	1.336	-1.161	-0.22	0
OC12	information flows freely within our organization.	0	2.451	1.576	-1.351	0.558	0
OC13	Our organization is concerned about its public image.	0	2.889	1.487	-1.473	0.193	0
OC14	Our organization's communication with its customers is open and honest.	0	2.715	1.456	-1.421	0.303	0
OC15	Our organization's communication with its suppliers is timely.	1	2.776	1.535	-1.496	0.312	0
OC16	Our organization's communication with its customers is constructive.	1	2.783	1.468	-1.415	0.315	0
OC17	Our organization's communication with its suppliers is reliable.	0	2.826	1.506	-1.527	0.176	0

Appendix C 4 Descriptive statistics of Quality dyadic relationship exchange:

Code	Measure	Missings	Mean	Standard deviation	Excess kurtosis	Skewness	Cramér-von Mises p value
QDRE1	I like my supervisor very much as a person.	0	2.757	1.692	-1.694	0.257	0
QDRE2	My supervisor is the kind of person one would like to have as a friend.	0	2.778	1.754	-1.761	0.251	0
QDRE3	My supervisor is a lot of fun to work with.	0	2.743	1.817	-1.806	0.276	0
QDRE4	My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.	0	2.5	1.607	-1.502	0.436	0
QDRE5	My supervisor would come to my defense if I were “attacked” by others.	0	3.312	1.685	-1.649	-0.283	0
QDRE6	My supervisor would defend me to others in the organization if I made an honest mistake.	0	2.993	1.648	-1.675	0.049	0
QDRE7	I do work for my supervisor that goes beyond what is specified in my job description.	0	2.597	1.634	-1.562	0.38	0