

**INFLUENCE OF CULTURAL INTELLIGENCE AND ORGANIZATIONAL
CITIZENSHIP BEHAVIOR ON STRESS AMONG FILIPINO NURSES
WORKING ABROAD**

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ABSTRACT

Influence of Cultural Intelligence and Organizational Citizenship Behavior on Stress Among Filipino Nurses Working Abroad

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As international healthcare systems continue to rely on migrant nursing professionals, Filipino nurses face complex professional and cultural adjustments in their host countries. This study aims to assess the level of cultural intelligence and organizational citizenship behavior among Filipino nurses working abroad. A quantitative descriptive-correlational design was utilized. Data were collected from 159 Filipino staff nurses employed in the United States, United Kingdom, United Arab Emirates, Saudi Arabia, and Australia using standardized instruments: the Cultural Intelligence Scale (CQS), Organizational Citizenship Behavior Checklist (OCB-C), and Nursing Stress Scale (NSS). Descriptive statistics, Pearson correlation, multiple linear regression, t-test, and ANOVA were used for data analysis. Most respondents were 31-44 years old, predominantly female, single, working in the USA with 1-5 years of employment. Findings revealed that respondents demonstrated high levels of CQ ($M = 5.0514$ - 5.9623), high levels of OCB ($M = 3.4681$ - 3.7126), and moderate levels of nursing stress ($M = 1.6540$). Significant relationships were found between selected dimensions of cultural intelligence and stress ($r = -.160$, $p = .045$), but the relationship between organizational citizenship behavior and stress was insignificant ($r = .020$, $p = .805$). Regression analyses indicated that specific components of CQ (motivational CQ and behavioral CQ) and OCB (OCB-O) significantly predicted stress levels. Demographic variables showed limited and context-dependent differences in stress. The results suggest that enhancing cultural intelligence and fostering positive organizational citizenship behaviors may reduce stress among Filipino nurses working abroad. The study underscores the importance of organizational support, cultural training, and workplace environments that promote collaboration and psychological well-being.

Keywords: *cultural intelligence, organizational citizenship behavior, nursing stress, occupational stress, Filipino nurses, migrant nurses, multicultural healthcare.*

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DEDICATION

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*To my mentors, colleagues, and professors
who inspired excellence and integrity in both nursing and leadership.*

*To all the Filipino nurses
who continue to serve with courage, resilience, and compassion
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workplace demands, and personal sacrifices.*

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Chapter 1

The Problem and Its Background

The workforce is increasingly interconnected and crossing national borders; institutions and structures are being shaped by the globalisation of healthcare, with professionals cooperating to provide care and improve people's health everywhere (Mohammadi et al., 2020). The staff and patients in hospitals and clinics are increasingly becoming multicultural due to globalization. Hospitals and clinics can see more diversity in both their workforce and patients. Because of daily interactions with patients and co-workers from different cultures, nurses become particularly impacted by this change. Multicultural healthcare facilities offer opportunities to share knowledge, to learn about other cultures, and to improve patient care. However, it can also cause stress for nurses because of communication and teamwork challenges. These challenges come from differences in language, health beliefs, values, and practices. Consequently, nurses' ability to adapt effectively to cultural differences has become an important factor in ensuring both professional effectiveness and patient outcomes.

Filipino nurses are one of the largest groups of migrant healthcare workers worldwide. They are valued for their professionalism, skills, dedication, high-quality patient care, and compassion. They excelled and have become an important part of the global health workforce. However, despite their strengths, stress remains a challenge for them when working abroad. Homesickness, cultural differences, discrimination, and social isolation are often the cause of stress for nurses, which can affect their well-being and mental health (*Philippine Daily Inquirer*, 2023). On top of that, they may also experience role strain as they adjust to new workplace norms and expectations. As Filipino nurses navigate a new environment, stress becomes both a root cause and a

compounding factor in these difficulties. These kinds of situations highlight the importance of ensuring that Filipino nurses have the competencies to thrive abroad.

Cultural intelligence (CQ) is one of many competencies. It is the ability to respect diversity, communicate effectively with people from different backgrounds, appreciate different viewpoints, challenge stereotypes and prejudices, engage with others in a culturally sensitive way, learn from cultural experiences, build real connections with people from different cultural backgrounds, and advocate for inclusion and equity (Del Rosario, 2023). Nurses with high cultural intelligence are more likely to communicate effectively, show cultural empathy, and prevent misunderstandings. This will not only benefit the workplace but will also improve the healthcare services provided.

Another important competency is Organizational Citizenship Behavior (OCB), which refers to “voluntary, extra-role behaviors supporting the organization” (Stepanek & Paul, 2022). OCBs are when employees go beyond their job responsibilities and contribute positively to the workplace. Teamwork and supportive work relationships can be strengthened with these OCBs. It can also help reduce interpersonal tensions that Filipino nurses experience abroad. When organizations acknowledge and reinforce these OCBs, they are more likely to be sustained. This will encourage a more collaborative work environment.

CQ and OCB are important assets of an overseas Filipino nurse, which are often tested in high-pressure healthcare settings and can intensify stress. This necessitates understanding how cultural intelligence and organizational citizenship behavior influence stress levels to promote a healthier nursing workforce.

Statement of the Problem

This study examines how cultural intelligence and workplace behaviors in the organization affect the stress of overseas Filipino nurses. It will further explore dimensions of cultural intelligence and specific organizational citizenship behaviors that mostly affect the stress of Filipino nurses. This research will contribute to a better understanding of how organizations can create strategies that can promote positive workplace relationships and reduce stress among nurses in diverse healthcare environments. This study seeks to answer the following research questions:

1. What is the level of cultural intelligence (CQ) of the nurses in terms of the following?
 - a. Metacognitive CQ
 - b. Cognitive CQ
 - c. Motivational CQ
 - d. Behavioral CQ?
2. What is the level of organizational citizenship behavior (OCB) among nurses
 - a. Toward the organization (OCBO)
 - b. Toward individuals (OCBI)
3. What are the levels of stress among overseas Filipino nurses in terms of
 - a. Physical Environment
 - b. Psychological Environment
 - c. Social Environment

4. Is there any significant difference in nurses' stress levels when categorized according to:
 - a. Age
 - b. Sex
 - c. Marital Status
 - d. Years of Employment
 - e. Country of Employment
5. Is there any significant relationship between nurses' cultural intelligence and stress?
6. Is there any significant relationship between nurses' organizational citizenship behavior and stress?
7. Which aspect of cultural intelligence influence nurses' stress levels the most?
8. Which OCB tendency – OCBI or OCBO – has the greatest influence on nurse's stress?

Hypothesis

The study hypothesized the following:

1. There is no significant relationship between cultural intelligence and stress.
2. There is no significant relationship between organizational citizenship behavior and stress.
3. Cultural intelligence does not predict the stress of Filipino nurses working abroad.
4. Organizational citizenship behavior does not predict the stress of Filipino nurses working abroad.

5. There is no significant difference in nurse's stress levels, considering their age, sex, and years of experience, country of employment, and marital status.

Significance of the Study

The study focuses on the factors that affect the stress levels of Filipino nurses working abroad, particularly their cultural intelligence and organizational citizenship behavior. The research seeks to provide practical insights to improve nurse well-being and workplace effectiveness by identifying which aspects of these competencies most influence stress. The findings of the study are beneficial to the following:

Nurses

This study provides nurses with a clear understanding of how cultural intelligence and organizational citizenship behavior affect their workplace stress. When nurses have knowledge of competencies that help them navigate their workplace, they may take further steps to enhance these skills and prepare for their future roles. As a result, these skills will enable them to create better relationships with their colleagues, promote harmony in the workplace, and provide high-quality patient care.

Healthcare Administration Management

The findings of this study enable policymakers to create a competency checklist and screening to hire more effective nurses. In addition, it aids human resource management in organizing effective training that fosters teamwork and an effective environment. Consequently, a better professional environment will improve nurse retention and healthcare delivery.

Nurse Educators

With the knowledge gained from this study, instructors may design programs that prepare nurses for the diverse cultures they will encounter in the workplace. It also serves as a guide to explore strategies that will help nurses manage their stress. Ultimately, these insights can help produce more resilient and culturally competent nurses who are equipped to thrive in diverse clinical settings.

Future Research

This study serves as a reference material for future researchers who wish to explore the relationship between cultural intelligence, organizational citizenship behavior, and stress in greater depth. It also encourages further investigation into variables such as resilience, leadership styles, organizational culture, and moral sensitivity that may influence nurses' stress levels and workplace effectiveness. By building on this research, future scholars can contribute to a more comprehensive understanding of how multicultural healthcare environments shape nurses' professional experiences and well-being.

Scope and Limitations of the Study

This research examines how cultural intelligence (CQ) and organizational citizenship behavior (OCB) affect the stress levels of Filipino nurses working internationally. It employs a quantitative, descriptive-correlational method and uses three questionnaires: the Nursing Stress Scale (NSS), the Organizational Citizenship Behavior Checklist (OCB-C), and the Cultural Intelligence Scale (CQS). It also seeks to identify existing relationships among variables, but does not aim to establish causal relationships.

The research study focuses only on Filipino nurses working as staff nurses and providing direct patient care outside the Philippines, specifically in the United States, United Kingdom, United Arab Emirates, Saudi Arabia, and Australia. It includes only nurses who have completed their formal clinical training and institutional orientation and currently work independently in their assigned clinical roles. The study excludes nurses who are under 21 years of age, those still undergoing training, internship, residency, or preceptorship, and nurses with less than 1 month of experience. It also excludes nurses in administrative, managerial, and non-clinical roles. The study results apply only to staff nurses who meet the specific age and length-of-service criteria. The results do not extend beyond these groups or to other healthcare workers.

It is also important to note the study's limitations, such as its reliance on purposive sampling, which may not fully represent all Filipino nurses. In addition, using self-reported questionnaires may introduce social desirability and response biases, as participants' answers depend on their honesty, perceptions, and accuracy. Also, distributing the survey online may limit participation to individuals with reliable internet access, thereby limiting the sample's representativeness.

Data collection was also limited by time constraints, which reduced the time available to gather respondents and affected the overall sample size. The study also showed uneven distribution of respondents across countries, which affected the ability to make cross-country comparisons. Because of this limitation, the research will have limited capacity to reach country-specific conclusions, thereby limiting the study's generalizability.

Furthermore, cultural context, leadership style, workload, organizational support, and cultural training can influence the results, as these factors were not accounted for by the researcher. Lastly, although stress is multidimensional, the study examines it only in its psychological and environmental dimensions, as measured by the Nursing Stress Scale (NSS). Stress levels may also be influenced by external factors beyond the scope of research, such as personal circumstances and hospital policies.

Chapter 2

Review of Literature

Cultural adaptability and strong teamwork are essential characteristics of nurses working abroad. Filipino nurses make up a significant portion of the global nursing workforce, and although they are known internationally for their dedication at work, they still often face stress when navigating cultural differences, which may affect their performance and well-being. Key factors such as cultural intelligence (CQ) and organizational citizenship behavior (OCB) may serve as protective resources for nurses to cope with workplace stress. This review discusses existing literature on CQ, OCB, work-related stress, and their significance to nursing practice.

Stress

Work-related stress is a major concern in nursing and public health. In fact, 44% of nurses reported experiencing some level of stress (Mehta et al., 2020). The high number of nurses affected by stress underscores the need for immediate solutions. Nurses' stress poses risks not only to themselves but also to the quality of patient care they provide. This is supported by previous studies showing that stress harms nurses' well-being, reduces job satisfaction, and compromises patient care quality (Mehta et al., 2020). Because nurses experience high levels of stress, researchers need to study its effects on personal health, workplace performance, and patient care standards.

Nursing professionals experience high stress levels, which may result in multiple negative outcomes, including higher turnover, burnout, absenteeism, clinical errors (Kiptulon et al., 2024; Peña et al., 2019; Shankar et al., 2025), and reduced patient satisfaction (Shankar et al., 2025). In addition, it can also lead to altered hormonal

regulation (Lin et al., 2022) and can lead to the development of anxiety and depression, as well as physical health issues such as fatigue and sleep disturbances (Parajuli et al., 2021; Singh et al., 2021). Together, these outcomes emphasize the significant burden of occupational stress on nurses and healthcare systems, emphasizing the need to systematically identify workplace and organizational determinants of elevated stress levels.

The literature describes stress as a multidimensional construct encompassing environmental, psychological, and physiological components. The psychological dimension of stress, according to transactional stress models, focuses on how people appraise their stressors and believe they can manage them (Lazarus & Folkman, 1984). In contrast, the allostatic load theory, which operates from a biological perspective, shows how ongoing activation of stress-response systems causes permanent bodily damage, increasing the likelihood of developing chronic diseases (McEwen & Stellar, 1993).

More recent empirical studies have sought to create a unified understanding that combines these two viewpoints. Dorsey et al. (2022) showed that health outcomes result from the combined effects of stressor exposure, perceived stress, and physiological responses, which interact. Research shows that stress-related outcomes improve when multiple dimensions are included in models rather than single dimensions, especially in occupational environments where workers face environmental pressures, emotional demands, and biological stress responses.

Building on this integrative perspective, Giorgi et al. (2020) used an integrative approach to explain how three environmental factors, which include physical, psychological, and social aspects, create occupational stress. The research team studied

workplace stressors at healthcare facilities and demanding professions, which included physical workplace elements that consisted of workload intensity and time pressure, and occupational hazards, while the psychological workplace elements included emotional demands and perceived control, cognitive overload, and fear of failure; the social environment showed leadership quality, interpersonal conflict, and availability of organizational support. Their findings showed that the three study dimensions interact to increase stress levels. They observed that social support and leadership moderated the effects of both physical and psychological demands. The investigation established that stress-related outcomes, including burnout, mental distress, and decreased well-being, were better predicted by models that included all three environmental factors than by models that used only one dimension. The research demonstrates that occupational health studies require research designs that assess multiple stress factors and shows that organizations need to create studies that evaluate both individual employee coping methods and their workplace environment.

Physical Stress. Physical stress refers to physiological strain or bodily fatigue resulting from physically demanding nursing tasks and working conditions (Lourenção et al., 2025). Nursing work often involves prolonged standing, heavy workloads, and extended shifts, all of which contribute to increased physical strain. Previous studies have identified several workplace factors that contribute to elevated stress levels, including heavy workloads, prolonged shifts, understaffing, lack of recognition from supervisors, shift patterns, and poor working conditions (Mehta et al., 2020; Peña et al., 2019; Parajuli et al., 2021; Singh et al., 2021; Gupta et al., 2023). These factors place significant physiological demands on nurses and contribute to fatigue and physical health problems.

The physiological consequences of sustained occupational stress may also extend to biological dysregulation, such as altered hormonal responses associated with prolonged stress exposure (Lin et al., 2022). These findings align with allostatic load theory, which posits that repeated activation of stress-response systems can accumulate over time and negatively affect physical health (McEwen & Stellar, 1993).

Psychological Stress. Psychological stress in nursing arises from the emotional and cognitive demands of patient care and professional responsibilities. The transactional model of stress suggests that psychological stress depends on how individuals perceive stressors and evaluate their ability to cope with them (Lazarus & Folkman, 1984). In nursing settings, psychological stressors may include emotional burden from patient care, fear of making mistakes, cognitive overload, and uncertainty regarding treatment decisions.

Research also indicates that the psychological impact of occupational stress may manifest as anxiety, depression, fatigue, and sleep disturbances (Parajuli et al., 2021; Singh et al., 2021). Psychological stress is further intensified by high responsibility, time pressure, and constant exposure to critical clinical situations, which can significantly affect nurses' mental well-being and job satisfaction.

Empirical studies support the interaction between psychological perceptions of stress and physiological responses. Dorsey et al. (2022) demonstrated that stress outcomes result from the interaction of perceived stress, stressor exposure, and physiological reactions, highlighting the importance of understanding how nurses interpret and respond to workplace demands.

Social Stress. Social stress refers to stress arising from interpersonal relationships, organizational structures, and workplace culture. In healthcare environments, social

stressors may include poor leadership, lack of organizational support, professional conflicts, pressure from patients and their families, and uncertainty about treatment processes (Kunwar et al., 2025).

Research suggests that organizational culture plays a significant role in shaping nurses' stress experiences. Kiptulon et al. (2024) reported that a positive organizational culture, characterized by teamwork, respect, recognition, support, communication, and fair policies, is associated with reduced stress and higher job satisfaction, which, in turn, improves employee retention. Similarly, workplace interventions such as supportive leadership and organizational backing (Peter et al., 2024), positive recognition from supervisors (Gupta et al., 2023), spiritual or religious support such as conversations with chaplains (Liberman et al., 2020), and social connections among colleagues (Peña et al., 2019) have been identified as mechanisms that help mitigate stress among nurses.

In addition, organizations are encouraged to implement open communication systems and inclusive onboarding practices to strengthen workplace support structures (Heidt, 2022). These strategies highlight the importance of social and organizational factors in reducing occupational stress and fostering resilience among nurses.

Cultural Intelligence (CQ)

Sternberg et al. (2021) define cultural intelligence (CQ) as “one's ability to adapt when confronted with problems arising in interactions with people or artifacts of cultures other than one's own”. In other words, cultural intelligence is the capacity of an individual to interact successfully with people from different cultures by being flexible, sensitive, and able to adapt, rather than just being aware of cultural differences. The main requirement is to assess a person's ability to interact successfully with people from different cultures through their flexibility, sensitivity to others, and adaptability. The process of building strong relationships requires people to understand and respect

different values, beliefs, and traditions while they develop new ways to interact and communicate with others.

Cultural intelligence is particularly important in healthcare environments where nurses interact with patients, families, and colleagues from diverse cultural backgrounds. Nurses working in foreign countries must develop CQ to deliver culturally responsive and patient-centered care, reduce cultural barriers, and improve professional and interpersonal interactions. Research indicates that CQ among nurses can be developed and highlights empathy, critical thinking, and cultural learning as important mechanisms that support its development (Lee et al., 2025).

In addition, nurses who transition to practice in another country experience several adjustment stages, including the honeymoon, culture shock, and adaptation phases, each presenting unique challenges, such as differences in academic preparation, communication barriers, and adaptation to electronic health documentation systems (Heidt, 2022). These challenges can contribute to stress and may affect both nurses' well-being and the quality of care they provide.

Empirical research has also demonstrated the relationship between cultural intelligence and occupational outcomes. A study of Japanese workers found that higher cultural intelligence, particularly the dimension reflecting an individual's ability to adapt to a different culture, was associated with lower perceived stress (Tabuse & Otsuka, 2023). Similarly, research on frontline workers showed that the motivational component of CQ significantly reduced burnout, whereas the cognitive and behavioral dimensions did not (Puzzo et al., 2023). These findings suggest that specific elements of cultural intelligence, particularly adaptability and intrinsic motivation, may help workers cope with work-related pressures and stress.

Despite the importance of CQ in healthcare practice, studies indicate that many nurses remain culturally aware but lack the ability to translate this awareness into

adaptive and effective clinical behaviors (Ślusarska, Marcinowicz, & Blaževičienė, 2023; Osmancevic, Großschädl, & Lohrmann, 2023). Developing CQ, therefore, requires a comprehensive approach that includes supportive organizational environments (Chae, Park, Kang, & Kim, 2020), strengthened resilience (Üzar Özçetin & Sarioğlu, 2022), and moral or ethical education (Dur, Göl, Erkin, & Yildiz, 2022). These strategies enable nurses to progress from cultural awareness to cultural intelligence, a competency increasingly recognized as essential in nursing practice.

Metacognitive Cultural Intelligence. Metacognitive cultural intelligence refers to an individual's awareness and control over cultural assumptions during intercultural interactions, including the ability to reflect on cultural knowledge and adjust thinking when interacting with people from different backgrounds (Ang et al., 2007). This dimension involves planning, monitoring, and revising mental strategies when navigating cross-cultural situations.

In nursing practice, metacognitive CQ helps nurses become more aware of cultural differences and reflect on their own cultural perspectives when providing care to diverse patient populations. Through reflective thinking and cultural awareness, nurses can adapt their communication and care strategies to ensure that interactions remain respectful and culturally appropriate.

Cognitive Cultural Intelligence. Cognitive cultural intelligence refers to knowledge of norms, practices, conventions, and systems of different cultures (Ang et al., 2007). This dimension reflects an individual's understanding of cultural values, social structures, communication patterns, and healthcare beliefs that influence interactions across cultures.

In healthcare settings, cognitive CQ enables nurses to recognize cultural differences in health beliefs, communication styles, and expectations related to treatment

and care. However, research indicates that although many nurses possess cultural knowledge and awareness, they may still struggle to apply this knowledge effectively in clinical practice (Ślusarska, Marcinowicz, & Blaževičienė, 2023; Osmancevic, Großschädl, & Lohrmann, 2023). This gap highlights the need to move beyond knowledge-based awareness toward practical cultural adaptability.

Motivational Cultural Intelligence. Motivational cultural intelligence refers to the intrinsic interest, confidence, and willingness to engage in intercultural interactions (Ang et al., 2007). This dimension reflects the energy and persistence individuals invest in learning about and adapting to different cultural environments.

Studies have shown that motivational CQ plays an important role in reducing occupational stress and burnout. Research on frontline workers found that the motivational dimension of CQ significantly reduced burnout, whereas cognitive and behavioral CQ did not (Puzzo et al., 2023). Similarly, studies suggest that individuals with greater adaptability to diverse cultural contexts experience lower perceived stress (Tabuse & Otsuka, 2023). These findings suggest that intrinsic motivation to engage with cultural differences can serve as a protective factor against workplace stress.

Behavioral Cultural Intelligence. Behavioral cultural intelligence refers to the ability to demonstrate appropriate verbal and nonverbal behaviors during intercultural interactions (Ang et al., 2007). This includes adjusting communication styles, gestures, and behaviors to align with cultural expectations and norms.

For nurses working in multicultural healthcare environments, behavioral CQ enables them to communicate effectively with patients and colleagues from diverse backgrounds. However, despite growing recognition of cultural competence in healthcare, many nurses struggle to translate cultural awareness into adaptive clinical behaviors

(Ślusarska, Marcinowicz, & Blaževičienė, 2023; Osmancevic, Großschädl, & Lohrmann, 2023). This highlights the need for educational and organizational strategies that help nurses develop practical intercultural communication skills.

Developing behavioral CQ can be supported through organizational support systems, resilience-building programs, and ethical or moral education (Chae et al., 2020; Üzar Özçetin & Sarioğlu, 2022; Dur et al., 2022). These approaches help nurses strengthen their ability to translate cultural understanding into culturally responsive behaviors during patient care.

Organizational Citizenship Behavior (OCB)

Organizational citizenship behavior (OCB) refers to voluntary actions performed by employees beyond their formal job responsibilities that contribute to the functioning and development of the organization (Al-Ahmadi & Mahran, 2021). These behaviors include helping coworkers beyond assigned duties, mentoring new staff, and participating in activities that support organizational goals. In healthcare and nursing settings, OCB has been recognized as an important factor in improving both organizational performance and employee well-being.

The presence of OCB fosters a workplace environment that promotes productivity and collaboration. When employees actively support one another and participate in team-oriented activities, overall work efficiency improves. Evidence suggests that hospitals with higher levels of OCB among staff demonstrate greater organizational effectiveness (Wibowo & Mochklas, 2020). In nursing contexts, OCB has been associated with improved performance, reduced workplace conflict, and enhanced quality of patient care. Because of these benefits, researchers have emphasized the importance of identifying factors that encourage OCB among nurses, including job satisfaction (Ghewari & Pawar,

2023), responsible leadership (Özkan et al., 2024), and employee engagement (Bardhan & Haque, 2025). Research also suggests that organizational citizenship behavior can enhance nurses' job satisfaction, which may, in turn, reduce work-related stress. Given its influence on employee performance and organizational functioning, OCB remains an important concept for further investigation in organizational and nursing research.

Traditionally, OCB has been conceptualized as a multidimensional construct consisting of behavioral facets such as altruism, courtesy, conscientiousness, sportsmanship, and civic virtue (Organ, 1988; LePine et al., 2002). However, a widely adopted higher-order classification organizes these behaviors into two primary categories based on the target of the behavior: organizational citizenship behavior directed toward individuals (OCB-I) and toward the organization (OCB-O). This two-factor model was proposed by Williams and Anderson (1991), who argued that behaviors aimed at assisting coworkers differ conceptually from behaviors that primarily benefit the organization as a whole (Organizational Citizenship Behavior, 2022). Recent research continues to support this distinction, suggesting that these two forms of extra-role behavior contribute differently to workplace outcomes (Fousiani et al., 2025; Worku & Debela, 2024). Consequently, distinguishing between OCB-I and OCB-O provides a more parsimonious and theoretically meaningful framework for examining the antecedents and outcomes of citizenship behavior in organizational settings.

Organizational Citizenship Behavior Toward the Organization (OCB-O).

Organizational citizenship behavior directed toward the organization (OCB-O) refers to voluntary actions that primarily benefit the organization as a whole rather than specific individuals. These behaviors include participating in organizational activities,

demonstrating civic virtue, adhering to organizational rules beyond minimum expectations, and supporting institutional goals and initiatives (Williams & Anderson, 1991; Organ, 1988).

OCB-O reflects employees' commitment to the organization's broader functioning and success. Behaviors such as conscientiousness, sportsmanship, and civic virtue contribute to maintaining organizational norms and improving institutional effectiveness (LePine et al., 2002). In healthcare settings, OCB-O may involve nurses actively participating in organizational improvement efforts, supporting hospital initiatives, and maintaining positive attitudes even in challenging work environments. Research suggests that distinguishing between OCB-O and OCB-I enables scholars to better examine how organizational factors, such as leadership and workplace policies, influence employees' willingness to engage in extra-role behaviors that benefit the organization (Worku & Debela, 2024).

Organizational Citizenship Behavior Toward Individuals (OCB-I).

Organizational citizenship behavior directed toward individuals (OCB-I) refers to voluntary actions that benefit specific coworkers within the organization. These behaviors typically include helping colleagues complete tasks, offering guidance or mentorship to new employees, and maintaining supportive interpersonal relationships in the workplace (Williams & Anderson, 1991). OCB-I is closely related to the behavioral dimensions of altruism and courtesy described in earlier conceptualizations of OCB (Organ, 1988; LePine et al., 2002).

In healthcare environments, OCB-I can play a significant role in strengthening teamwork and collaboration among nurses. When nurses provide assistance to colleagues

beyond their formal responsibilities, it fosters mutual support and enhances workplace relationships. Recent research suggests that people-oriented citizenship behaviors may be more strongly associated with coworker support and employee well-being than organization-directed behaviors in certain contexts (Fousiani et al., 2025). This highlights the importance of OCB-I in promoting a cooperative work climate and improving interpersonal dynamics within healthcare teams.

Relationship Between Variables

Studying how Filipino nurses function in multicultural healthcare settings requires researchers to understand cultural intelligence, organizational citizenship behavior, and stress. The three constructs must be examined to understand their relationships and their effects on nurses working in foreign countries.

Nurses' Cultural Intelligence and Stress

Research shows that cultural intelligence (CQ) enhances individuals' adaptability, empathy, and cultural awareness, allowing them to interact more effectively in diverse environments (Kadam et al., 2021; Ang et al., 2007). These skills are important in nursing because interacting with people from different cultures is constant in their field of work. High CQ helps nurses develop effective coping mechanisms to handle psychological stress arising from cultural misunderstandings, communication barriers, and diverse patient needs. Studies have shown that nurses with higher CQ report lower emotional exhaustion and greater personal accomplishment, reflecting reduced work-related stress and burnout (Purabdollah, Tabrizi, Markani, & Poornaki, 2021). However, despite its significance, there is insufficient research about Filipino nurses and their cultural intelligence linked to stress. This is important because it shows how CQ affects

stress levels in this population, which may help develop strategies to improve their well-being, resilience, and ability to provide care in international healthcare environments.

Nurses' Organizational Citizenship Behavior and Stress

Studies suggest that in complex and high-demand environments such as hospitals, organizational citizenship behavior (OCB) plays a vital role in supporting effective, patient-centered care (Podsakoff et al., 2000). Helping a coworker and initiating help are examples of discretionary behaviors that can reduce workplace stress, as they build teamwork that can decrease conflicts and create an environment of support and belonging. However, high levels of job stress may decrease nurses' desire to engage in OCB because these behaviors require emotional and cognitive capacities that can become exhausted because of work-related strain. Empirical research supports this pattern, showing that job stressors are associated with lower levels of OCB because they diminish organizational commitment and draw from employees' limited psychological resources, making discretionary behaviors less likely (Pooja et al., 2016). This creates a cycle: OCB provides stress protection, while stress inhibits OCB execution. Despite the importance of this relationship, there is a significant gap in the research, as only a few studies have examined the direct relationship between OCB and stress among nurses. Because of this, more studies are needed, particularly those focusing on Filipino nurses working overseas, as their cultural backgrounds, migration patterns, and work-related stressors shape different ways of displaying OCB, which in turn affects their stress management.

Moderating Variables in Nurses' Stress

Nurses experience occupational stress through multiple dimensions that develop from both personal experiences and work environment factors. Demographic variables

such as sex, age, marital status, years of employment, and country of employment have been widely studied as potential moderators influencing how nurses experience, perceive, and respond to occupational stress. However, studies yield inconsistent findings, suggesting that the effects of these variables vary across organizational, cultural, and situational contexts.

Sex. Research indicates that nurses' work-related stress may differ based on gender. Studies conducted in high-demand, emotionally intensive contexts, such as the COVID-19 pandemic, found that female nurses often experience higher levels of perceived stress than male nurses (Ali et al., 2022). This may be due to the greater emotional labor and work demands faced by women in caregiving professions, compounded by societal expectations regarding caregiving roles.

Conversely, some studies report contrasting findings. Regression-based analyses in European samples suggest that male nurses may experience higher perceived stress, potentially due to their minority status in the profession, role strain, or differing coping expectations (Rypicz et al., 2023). These findings underscore that sex interacts with contextual and situational factors in shaping occupational stress, rather than having a uniform effect.

Age. Age has also been examined as a moderator of stress, with mixed outcomes. Several studies indicate that younger nurses tend to experience higher stress levels, particularly related to workload, emotional demands, and coping difficulties (Ali et al., 2022). In contrast, older nurses often report lower stress levels, reflecting greater professional competence, resilience, and adaptive coping strategies developed over time.

However, cluster analyses by Tran et al. (2019) reveal that older nurses were more frequently found in groups characterized by moderate stress, anxiety, and depression, suggesting that cumulative exposure to occupational stressors and additional responsibilities may diminish the protective effects of experience. This demonstrates a complex, non-linear relationship between age and stress outcomes.

Marital Status. Marital status has been shown to influence nurses' perceived stress. Regression analyses suggest that single nurses report higher stress levels than nurses in partnered relationships, suggesting that social and emotional support buffers against occupational stress (Rypicz et al., 2023). Conversely, Tran et al. (2019) found that married nurses experienced moderate mental strain, highlighting that marital status interacts with life-course and contextual factors rather than exerting a direct or uniform effect on stress.

Years of Employment. Years of employment are closely related to age but may independently moderate stress. Less experienced nurses often experience higher stress due to limited exposure to coping strategies and organizational routines, while more experienced nurses may demonstrate lower stress levels as a result of professional mastery (Ali et al., 2022). Nevertheless, similar to age, cumulative work exposure can lead to moderate levels of stress, anxiety, and depression over time (Tran et al., 2019), indicating that tenure effects are context-dependent.

Country of Employment. Cross-national research demonstrates that the country of employment moderates stress-related outcomes due to variations in healthcare systems, staffing patterns, cultural norms, and available resources. Nurses in Japan and Malaysia report higher levels of burnout, emotional exhaustion, and turnover intentions, reflecting elevated stress in these contexts (Ohue et al., 2021). In contrast, nurses in Thailand

exhibit lower burnout and higher professional efficacy, suggesting more supportive work environments, while nurses in Canada and the United States generally show moderate stress outcomes. These findings indicate that organizational and systemic factors across countries shape nurses' stress experiences.

Not all studies support the moderating role of demographic variables. Research in Indonesian hospital settings found no significant associations between sex, age, years of employment, and stress (Hapsari et al., 2023). Similarly, Babapour et al. (2022) found that while occupational stress negatively affects nurses' quality of life and professional functioning, demographic variables were not consistently identified as dominant predictors across contexts.

Overall, demographic variables including sex, age, marital status, years of employment, and country of employment do not exert uniform direct effects on nurses' occupational stress. Instead, these variables function as context-specific moderators, interacting with organizational conditions, cultural environments, and situational demands. The mixed findings highlight the importance of considering both demographic characteristics and psychosocial/workplace factors to fully understand occupational stress among nurses.

Theoretical Framework

The present research is grounded on the Cultural Intelligence Model (Earley & Ang, 2003), which defines cultural intelligence as “a person's capability for successful adaptation to new cultural settings, that is, for unfamiliar settings attributable to cultural context”. The cultural intelligence model comprises four aspects: metacognitive, cognitive, motivational, and behavioral. Eliadis (2023) discussed these concepts and defined metacognitive CQ as a person's cultural awareness, while cognitive CQ as an

individual's cultural knowledge. Furthermore, motivational CQ was described as a person's ability to focus attention and effort on cultural differences, while behavioral CQ was the capacity to demonstrate appropriate verbal and nonverbal responses (Eliadis, 2023). Employees with a high level of cultural intelligence can learn new behaviors that help them adapt more easily to environments different from their own. They continue to work efficiently by understanding different cultures and taking steps to thrive in a new environment, even as they adjust to a place's norms.

In addition, the present study is also based on the concept of organizational citizenship behavior (OCB) (Organ, 1988), defined as discretionary, voluntary behaviors that contribute to organizational effectiveness but are not formally recognized or rewarded. Organ identified five dimensions of OCB: altruism, courtesy, conscientiousness, civic virtue, and sportsmanship (Organ, 1988). Building on this foundation, Williams and Anderson (1991) distinguished OCB by its target, categorizing it as either directed toward individuals or toward the organization. Neither Williams nor Anderson employed the labels OCB-I and OCB-O, but their work laid the conceptual foundation for these categories. The terms OCB-I (directed toward individuals) and OCB-O (directed toward the organization) were later introduced by Podsakoff et al. (2000) to provide a more precise higher-order classification of OCB. According to Podsakoff et al. (2000), OCB-I encompasses discretionary behaviors that primarily benefit co-workers and interpersonal relationships, such as altruism and courtesy, whereas OCB-O includes behaviors that principally serve organizational objectives, such as conscientiousness, civic virtue, and sportsmanship. The higher-order distinction between interpersonal and organizational citizenship behavior helps establish better conceptual understanding. In the healthcare context, OCB-I refers to the supportive and

cooperative actions that nurses show toward fellow nurses, while OCB-O refers to the actions that nurses take to support the organization as a whole. This research uses Organ's OCB framework, operationalized through the OCB-I and OCB-O classification, to study how Filipino nurses working overseas engage in voluntary work activities.

Additionally, this research is also grounded in the Multidimensional Stress Model by McGrath (1970). The model defines stress as the result of two factors: environmental demands and the individual's assessment of those demands. It differentiates between stressors in actual work and in social settings, and between the individual's perception of those stressors, their coping abilities, and their emotional responses. The current study uses this framework to investigate stress arising from environmental factors in nursing workplaces and psychological factors, examining how Filipino nurses working internationally handle their work demands and demonstrating the different dimensions of stress experienced in international healthcare environments.

Lastly, this study is anchored on the Transactional Model of Stress and Coping developed by Richard Lazarus and Susan Folkman (1984). The model conceptualizes stress as the result of dynamic interactions, or transactions, between an individual and their environment. According to this framework, stress occurs when individuals perceive that environmental demands exceed their available coping resources, thereby threatening their well-being (Pezaro, 2018). Rather than viewing stress as a purely environmental stimulus or an internal psychological response, the model emphasizes that stress emerges from how individuals interpret and respond to environmental conditions.

A central component of the model is cognitive appraisal, the process by which individuals evaluate whether a situation is stressful and determine how to cope with it. Through primary appraisal, individuals assess whether an event poses a threat, challenge,

or harm to their well-being. Through secondary appraisal, they evaluate the coping resources available to manage the situation. These appraisal processes ultimately influence the coping strategies that individuals employ and the level of stress they experience.

In this study, Filipino nurses working abroad face various workplace and cultural challenges, including communication barriers, adaptation to different healthcare systems, and integration into multicultural work environments. Consistent with the transactional perspective, these challenges do not automatically produce stress; rather, stress emerges from how nurses perceive and interpret these experiences and whether they believe they possess sufficient resources to cope with them.

Within this framework, cultural intelligence (CQ) and organizational citizenship behavior (OCB) are conceptualized as important personal and social resources that influence nurses' appraisal and coping processes. Cultural intelligence equips individuals to understand, interpret, and adapt to culturally diverse situations. Nurses with higher levels of CQ are therefore more likely to interpret cross-cultural interactions as manageable challenges rather than overwhelming stressors, enabling them to respond with more effective coping strategies in multicultural healthcare settings.

Similarly, organizational citizenship behavior contributes to the social resources available to nurses in the workplace. By engaging in voluntary behaviors such as helping coworkers, supporting team functioning, and contributing to organizational effectiveness, nurses who demonstrate OCB may cultivate stronger interpersonal relationships and more supportive work environments. These social networks can provide emotional and professional support that helps individuals cope with occupational stress.

By integrating the transactional model with the constructs of cultural intelligence and organizational citizenship behavior, this study proposes that stress among Filipino nurses working abroad is influenced not only by environmental demands but also by the individual and relational resources that shape their appraisal and coping processes. This theoretical perspective provides a framework for understanding how CQ and OCB may contribute to variations in physical, psychological, and social dimensions of nursing stress in multicultural healthcare contexts.

Synthesis/Implications of the Study to SDA Principles

Seventh-day Adventists encourage Christians to live in service just as Jesus did while He was on Earth (New International Version, 2011, Matthew 20:28, Philippians 2:3-4). Jesus dedicated his life to serving people. He healed the sick, fed the hungry, and comforted those who mourned. These are similar to the duties nurses perform; however, nurses must not use their professional obligations as an excuse to skip essential self-care activities or neglect their health. Ellen White (1957) emphasizes that maintaining holistic health is important for enabling individuals to serve God and others effectively.

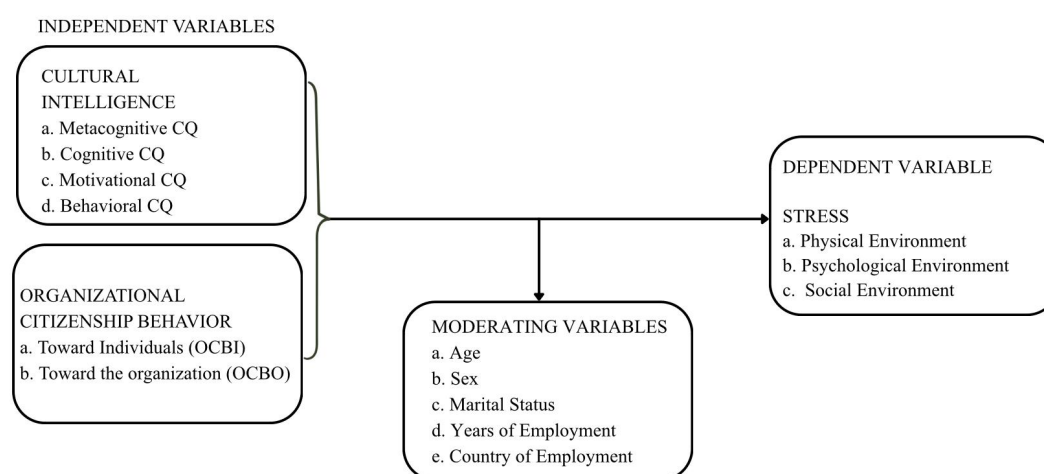
Nursing is a stressful profession by nature, and prolonged exposure to work-related stress can negatively impact one's physical, mental, and emotional well-being (Babapour et al., 2022). This is where cultural intelligence and organizational citizenship behavior come in. Both cultural intelligence (CQ) and organizational citizenship behavior (OCB) are potential factors that could help reduce nurses' work-related stress. Therefore, addressing these factors is essential for understanding how Filipino nurses working abroad can preserve holistic wellbeing while sustaining the quality of patient care.

Research Paradigm

The research paradigm illustrates the hypothesized relationship between cultural intelligence and workplace stress among Filipino nurses working abroad. It also takes into consideration moderating variables such as age, gender, and years of experience, which may affect the strength and direction of these relationships.

Figure 1.

Relationship of Cultural Intelligence and Organizational Citizenship Behavior on Workplace Stress Among Filipino Nurses Working Abroad



Definition of Terms

The following key terms are defined to ensure a common understanding of the variables used in this study. These definitions are taken from established literature and adapted to the context of the present research, which focuses on the relationship between cultural intelligence, organizational citizenship behavior, and stress among Filipino nurses in multicultural healthcare facilities.

Behavioral CQ. It describes a person's ability to use appropriate verbal and nonverbal actions when engaging with people from different cultures. This research focuses on Filipino nurses' capacity to behave appropriately when interacting across cultures.

Cognitive CQ. It describes an individual's knowledge of cultural norms, practices, and differences, providing the foundation for effective decision-making and performance in multicultural settings. In this research, it means the Filipino Nurses' knowledge and understanding of different cultures in the workplace.

Cultural Intelligence (CQ). It refers to an individual's ability to adapt in a culturally diverse setting. In this study, cultural intelligence will be measured using the Cultural Intelligence Scale (CQS), which assesses Filipino nurses' perceived ability to adapt in another country.

Metacognitive CQ. It is defined as a person's cultural awareness in cross-cultural interactions, enabling active reflection, critical evaluation of assumptions, and continual adjustment to mental frameworks to enhance understanding. In this study, it refers to Filipino nurses' understanding of the cultures in which they are currently working.

Motivational CQ. It describes an individual's capacity to direct effort toward cultural differences, supported by self-efficacy and innate motivation that build the confidence and interest needed for effective intercultural interaction. This study pertains to Filipino nurses' ability to sustain motivation and display acceptable behavior when interacting with people from diverse cultural backgrounds.

Organizational Citizenship Behavior (OCB). It refers to voluntary actions beyond official job duties that promote the organization's efficiency and a positive work environment. In this study, OCB refers to the voluntary actions of Filipino staff nurses to

help and improve their workplace. Measured using the OCB Checklist by Spector et al. (2010), with higher scores indicating a greater frequency of voluntary, helpful behaviors beyond formal nursing duties.

OCB-Individual (OCB-I). It refers to OCB directed toward individuals, such as helping co-workers, mentoring, or supporting colleagues in their tasks. For this study, OCB-I is quantified using subscale scores from the OCB Checklist, which reflect nurses' frequency of helpful behaviors toward fellow staff members.

OCB-Organization (OCB-O). It refers to OCB directed toward the organization, including behaviors such as adherence to policies, promoting hospital welfare, and taking initiatives to improve organizational processes. In this study, OCB-O is measured using the OCB Checklist subscale, which assesses nurses' discretionary actions that benefit the hospital or organization as a whole.

Physical Environment. Aspects of the hospital environment that can influence stress levels include noise, lighting, patient load, and resource availability. In this study, stress is measured using NSS items related to workload, physical conditions, and resource availability, with higher scores indicating greater stress from physical environment factors.

Psychological Environment. Emotional and cognitive factors in the workplace that affect nurses' stress, including role conflict, workload pressure, and job expectations. In this study, it is measured via NSS items assessing perceived role conflict, responsibility, and emotional demands, with higher scores indicating higher psychological stress.

Social Environment. Interpersonal interactions in the workplace that influence stress, including relationships with colleagues, supervisors, and patients. In this study, it is measured using NSS items on conflict with peers, supervisory issues, and social support, with higher scores indicating greater stress arising from the social environment.

Staff Nurse. It refers to a registered nurse who provides direct patient care in clinical settings, implementing nursing interventions, monitoring patient conditions, and collaborating with other healthcare professionals to ensure quality care. For this study, a staff nurse is a registered nurse currently employed as a bedside nurse, aged 21–50 years, with at least 1-25 years of nursing experience abroad.

Stress. It is a multidimensional construct that may manifest physiologically, psychologically, behaviorally, cognitively, socially, and spiritually. In this study, stress is assessed using the Nursing Stress Scale (NSS) by Gray-Toft & Anderson (1981), which measures the frequency of stress experienced in various nursing work situations on a 4-point Likert scale.

Chapter 3

Methodology

This chapter outlines the methods and procedures the researcher used to address the objectives and problem of the study. It details the research design, population, and sampling techniques, research instruments, data-gathering procedures, and the ethical considerations that will be observed throughout the study.

Research Design

This study employs a quantitative research design, drawing on both descriptive-evaluative and descriptive-correlational approaches. A quantitative design focuses on collecting numerical data and applying statistical analysis to test hypotheses and identify patterns or relationships among variables (Creswell & Creswell, 2018). The descriptive-evaluative design assessed the levels of cultural intelligence (CQ), organizational citizenship behavior (OCB), and occupational stress among respondents, and described how CQ and OCB contribute to managing occupational stress among nurses. Meanwhile, the descriptive correlational design systematically examines the relationships among CQ, OCB, and stress as they naturally occur, without manipulating any variables. This type of correlational approach is particularly suitable for observing and measuring variables in their natural settings, facilitating the identification of potential associations between variables and providing a foundation for more in-depth investigations (Williams, 2025). Overall, this combined approach is appropriate for the present study because it enables objective measurement and analysis of how CQ and OCB influence the stress levels of Filipino nurses employed overseas, allowing for generalization of the findings to a broader population.

Population and Sampling Techniques

The study population consisted of 159 Filipino staff nurses currently employed in direct patient care outside the Philippines, specifically in the United States, United Kingdom, United Arab Emirates, Saudi Arabia, and Australia. These countries were selected because of their high employment rates of Filipino nurses (Lorenzo et al., 2007; Patinio, 2021) and their diverse cultural work environments, which are necessary for examining CQ and OCB in relation to workplace stress.

Eligible participants were Filipino nurses aged 21-60 years old who had completed formal clinical training and institutional orientation and were functioning independently in their assigned clinical roles. Nurses still undergoing training, internship, residency, or orientation were excluded, as were those occupying purely administrative, managerial, or non-clinical roles. Additionally, participants were required to have at least one month of cumulative overseas staff nursing experience to ensure adequate exposure to organizational systems and cross-cultural interactions necessary for assessing CQ, OCB, and perceived stress.

A quota sampling technique was initially employed to ensure proportional and equal representation across the five selected countries. The required sample size for this study was calculated using G*Power software, (Faul et al., 2009) for multiple linear regression with two predictors (OCB and CQ), applying a medium effect size ($f^2=0.15$) which provides a reasonable and conservative estimate to keep the sample size practical and achievable for multi-country data collection, $\alpha=0.05$, and statistical power $=0.80$. The analysis indicated a minimum of 68 participants per country, for a total of 340 respondents. Equal allocation per country was planned to strengthen cross-country comparisons while maintaining adequate statistical power for hypothesis testing.

To achieve the predetermined quotas, purposive sampling was used as the primary recruitment strategy. A purposive sampling technique was used to identify participants

for the study. It is a non-probability sampling technique that involves selecting participants who meet specific inclusion criteria relevant to the research objectives (Etikan et al., 2016). Following initial recruitment, snowball sampling was employed to supplement participant recruitment through referrals from existing respondents, particularly to reach eligible nurses within the same country, until the assigned quota was met. The combined use of purposive and snowball sampling is appropriate for accessing a geographically dispersed population with specific professional and cultural characteristics.

However, despite these recruitment strategies, the intended quota of 340 respondents was not achieved. The final sample consisted of 159 participants, with unequal representation across the five countries. Recruitment was constrained by several factors, including limited access to professional networks in certain locations and time limitations during the data collection period. Additionally, some potential participants declined participation or submitted responses that did not meet the inclusion criteria.

While the reduced and unequal sample distribution may limit the representativeness of specific country subgroups and reduce statistical power for cross-country comparisons, the total sample of 159 respondents remained sufficient for conducting the planned multiple linear regression analysis. Therefore, the study was still able to adequately examine the influence of cultural intelligence and organizational citizenship behavior on stress among Filipino nurses working overseas, although findings related to country comparisons were interpreted with caution.

Instrumentation

This study utilized standardized, validated instruments, namely the Cultural Intelligence Scale (CQS), Organizational Citizenship Behavior Checklist (OCB-C), and

Nursing Stress Scale (NSS). These questionnaires were selected for their strong relevance to the study variables and their proven ability to generate data that effectively address the research problem.

Part I. Collected demographic data from the respondents. This includes their age, sex at birth, marital status, years of work experience, and the country in which they are currently working.

Part II. Consists of the Cultural Intelligence Scale (CQS) developed by Ang et al. (2007). It is a 20-item, reliable, and valid instrument designed to assess an individual's ability to function effectively in culturally diverse environments. It demonstrates strong psychometric properties, with reported Cronbach's alpha values ranging from 0.89 to 0.93. The CQS consists of four dimensions: metacognitive CQ (4), cognitive CQ (6), motivational CQ (5), and behavioral CQ (5). It includes a 7-point rating scale (1 = Strongly Disagree to 7 = Strongly Agree), with higher scores indicating greater cultural intelligence. To enhance clarity and avoid ambiguity in interpretation, the CQS mean scores were categorized into seven levels: very low, low, slightly low, moderate, slightly high, high, and very high cultural intelligence. This approach is consistent with prior empirical studies using the CQS and supports clearer interpretation of findings in applied nursing research. This is highly suitable for the present study because Filipino nurses working abroad constantly interact with patients, colleagues, and supervisors from diverse cultural backgrounds. By applying the CQS, the researcher will be able to measure how effectively participants interact in a culturally diverse environment. Moreover, the CQS has demonstrated a strong cross-cultural validity and high internal

consistency in healthcare and multinational settings, further supporting its appropriateness for this study.

Table 1.

Likert Scale Interpretation for the Cultural Intelligence Scale (CQS)

Rating Scale	Scaled Response	Mean	Verbal Interpretation
1	Strongly Disagree	1.– 1.86	Very Low CQ
2	Disagree	1.87 – 2.72	Low CQ
3	Somewhat Disagree	2.73 – 3.58	Slightly Low CQ
4	Neutral	3.59 – 4.44	Moderate CQ
5	Somewhat Agree	4.45 – 5.30	Slightly High CQ
6	Agree	5.31 - 6.16	High CQ
7	Strongly Agree	6.17 - 7.00	Very High CQ

Part III. Assesses the respondents' frequency of engaging in Organizational Citizenship Behavior (OCB) using the 20-item Organizational Citizenship Behavior Checklist (OCB-C) developed by Spector et al. (2010). Based on Dennis Organ's OCB framework, the OCB-C was designed to make OCB measurable, behaviorally specific, and culturally adaptable, with strong reliability (Cronbach's alpha = 0.89–0.94). It measures voluntary behaviors that go beyond formal job expectations and classifies them into two dimensions: OCBI (6), which is directed toward helping people, and OCBO (6), which is directed toward supporting the organization. Notably, not all items are classified as OCBO or OCBI, as some behaviors represent broader forms of organizational citizenship that do not align neatly with either subscale. However, for analytical clarity and to align with the study's focus on prosocial behaviors toward individuals versus organizationally oriented behaviors, the researcher classified the items into these two categories. These items still contribute to the overall OCB score, maintaining both conceptual integrity and statistical validity. Responses are rated on a 5-point frequency

scale (1 = Never to 5 = Every day), with higher scores indicating greater OCB. This instrument is appropriate for the current study, as OCB plays a vital role in healthcare settings, where nurses often demonstrate teamwork-oriented, patient-centered behaviors. Measuring these behaviors will help determine how often and to what extent Filipino nurses engage in voluntary, prosocial behaviors that support co-workers and organizational functioning, providing insights into teamwork, workplace relationships, and the overall organizational climate.

Table 2.

Likert Scale Interpretation for the Organizational Citizenship Behavior Checklist (OCBC)

Rating Scale	Scaled Response	Mean	Verbal Interpretation
1	Never	1.– 1.79	Very Low OCB
2	Once or twice	1.80 – 2.59	Low OCB
3	Once or twice/ month	2.60 – 3.39	Moderate OCB
4	Once or twice/ week	3.40 – 4.19	High OCB
5	Every day	4.20 – 5.00	Very High OCB

Lastly, **Part IV** assesses nurses' occupational stress using the Nursing Stress Scale (NSS) developed by Gray-Toft and Anderson (1981). The NSS is a widely used and psychometrically sound instrument consisting of 34 items rated on a 4-point Likert-type frequency scale (0 = Never to 3 = Very Frequently), with higher scores indicating greater perceived stress. The scale demonstrates strong reliability, with reported Cronbach's alpha coefficients ranging from 0.89 to 0.97.

The original NSS comprises seven subscales: workload, death and dying, conflict with physicians, conflict with other nurses, insufficient support, uncertainty regarding treatment, and inadequate preparation. While the original instrument does not propose higher-order domains, Spanish validation studies have grouped NSS items into three

broad stress domains to enhance interpretability: physical (organizational and workload-related stressors), psychological (emotional and cognitive stressors such as death and suffering, uncertainty, and inadequate preparation), and social environment (interpersonal stressors involving conflict with physicians and other nurses). This three-domain grouping has demonstrated strong internal consistency and construct validity in nursing populations, with overall reliability coefficients exceeding 0.90 (Porcel-Gálvez et al., 2020).

In the present study, the original English version of the NSS was administered without modification, and the three-domain classification was applied solely for analytical grouping and interpretation, without altering the original scoring structure. The NSS is highly relevant to this research as it captures stressors unique to the nursing profession, enabling examination of physical, psychological, and social stress among Filipino nurses working abroad and supporting the study's aim of assessing the influence of Cultural Intelligence (CQ) and Organizational Citizenship Behavior (OCB) on nursing stress.

Table 3.

Likert Scale Interpretation for the Nursing Stress Scale (NSS)

Rating Scale	Scaled Response	Mean	Verbal Interpretation
0	Never	0.00 – 0.75	Very Low Stress
1	Occasionally	0.76 – 1.50	Low Stress
2	Frequently	1.51 – 2.25	Moderate Stress
3	Very Frequently	2.26 – 3.00	High Stress

Data Gathering Procedure

The study employed a quantitative approach to data collection using structured questionnaires to ensure consistency, reliability, and comparability of responses across participants (Saunders et al., 2019). The use of standardized survey instruments is appropriate for examining relationships among variables and minimizing measurement bias across diverse geographic contexts.

A systematic and structured data collection process was implemented. Research assistants from each participating country were carefully selected based on their accessibility to the target population and familiarity with the local context. Their responsibility is to distribute the questionnaires via an online platform to participants who meet the study's inclusion criteria. Prior to data collection, the researcher conducted an online, comprehensive, one-on-one orientation for all research assistants, covering the study's objectives, data collection procedures, inclusion criteria, ethical considerations, and proper administration of the research instruments. This orientation aims to promote uniformity in data collection procedures and ensure adherence to ethical research standards.

The research assistants are primarily responsible for disseminating the Google Form questionnaire links to referred and eligible participants. They also serve as initial points of contact for participants by addressing inquiries and providing immediate clarification on procedural matters during the data collection phase, particularly when the researcher is unavailable. To maintain data integrity, research assistants were instructed not to influence participants' responses or interpretations of questionnaire items.

Prior to participation, all respondents were fully informed about the purpose, scope, and nature of the study. Informed consent was obtained electronically before access to the questionnaire was granted. Participants were assured that their involvement was voluntary and that they may withdraw from the study at any time without penalty. Strict measures were implemented to ensure the anonymity and confidentiality of all collected data, and no personally identifiable information will be collected.

The Cultural Intelligence Scale (CQS), Organizational Citizenship Behavior Checklist (OCB-C), and Nursing Stress Scale (NSS) were utilized to measure cultural intelligence, organizational citizenship behavior, and nursing stress, respectively. These instruments were administered through a secure online platform to facilitate accessibility for participants across different countries. Respondents were provided with sufficient time to complete the questionnaires at their convenience.

Upon completion of data collection, all responses were screened for completeness and accuracy. Validated data will then be encoded and submitted to a statistician for appropriate statistical analysis. The results of these analyses were used to address the study's research questions and test the proposed hypotheses.

Ethical Considerations

The researchers sought approval from the Institutional Ethics Review Board before commencing data collection. The study also strictly adhered to established ethical standards to protect the rights and welfare of all participants. The purpose, procedures, and significance of the study were clearly explained to the participants, and their voluntary participation was emphasized through informed consent. Confidentiality and anonymity were also strictly enforced, and the gathered data was solely for academic purposes.

In addition, the researcher sought permission via email from the original authors of the validated instruments used in the study and ensured proper acknowledgment and credit were given to them in all related documentation and publications.

Data Analysis

This study utilized survey questionnaires as the primary data collection instruments, with responses subjected to quantitative analysis using predetermined scoring and interpretation guidelines. The standardized instruments use Likert-type scales, yielding numerical data suitable for statistical analysis. The results were analyzed to determine the levels of Cultural Intelligence (CQ), Organizational Citizenship Behavior (OCB), and Nursing Stress among Filipino nurses working overseas and to examine the relationships among these variables.

Descriptive statistical techniques, including frequency, percentage, mean, and standard deviation, were used to summarize participants' demographic characteristics and determine the levels of CQ, OCB, and Nursing Stress. Computed mean scores were interpreted using the established Likert-scale ranges specific to each standardized instrument.

Inferential statistical analyses were conducted to address the study's research questions. Pearson's product-moment correlation coefficient (r) will be employed to examine the relationships among Cultural Intelligence, Organizational Citizenship Behavior, and Nursing Stress. To determine whether Cultural Intelligence and Organizational Citizenship Behavior significantly predict Nursing Stress, a multiple linear regression (MLR) was conducted.

Additionally, differences in CQ, OCB, and Nursing Stress across demographic variables were analyzed using independent samples t-tests for variables with two groups and one-way analysis of variance (ANOVA) for variables with three or more groups.

These statistical procedures provide a comprehensive understanding of the associations, predictive relationships, and group differences among the study variables.

Demographic Profile of the Respondents

Table 4 presents the demographic profile of the respondents, providing an overview of key characteristics including age, sex, marital status, country of employment, and years of professional experience.

Age. The age distribution of the respondents in this study indicates that the largest proportion fell within the 31–44 years range (47.8%), followed by those aged 23–30 years (27.0%), and 45–60 years (25.2%). These categories were selected to reflect early-, mid-, and late-career stages, which are relevant to examining how professional experience and career stage may relate to occupational stress.

Sex. The table presents the distribution of the respondents by sex. Among the 159 participants, the majority are female, with 113 respondents, accounting for 69.3% of the total. The male participants numbered 50 respondents, accounting for 30.7% of the total.

Marital Status. The sample included single nurses (44.8%), married and living with family (42.9%), and married but not cohabiting with family (12.3%). For this study sample, these groupings provide a framework to examine potential differences in social and psychological stress related to family structure and living arrangements.

Years of Employment. In this study sample, 4.4% of the respondents had less than 1 year of experience working abroad, 44.0% had 1–5 years, 17.6% had 6–10 years, and 34.0% had 11 years or more. These categories were selected to capture variations in professional experience and tenure, which are relevant to understanding adjustment to international work environments and exposure to occupational stress. Consistent with existing literature, early-career registered nurses are generally defined as those within the first five years of professional practice, reflecting a stage characterized by skill

consolidation, adaptation to workplace demands, and vulnerability to occupational stress (Douglas et al., 2020).

Country of Employment. Respondents were employed across five countries: Australia (11.0%), Saudi Arabia (23.3%), the United Arab Emirates (9.2%), the United Kingdom (17.8%), and the United States (38.7%). These categories reflect key migration destinations for Filipino nurses, chosen based on workforce availability and cultural diversity (OECD, 2025). The sample distribution allows for consideration of cross-cultural factors influencing stress among nurses working abroad.

Table 4.
Profile of the Respondents

Profile	Category	Frequency	Percentage
Age	23-30 years old	43	27.0
	31-44 years old	76	47.8
	45 - 60 years old	40	25.2
	Total	159	100.0
Sex	Female	110	69.2
	Male	49	30.8
	Total	159	100.0
Marital Status	Married NOT living together with family	20	12.6
	Married living together with family	69	43.4
	Single	70	44.0
	Total	159	100.0
Years of Employment	<1 year	7	4.4
	1 - 5 years	70	44.0
	6 - 10 years	28	17.6
	11 years	54	34.0
	Total	156	95.6
	Missing System	7	4.3
	Total	159	100.0
Country of Employment	United Arab Emirates	14	8.8
	Australia	18	11.3
	United Kingdom	29	18.2
	Saudi Arabia	38	23.9
	United States	60	37.7
	Total	159	100.0

Chapter 4

Results and Discussion

This chapter presents the gathered data, along with its analysis and interpretation. It addresses the questions aimed at in the study. The findings are presented in tabular form to clearly illustrate the respondents' demographic profile, levels of cultural intelligence, organizational citizenship behavior, and nursing stress. Statistical measures such as the mean and standard deviation are used to describe and interpret the results.

Levels of Cultural Intelligence

Metacognitive Cultural Intelligence

Table 5 presents the level of metacognitive cultural intelligence among the 159 respondents. Specifically, it answers the research question: "What is the level of cultural intelligence of nurses in terms of metacognitive cultural intelligence?"

Metacognitive cultural intelligence, as conceptualized in the Cultural Intelligence Theory of Earley and Ang (2003), refers to higher-order cognitive processes that individuals use to acquire, understand, and regulate cultural knowledge during intercultural interactions. It involves conscious cultural awareness, strategic thinking, planning, and monitoring of assumptions in cross-cultural contexts.

The results show that the overall mean score for metacognitive cultural intelligence among Filipino nurses is 5.9623 (SD = .94768) on a 7-point scale. This indicates that respondents have strong awareness and control over their cultural thought processes during intercultural interactions. Within the cultural intelligence framework, metacognitive CQ enables individuals to plan, monitor, and revise their cultural assumptions before, during, and after cross-cultural encounters.

Table 5.
Level of Metacognitive Cultural Intelligence

	Items	Mean	Std. Deviation	Q.I.
Meta1	I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.	5.97	1.021	High
Meta2	I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.	6.13	1.056	High
Meta3	I am conscious of the cultural knowledge I apply to cross-cultural interactions.	6.01	.997	High
Meta4	I check the accuracy of my cultural knowledge as I interact with people from different cultures.	5.74	1.181	High
OVERALL MEAN		5.9623	.94768	High

Legend: 1.0 – 1.86 *Very Low*, 1.87 – 2.72 *Low*, 2.73 – 3.58 *Slightly Low*, 3.59 – 4.44 *Moderate*, 4.45 – 5.30 *Slightly High*, 5.31 – 6.16 *High*, 6.17 – 7.00 *Very High*, *QI*: *Qualitative Interpretation*

The elevated mean score in the present study suggests that nurses do not automatically or habitually respond to cultural differences. Rather, they appear to engage in reflective and strategic thinking when interpreting cultural cues in clinical settings. This interpretation is further supported by the highest-rated item, “I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me” ($M = 6.13$, $SD = 1.056$). This item directly captures the monitoring and regulatory dimensions of metacognitive CQ, indicating that nurses actively reassess and refine their understanding of patients’ cultural backgrounds during interactions.

Similarly, high mean scores were observed in the items measuring awareness of cultural knowledge used ($M = 5.97$, $SD = 1.021$) and applied ($M = 6.01$, $SD = .997$) in cross-cultural interactions. These findings reflect strong cultural self-awareness, which is a foundational element of culturally competent practice. In clinical settings, such reflective processing reduces the likelihood of biased judgments and improves communication accuracy.

From a clinical perspective, such reflective processing is particularly important in multicultural healthcare environments, where culturally informed decision-making influences communication effectiveness, patient satisfaction, and quality of care. Prior research suggests that higher levels of cultural intelligence are associated with more effective cross-cultural adaptation and interaction outcomes (Chu & Zhu, 2023). Therefore, the high metacognitive CQ observed in this study may contribute to improved culturally responsive nursing practice. These findings underscore the importance of fostering reflective cultural awareness in professional development programs for nurses.

Additionally, the lowest mean, though still within the high range, was observed in the item, “I check the accuracy of my cultural knowledge as I interact with people from different cultures” ($M = 5.74$, $SD = 1.181$). The comparatively higher standard deviation suggests greater variability in how consistently respondents engage in critical evaluation of their cultural assumptions. This nuance is analytically important. While nurses generally demonstrate awareness and adaptability, actively verifying the accuracy of cultural interpretations may not be uniformly practiced. Within the CQ framework, monitoring and validation of cultural knowledge are essential to prevent overgeneralization and cultural stereotyping. Variability in this area may indicate differences in exposure, training, or reflective practice among respondents.

Cognitive Cultural Intelligence

Table 6 presents the level of cognitive cultural intelligence among the 159 nurse respondents. It specifically answers the research question: “What is the level of cultural intelligence of nurses in terms of cognitive cultural intelligence?” Cognitive cultural intelligence refers to an individual’s understanding of the norms, practices,

and social conventions of various cultures, developed through formal learning and personal experiences (Chu & Zhu, 2023). This describes an individual's ability to comprehend and interpret cultural differences by drawing on acquired knowledge about values, beliefs, norms, and social practices across diverse cultural contexts.

The overall mean for cognitive CQ was 5.0514($SD = 1.18594$), indicating a slightly high level. Compared to the metacognitive dimension, this slightly lower mean suggests that, while nurses are reflective and adaptive (metacognitive), their factual knowledge of specific cultural systems and practices may be less developed. This distinction is theoretically meaningful: cognitive CQ represents the knowledge an individual possesses about different cultures, while metacognitive CQ concerns the process of reflecting on and regulating that knowledge.

Among the items, the highest mean was observed for Cog3: knowledge of the cultural values and religious beliefs of other cultures ($M = 5.36$, $SD = 1.249$), suggesting relatively stronger knowledge in this domain. However, knowledge of the arts and crafts of other cultures obtained the lowest mean ($M = 4.72$, $SD = 1.462$), indicating variability in respondents' depth of cultural knowledge.

Table 6.
Level of Cognitive Cultural Intelligence

	Items	Mean	Std. Deviation	Q.I.
Cog1	I know the legal and economic systems of other cultures.	5.04	1.352	Slightly High
Cog2	I know the rules (e.g., vocabulary, grammar) of other languages.	4.98	1.573	Slightly High
Cog3	I know the cultural values and religious beliefs of other cultures.	5.36	1.249	High
Cog4	I know the marriage systems of other cultures.	5.08	1.403	Slightly High
Cog5	I know the arts and crafts of other cultures.	4.72	1.462	Slightly High
Cog6	I know the rules for expressing non-verbal behaviors in other countries.	5.13	1.349	Slightly High
OVERALL MEAN		5.0514	1.18594	Slightly High

Legend: 1.0 – 1.86 *Very Low*, 1.87 – 2.72 *Low*, 2.73 – 3.58 *Slightly Low*, 3.59 – 4.44 *Moderate*, 4.45 – 5.30 *Slightly High*, 5.31 – 6.16 *High*, 6.17 – 7.00 *Very High*, *QI: Qualitative Interpretation*

According to Da Silva Teixeira and Klein (2024), cultural intelligence, particularly in the motivational and cognitive dimensions, primarily develops through everyday activities and interactions with locals and foreigners during international experiences, suggesting that sustained intercultural contact and real-world experience are key contributors to CQ development. In nursing practice, limited formal cultural education may explain why knowledge-based CQ is lower than other CQ dimensions. This finding implies that while nurses may be capable of adapting to multicultural contexts, structured cultural competence training could strengthen their foundational cultural knowledge base, thereby enhancing overall intercultural effectiveness and supporting more effective, culturally safe nursing practice.

Motivational Cultural Intelligence

Table 7 also presents the level of motivationalCQ. It answers the research question: “What is the level of cultural intelligence of nurses in terms of motivational cultural intelligence?” Motivational cultural intelligence refers to an individual’s capacity to invest interest, effort, and persistence in understanding and effectively engaging in culturally diverse situations (Chu & Zhu, 2023). It represents the affective and intrinsic energy that directs individuals toward intercultural engagement.

The overall mean for motivational CQ was 5.5358(SD = 1.02187), indicating a high level. This suggests that nurses possess strong intrinsic motivation and willingness to engage with culturally diverse patients. Notably, Motiv1obtained the highest mean (M = 5.88, SD = 1.66), indicating strong interest and confidence in functioning in multicultural environments.

Table 7.
Level of Motivational Cultural Intelligence

	Items	Mean	Std. Deviation	Q.I.
Motiv1	I enjoy interacting with people from different cultures.	5.88	1.166	High
Motiv2	I am confident that I can socialize with locals in a culture that is unfamiliar to me.	5.57	1.230	High
Motiv3	I am sure I can deal with the stresses of adjusting to a culture that is new to me.	5.48	1.226	High
Motiv4	I enjoy living in cultures that are unfamiliar to me.	5.11	1.382	Slightly High
Motiv5	I am confident that I can get accustomed to the shopping conditions in a different culture.	5.64	1.099	High
OVERALL MEAN		5.5358	1.02187	High

Legend: 1.0 – 1.86 Very Low, 1.87 – 2.72 Low, 2.73 – 3.58 Slightly Low, 3.59 – 4.44 Moderate, 4.45 – 5.30 Slightly High, 5.31 - 6.16 High, 6.17 - 7.00 Very High, QI: Qualitative Interpretation

Theoretically, motivational CQ is considered a critical predictor of persistence in cross-cultural interactions. Ang et al. (2007) emphasized that individuals with high motivational CQ are more likely to invest effort in learning about cultural differences and overcoming intercultural challenges. Recent empirical research further supports the central role of motivational cultural intelligence in driving sustained engagement across cultures. For instance, a 2024 study found that individuals with higher levels of motivational CQ experienced greater psychological empowerment and thriving at work in culturally diverse environments, suggesting that motivational CQ is associated with persistence and confidence during intercultural interactions (Kaur & Ren, 2024). Additionally, evidence indicates that the motivational dimension of cultural intelligence has a particularly strong positive effect on employee performance and adjustment outcomes in multicultural settings, underscoring its importance in maintaining engagement and effort when navigating cultural differences (Iskandar & Pratama, 2025). In healthcare settings, such motivation is particularly important because cultural misunderstandings can affect diagnosis accuracy, treatment adherence, and patient satisfaction.

The relatively lower standard deviation (1.02187 overall) compared to cognitive CQ suggests more consistency among respondents in their intercultural drive. This may reflect the professional values embedded in nursing practice, which emphasize empathy, inclusivity, and patient-centered care. Thus, nurses appear not only capable but also willing to engage across cultural boundaries.

Behavioral Cultural Intelligence

The table below further presents the level of behavioral cultural intelligence. It answers the research question: “What is the level of cultural intelligence of nurses in terms of behavioral cultural intelligence?” Behavioral CQ refers to the capability to exhibit appropriate verbal and nonverbal actions when interacting with people from

different cultures (Earley & Ang, 2003). It is the observable manifestation of cultural intelligence.

The overall mean for behavioral CQ was 5.5057 (SD = 1.09239), indicating a high level. This suggests that nurses can generally adapt their communication style, gestures, tone, and interaction patterns to culturally diverse situations.

Among the items, Behav2 obtained the highest mean (M = 5.69, SD = 1.142), suggesting strong adaptability in specific behavioral expressions. The consistency of means across items (ranging from 5.21 to 5.69) indicates that respondents demonstrate relatively balanced behavioral flexibility.

Table 8.
Level of Behavioral Cultural Intelligence

	Items	Mean	Std. Deviation	Q.I.
Behav1	I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it	5.43	1.512	High
Behav2	I use pause and silence differently to suit different cross-cultural situations	5.69	1.142	High
Behav3	I vary the rate of my speaking when a cross-cultural situation requires it.	5.60	1.288	High
Behav4	I change y non-verbal behavior when a cross-cultural situation requires it.	5.58	1.304	High
Behav5	I alter my facial expressions when a cross-cultural interaction requires it.	5.21	1.460	Slightly High
OVERALL MEAN		5.5057	1.09239	High

Legend: 1.0 – 1.86 Very Low, 1.87 – 2.72 Low, 2.73 – 3.58 Slightly Low, 3.59 – 4.44 Moderate, 4.45 – 5.30 Slightly High, 5.31 - 6.16 High, 6.17 - 7.00 Very High, *QI*: Qualitative Interpretation

Prior studies consistently support the significant role of behavioral cultural intelligence (CQ) in facilitating effective cross-cultural interactions. Individuals with high levels of behavioral CQ demonstrate flexibility in both verbal and non-verbal communication, enabling them to minimize misunderstandings in intercultural contexts (Wawrosz & Jurasek, 2021). Furthermore, behavioral CQ has been found to

significantly influence self-efficacy and academic adaptation among individuals navigating culturally diverse environments (Xiaoying et al., 2024). It is also positively associated with job performance and service quality, as culturally intelligent employees can appropriately adjust their verbal and nonverbal behaviors in line with cultural norms and expectations (Jiony et al., 2021).

From a theoretical standpoint, behavioral CQ represents the translation of cognitive and motivational resources into action. Within this framework, the behavioral dimension reflects an individual's ability to adjust verbal and nonverbal actions appropriately in culturally diverse interactions, enabling more effective communication and interaction outcomes (Skhiri et al., 2025). In this sense, behavioral CQ serves as the observable manifestation of cultural intelligence, reflecting an individual's ability to adapt behavior in culturally diverse situations.

In nursing practice, behavioral CQ may be demonstrated through adjusting communication tone, respecting culturally specific health beliefs and practices, modifying interpersonal distance, and adapting decision-making approaches to align with patients' cultural expectations. These behavioral adjustments are particularly critical in healthcare settings, where culturally incongruent behaviors may negatively influence patient trust, satisfaction, and treatment adherence.

The findings of the present study suggest that nurses are not merely culturally aware or motivated, but also capable of adapting behaviorally during actual clinical interactions. This is especially significant in a healthcare environment, where effective cross-cultural communication directly impacts patient safety, quality of care, and overall health outcomes.

Levels of Organizational Citizenship Behavior (OCB)

Toward the Organization (OCB-O)

Table 9 presents the level of organizational citizenship behavior of the respondents toward the organization (OCBO). It answers the research question: “What is the level of organizational citizenship behavior toward the organization among Filipino nurses working abroad?” The mean, standard deviation, and verbal interpretation for each variable are presented.

The overall mean score for OCB toward the organization was 3.4681(SD = .77631), indicating a high level of OCBO among Filipino nurses working abroad. This finding suggests that respondents frequently engaged in discretionary behaviors that contribute to organizational effectiveness beyond formal role expectations. Such behaviors are essential in healthcare settings, where collaboration, initiative, and voluntary support enhance both team functioning and service quality.

Empirical evidence supports the prevalence and significance of OCB in nursing practice. Khajoei et al. (2024) reported that nurses conceptualize OCB as helping behaviors, extra-role performance, and contributions to professional growth, dimensions that closely align with altruism and voluntary cooperation among staff. Similarly, Alabas and Mahran (2023) found high overall levels of OCB among nurses in Saudi Arabia, suggesting that strong citizenship behaviors are consistently observed across diverse healthcare contexts. Moreover, OCB has been shown to positively influence both task and contextual performance among nurses (Tsetim & Owoicho, 2024) and to be significantly associated with improved nurse performance outcomes (Azizah et al., 2024). These findings reinforce the present study’s results, highlighting that high levels of OCBO are not only prevalent but also functionally beneficial in clinical environments.

Table 9.
Level of Organizational Citizenship Behavior Toward Organization

		Mean	Std. Deviation	Q.I.
Org1	Helped new employees get oriented to the job.	3.88	.990	High
Org2	Offered suggestions to improve how work is done.	3.63	1.094	High
Org3	Offered suggestions for improving the work environment.	3.57	1.082	High
Org4	Volunteered for extra work assignments.	2.97	1.250	Moderate
Org5	Said good things about your employer in front of others.	3.64	1.110	High
Org6	Gave up meal and other breaks to complete work.	3.21	1.416	Moderate
Org7	Decorated, straightened up, or otherwise beautified common work space.	3.38	1.184	Moderate
OVERALL MEAN		3.4681	.77631	High

Legend: 1.0 – 1.79 Very Low, 1.80 – 2.59 Low, 2.60– 3.39 Moderate, 3.40– 4.19 High, 4.20 - 5.00 Very High, QI: Qualitative Interpretation

Notably, the highest rated item under OCBO was “helping new employees get oriented to the job” (M = 3.88, SD = .990). Although one may consider helping behaviors as OCB toward individuals (OCBI), assisting newly hired staff with organizational orientation also reflects a strong dimension of OCB toward the organization (OCBO). This is because effective onboarding facilitates smoother role transition, strengthens adherence to institutional standards, and enhances overall organizational performance. By voluntarily guiding new employees, nurses contribute not only to interpersonal support but also to the long-term stability and efficiency of the organization. In nursing contexts, assisting newly hired staff is especially critical due to the complexity of clinical procedures, patient safety demands, and the need for

rapid role adaptation. Such supportive behaviors help reduce transition stress and promote smoother integration into healthcare teams.

Other indicators, such as offering suggestions to improve work processes and speaking positively about the employer, also demonstrated high levels, suggesting strong organizational identification and proactive engagement among respondents. In contrast, moderate levels observed in volunteering for extra work and sacrificing breaks may reflect realistic constraints related to workload, fatigue, and occupational stress, consistent with prior findings in healthcare settings. This interpretation is consistent with prior research indicating that while nurses often demonstrate high levels of citizenship behavior, excessive demands and burnout can limit sustained engagement in physically or emotionally taxing extra-role activities (Wan et al., 2023).

Toward Individuals (OCB-I)

Table 10 presents the respondents' level of organizational citizenship behavior toward individuals (OCBI). It answers the research question: "What is the level of organizational citizenship behavior toward individuals among Filipino nurses working abroad?" The mean, standard deviation, and scaled response for each variable are presented.

The overall mean for organizational citizenship behavior toward individuals was 3.7126 (SD = .68712), indicating a high level. This finding indicates that nurses frequently engage in voluntary, interpersonal behaviors that support colleagues and enhance teamwork within their clinical settings. Such behaviors are particularly vital in healthcare environments, where collaborative practice directly influences patient safety and care quality. Consistent with this result, a recent systematic review and meta-analysis reported that clinical nurses generally demonstrate high levels of organizational citizenship behavior, particularly in prosocial and cooperative domains (Sun et al., 2025). These findings collectively reinforce the interpretation that OCBI is a salient characteristic of nursing practice across diverse healthcare contexts.

Table 10.
Level of Organizational Citizenship Behavior Toward Individuals

		Mean	SD	Q.I.
Org8	Lent a compassionate ear when someone at work had a work problem.	4.13	.986	High
Org9	Lent a compassionate ear when someone had a personal problem.	4.14	.954	High
Org10	Changed vacation schedule, workdays, or shifts, to accommodate co-worker's needs.	3.08	1.153	Moderate
Org11	Helped a less capable co-worker lift a heavy box or other object.	4.19	.962	High
Org12	Went out of the way to give co-worker encouragement or express appreciation.	4.09	.924	High
Org13	Defended a co-worker who was being "put-down" or spoken ill of by other co-workers or supervisor.	3.65	1.026	High
Org14	Picked up meal for others at work	2.89	1.276	Moderate
Org15	Took time to advise, coach, or mentor a co-worker	3.75	.998	High
Org16	Helped co-worker learn new skills or shared job knowledge.	4.03	.941	High
Org17	Finished something for co-worker who had to leave early.	3.31	1.259	Moderate
Org18	Helped a co-worker who had too much to do.	3.95	1.042	High
Org19	Took phone messages for absent or busy co-worker.	3.38	1.330	Moderate
Org20	Volunteered to help a co-worker deal with a difficult customer, vendor, or co-worker.	3.67	1.118	High
OVERALL MEAN		3.7126	.68712	High

Legend: 1.0 – 1.79 Very Low, 1.80 – 2.59 Low, 2.60– 3.39 Moderate, 3.40– 4.19 High, 4.20 - 5.00 Very High, QI: Qualitative Interpretation

The highest mean was observed for helping a less capable co-worker ($M = 4.19$, $SD = .962$). It reflects a strong expression of altruism and collegial support. This behavior aligns with the altruism dimension of organizational citizenship behavior as originally conceptualized by Dennis Organ (1988), who defined OCB as discretionary behavior not formally rewarded yet essential for organizational effectiveness. Within the OCBI framework, altruism specifically refers to voluntary actions intended to help others with work-related problems. In nursing, assisting less experienced or less capable colleagues promotes skill development, reduces errors,

and enhances collective competence, thereby strengthening overall team performance. The high mean score for this item suggests that respondents not only value cooperation but also actively contribute to maintaining functional and supportive work units.

In addition, high scores were likewise noted for providing emotional support and encouragement to colleagues. This further underscores the interpersonal strength of OCBI among respondents. Emotional support has been identified as a critical antecedent and correlate of citizenship behaviors in nursing settings. Empirical evidence indicates that coworker and supervisor emotional support are positively associated with nurses' engagement in organizational citizenship behaviors and with improved teamwork and quality-of-care outcomes (Pohl et al., 2022). In high-demand healthcare environments, such supportive interactions help mitigate stress, foster resilience, and cultivate a positive organizational climate conducive to sustained collaborative performance.

Levels of Nursing Stress

Physical Environment

The table below presents the level of nursing stress Filipino nurses experience in their physical environment. It answers the research question: "What is the level of nursing stress in terms of physical environment among Filipino nurses working abroad?" The mean, standard deviation, and qualitative interpretation for each indicator are reported.

The overall mean physical environment stress score was 1.6352(SD = .70914), which falls within the moderate range. These findings suggest that respondents experience noticeable, though not severe, stress arising from environmental and workload-related conditions in their workplace. In contemporary nursing literature,

physical environment stressors commonly include staffing adequacy, scheduling patterns, workload distribution, and task demands, factors that significantly influence nurse well-being and performance outcomes (Boudreau & Rhéaume, 2024; Martins et al., 2025).

Table 11.
Level of Nursing Stress in Terms of Physical Environment

		Mean	Std. Deviation	Q.I.
Phy1	Breakdown of a computer	1.35	.850	Low
Phy2	Unpredictable staffing and scheduling	1.89	.907	Moderate
Phy3	Too many non-nursing tasks required, such as clerical work	1.62	.913	Moderate
Phy4	Not enough time to provide emotional support to a patient	1.42	.866	Low
Phy5	Not enough time to complete all of my nursing tasks	1.57	.984	Moderate
Phy6	Not enough staff to adequately cover the unit	1.97	.893	Moderate
OVERALL MEAN		1.635 2	.70914	Moderate

Legend: 0.0 – 0.75 Very Low, 0.76– 1.50 Low, 1.51– 2.25 Moderate, 2.26 – 3.00 High, QI: Qualitative Interpretation

Among the indicators, the highest mean scores were observed for “not enough staff to adequately cover the unit” (M = 1.97, SD = .893) and “unpredictable staffing and scheduling” (M = 1.89, SD = .907), both of which were interpreted as moderate stressors. These findings are consistent with recent international evidence demonstrating that staffing inadequacy and unstable scheduling are primary contributors to nurse workload stress, burnout, and job dissatisfaction. A study by Alnaturi et al. (2024) found that hospital nurse staffing levels are significantly

associated with nurse burnout and job outcomes, as well as patient safety indicators. Similarly, another study consistently showed that insufficient staffing and high patient-to-nurse ratios increase occupational stress and compromise work environment quality (Chen et al., 2025). These findings support the interpretation that staffing-related concerns remain central environmental stressors, even when overall stress levels are moderate.

Moderate stress was also reported for “too many non-nursing tasks required, such as clerical work” ($M = 1.62$, $SD = .913$) and “not enough time to complete all nursing tasks” ($M = 1.57$, $SD = .984$). Contemporary studies indicate that nurses frequently undertake non-nursing tasks (administrative duties, clerical work, coordination responsibilities, and other tasks outside their core clinical role), which increase workload, create role ambiguity, and negatively affect their effectiveness and productivity in patient care, thereby contributing to professional strain and occupational stress (Al-Akash et al., 2024). Similarly, a study in China found that an increase in non-professional (non-clinical) tasks was associated with higher levels of nurse burnout, a key indicator of emotional strain and work stress (Liu et al., 2020). When nurses are required to perform duties beyond their core clinical responsibilities, this may dilute professional focus and increase cumulative stress, particularly in high-demand healthcare systems.

In contrast, lower stress levels were reported for “breakdown of a computer” ($M = 1.35$, $SD = .850$) and “not enough time to provide emotional support to a patient” ($M = 1.42$, $SD = .866$), both categorized as low. These findings may suggest that technological infrastructure and workflow systems in respondents’ workplaces are relatively stable and functional. Studies show that integrated digital technologies and

well-designed workflow systems can enhance task efficiency and support clinicians in managing information, communication, and documentation processes, thereby reducing the cognitive and administrative burden experienced by nurses and allowing more time for patient-centered interactions (Schlicht et al., 2025; Stevens et al., 2025). Additionally, when technology supports routine tasks and improves data access, nurses have a greater opportunity to engage in direct care, which may mitigate stress related to time constraints during patient interactions (Dailah, 2024). The lower rating for limited time to provide emotional support may also indicate effective task management systems or supportive team structures that mitigate time-related strain in patient interaction.

Psychological Environment

The table below presents the level of nursing stress Filipino nurses experience in their psychological environment. It answers the research question: “What is the level of nursing stress in terms of psychological environment among Filipino nurses working abroad?” The mean, standard deviation, and scaled response for each variable are presented.

The overall mean psychological environmental stress score was 1.6632 (SD = .70144), indicating a moderate level of stress among Filipino nurses working abroad. This suggests that respondents encounter substantial psychological demands associated with their clinical roles, particularly in situations involving patient suffering, death, and emotionally complex care. These findings align with contemporary research showing that exposure to suffering, end-of-life care, and emotionally intense clinical interactions are significant psychological stressors for nurses (Vallone et al., 2025). Additionally, research indicates that the emotional burden of managing patients’ pain, witnessing deterioration, and communicating with

families in distress contributes markedly to nurses' psychological strain, even in well-resourced healthcare settings (Vallone et al., 2025).

Table 12.

Level of Nursing Stress in Terms of Psychological Environment

		Mean	SD	Q.I.
Psyc1	Performing procedures that patients experience as painful	1.52	.870	Moderate
Psyc2	Feeling helpless in the case of a patient who fails to improve	1.57	.883	Moderate
Psyc3	Listening or talking to a patient about his or her approaching death	1.60	.969	Moderate
Psyc4	The death of a patient	1.74	.977	Moderate
Psyc5	The death of a patient with who you developed a close relationship	1.94	.926	Moderate
Psyc6	Physician not being present when a patient dies	1.77	.989	Moderate
Psyc7	Watching a patient suffer	2.03	.900	Moderate
Psyc8	Feeling inadequately prepared to help with the emotional needs of a patient's family	1.81	.931	Moderate
Psyc9	Being asked a question by a patient for which I do not have a satisfactory answer	1.61	.885	Moderate
Psyc10	Feeling inadequately prepared to help with the emotional needs of a patient	1.60	.872	Moderate
Psyc11	Lack of an opportunity to talk openly with other unit personnel about problems in the unit	1.47	.863	Low
Psyc12	Lack of an opportunity to share experiences and feeling with other personnel on the unit	1.34	.833	Low
Psyc13	Lack of an opportunity to express to other personnel on the unit my negative feelings	1.31	.828	Low

toward a patient

Psyc14	Inadequate information from a physician regarding the medical condition of patient	1.64	.888	Moderate
Psyc15	A physician ordering what appears to be inappropriate treatment for a patient	1.70	.938	Moderate
Psyc16	A physician not being present during a medical emergency	1.97	.993	Moderate
Psyc17	Not knowing what a patient or a patient's family ought to be told about the patient's condition and its treatment	1.65	.929	Moderate
Psyc18	Uncertainty regarding the operation and functioning of specialized equipment	1.69	.887	Moderate
OVERALL MEAN		1.6632	.70144	Moderate

Legend: 0.0 – 0.75 *Very Low*, 0.76– 1.50 *Low*, 1.51– 2.25 *Moderate*, 2.26 – 3.00 *High*, *QI: Qualitative Interpretation*

Several items with higher stress ratings, such as “watching a patient suffer” ($M = 2.03$, $SD = .900$) and “the death of a patient with whom one has developed a close relationship” ($M = 1.94$, $SD = .926$), reflect the deep emotional labor inherent in nursing practice. Empirical evidence supports that nurses frequently encounter psychologically demanding situations that challenge their emotional resilience, including critical illness trajectories and repeated exposure to death and dying. Studies show that nurses regularly deal with emotionally intense circumstances, such as delivering bad news and caring for suffering patients, which are associated with elevated levels of psychiatric distress and emotional fatigue (Ebrahimi et al., 2025). Such findings reinforce the interpretation that encountering patient suffering and loss is a pervasive and impactful source of psychological stress among nurses.

Moderate stress levels for items such as “feeling of inadequately prepared to help with the emotional needs of a patient’s family” ($M = 1.81$, $SD = .931$) and “being

asked a question by a patient for which I do not have a satisfactory answer” ($M = 1.61$, $SD = .885$) further illustrate the cognitive and emotional complexity of nurses’ psychological environment. Research shows that among various nursing responsibilities, explaining patients’ conditions to family members was identified as the most mentally stressful task in both advanced general and general hospital settings (Kang & Jin, 2024).

In contrast, lower stress ratings for “lack of opportunity to express to other personnel on the unit negative feelings toward a patient” ($M = 1.31$, $SD = .828$) and “lack of opportunity to share experiences and feelings with other personnel on the unit” ($M = 1.34$, $SD = .833$) indicate that informal peer support and collegial coping mechanisms may be present in respondents’ workplaces. Such support networks have been shown to buffer psychological strain by providing forums for emotional expression and mutual understanding among nurses (Dziedzic, 2025). However, lower stress in these areas does not diminish the overall psychological demands of clinical work; rather, it suggests that social support may serve as a protective factor.

Social Environment

The table below presents the level of nursing stress Filipino nurses experience in their social environment. It answers the research question: “What is the level of nursing stress in terms of social environment among Filipino nurses working abroad?” The mean, standard deviation, and scaled response for each variable are presented.

The overall mean score for social environment nursing stress was 1.6635 ($SD = .77879$), indicating moderate stress among Filipino nurses working abroad. This reflects the psychological demands of interacting with physicians, supervisors, and colleagues, where role ambiguity, interprofessional communication challenges, and decision-making responsibilities contribute to occupational tension. Evidence further indicates that conflicts in professional roles, alongside cooperation and psychosocial

support, significantly shape nurses' experiences of occupational stress (Muz & Yüce, 2021), demonstrating that relational dynamics and workplace expectations are central to understanding social environment stress in nursing.

Among the individual indicators, conflict with physician (Soc2: $M = 1.75$, $SD = 1.077$), fear of making a mistake in patient care (Soc3: $M = 1.75$, $SD = .954$), and making clinical decisions in the absence of a physician (Soc5: $M = 1.81$, $SD = .853$) emerged as moderate stressors. These findings are consistent with research indicating that interpersonal conflict in the clinical environment is significantly associated with increased job stress and psychological strain among nurses, with conflict-related stressors correlating positively with anxiety, depression, and other negative health outcomes (Vallone & Zurlo, 2024). Additionally, Escher et al. (2023) identified that fear of making mistakes is a prominent contributor to nurses' stress, particularly in high-responsibility care environments where clinical decisions have direct patient safety implications.

Table 13.
Level of Nursing Stress in Terms of Social Environment

		Mean	SD	Q.I.
Soc1	Criticism by a physician	1.70	1.066	Moderate
Soc2	Conflict with a physician	1.75	1.077	Moderate
Soc3	Fear of making a mistake in treating a patient	1.75	.954	Moderate
Soc4	Disagreement concerning the treatment of a patient	1.52	.892	Moderate
Soc5	Making a decision concerning a patient when the physician is unavailable	1.81	.853	Moderate
Soc6	Conflict with a supervisor	1.57	1.076	Moderate
Soc7	Floating to other units that are short-staffed	1.87	.962	Moderate
Soc8	Difficulty in working with a particular nurse(or nurses)outside the unit	1.64	.976	Moderate
Soc9	Criticism by a supervisor	1.47	.973	Low
Soc10	Difficulty working with a with a particular nurse (or nurses)on the unit	1.57	.958	Moderate
OVERALL MEAN		1.6635	.77879	Moderate

Legend: 0.0 – 0.75 Very Low, 0.76– 1.50 Low , 1.51– 2.25 Moderate, 2.26 – 3.00 High, Q.I. : Qualitative Interpretation

Floating to units with staffing shortages (Soc7: $M = 1.87$, $SD = .962$) also contributed to moderate stress levels, reflecting the broader stress associated with adapting to new clinical contexts and unfamiliar team dynamics. Research indicates that nurses who are floated between units experience emotional exhaustion and reduced job satisfaction due to frequent changes in work settings, patient care demands, and challenges with team integration (Balbuena et al., 2024). These transition demands can disrupt continuity of care and contribute to feelings of inefficiency, especially when nurses are required to work outside their primary specialization.

In contrast, “criticism by a supervisor” (Soc9: $M = 1.47$, $SD = .973$) yielded a lower stress rating, suggesting the presence of adaptive feedback cultures or supportive leadership practices in respondents’ workplaces. Research indicates that perceived supervisor social support can mitigate the impact of role stress on nurses’ engagement and workplace well-being, suggesting that supportive leadership and constructive feedback mechanisms serve as stress buffers in nursing practice (Sun et al., 2023). Effective leadership has been shown to moderate the relationship between workplace conflict and stress outcomes by fostering inclusive communication and conflict resolution strategies.

Overall Level of Nursing Stress

Table 14 presents the overall levels of nursing stress across all domains among Filipino nurses working abroad. It compares the physical, psychological, social, and overall stress experienced by the respondents. The table also provides a qualitative interpretation of stress levels for a clearer comparison across dimensions.

Across dimensions, the overall mean score for nursing stress was 1.6540 ($SD = .65211$), which falls within the moderate stress category. Among the three dimensions, social ($M = 1.6635$, $SD = .77879$) registered the highest mean, followed

very closely by psychological stress ($M = 1.6632$, $SD = .70144$), while physical stress ($M = 1.6352$, $SD = .70914$) ranked slightly lower overall. Although the differences are minimal, the pattern indicates that interpersonal and relational demands slightly outweigh emotional-cognitive and physical demands as sources of stress among Filipino nurses working abroad.

Table 14.
Overall Level of Nursing Stress

Dimension	Mean	SD	Q.I.
Physical	1.6352	.70914	Moderate
Psychological	1.6632	.70144	Moderate
Social	1.6635	.77879	Moderate
Overall	1.6540	.65211	Moderate

Legend: 0.0 – 0.75 Very Low, 0.76– 1.50 Low , 1.51– 2.25 Moderate, 2.26 – 3.00 High, Q.I. : Qualitative Interpretation

The prominence of social stress suggests that workplace relationships, interprofessional collaboration, communication barriers, and role-related conflicts may exert a particularly strong influence on nurses' stress experiences. This finding aligns with the framework of Gary-Toft and Anderson (1981), developers of the Nursing Stress Scale, who identified interpersonal conflict and lack of support among central contributors to occupational stress in nursing. Empirical evidence further supports this pattern, demonstrating that problematic interactions with colleagues and physicians, including perceived subordination, communication challenges, and lack of shared decision-making, contribute to nurses' work stress and hinder effective collaboration in clinical settings (Ghattas & Abdou, 2025). Such findings reinforce the idea that strained professional relationships and unresolved interprofessional conflict can intensify occupational strain. For nurses working abroad, cultural

differences, hierarchical structures, and communication challenges may further amplify these relational stressors.

The near-equal mean of psychological stress indicates that emotional and cognitive demands remain substantial contributors to overall stress. Previous studies have emphasized psychological strain as a dominant component of occupational stress in nursing, with nurses reporting significant impacts on their mental well-being (Kaburi et al., 2019; Zhou et al., 2022). However, in the present study, psychological stress appears slightly secondary to social stress, suggesting that relational dynamics may amplify or even precede emotional exhaustion.

Although physical stress ranked lowest among the three, its moderate level indicates that workload, staffing adequacy, scheduling demands, and environmental pressures continue to meaningfully affect nurses' well-being. Evidence shows that high workload and unit demands are significantly associated with burnout, decreased job satisfaction, and turnover intention (Galanis et al., 2025; Ji et al., 2026). Nonetheless, the findings of this study suggest that physical demands alone may not be the primary driver of stress, but rather operate alongside social and psychological factors.

Overall, the results highlight that while nursing stress is multifactorial, social stressors—particularly those related to workplace relationships and professional interactions—constitute the most prominent dimension in this sample. This underscores the importance of strengthening interprofessional collaboration, enhancing communication support systems, and promoting culturally responsive leadership strategies to mitigate stress among Filipino nurses working internationally.

Difference in Nurses' Stress Levels Categorized

Age

A Kruskal–Wallis H test was conducted to determine whether there were statistically significant differences in nurses' stress levels across age groups (Table 15). Results indicated that there was no statistically significant difference in physical environment stress, $H(2) = 4.247$, $p = .120$. Although nurses aged 23–30 years obtained the highest mean rank (92.31), compared to those aged 45–60 years (75.83) and 31–44 years (75.23), the difference was not statistically significant. This suggests that stressors related to workload, physical conditions, and environmental demands were experienced similarly across age groups.

Table 15.

	Age Group	N	Mean Rank	Kruskal-Wallis H	df	Asymp. Sig.	Q.I
Physical Environment	23-30 years old	43	92.31	4.247	2	.120	Not Significant
	31-44 years old	76	75.23				
	45 - 60 years old	40	75.83				
Psychological Environment	23-30 years old	43	89.48	5.988	2	.050*	Not Significant
	31-44 years old	76	82.28				
	45 - 60 years old	40	65.49				
Social Environment	23-30 years old	43	92.31	8.565	2	.014	Significant
	31-44 years old	76	81.88				
	45 - 60 years old	40	63.19				
Overall Stress	23-30 years old	43	92.43	6.343	2	.042	Significant
	31-44 years old	76	79.83				
	45 - 60 years old	40	66.96				

Difference in Nurses' Stress Levels Categorized According to Age (Kruskal-Wallis Test)

Similarly, no statistically significant difference was found in psychological environment stress, $H(2) = 5.988$, $p = .050$. However, a declining pattern in mean

ranks was observed, with younger nurses ($M_r = 89.48$) reporting higher psychological stress than middle-aged nurses ($M_r = 82.28$) and older nurses ($M_r = 65.49$). While this difference did not meet the .05 level of significance, the observed trend suggests a possible decrease in psychological stress perception with increasing age and professional maturity.

In contrast, statistically significant differences were identified in the social environment, $H(2) = 8.565$, $p = .014$, and in overall nursing stress, $H(2) = 6.343$, $p = .042$. For social environment stress, nurses aged 23–30 years had the highest mean rank (92.31), followed by those aged 31–44 years (81.88), while nurses aged 45–60 years had the lowest mean rank (63.19). Regarding overall nursing stress, younger nurses ($M_r = 92.43$) again reported the highest levels, followed by middle-aged nurses ($M_r = 76.06$) and older nurses ($M_r = 88.74$). These findings indicate that age-related differences in stress are most pronounced in the social domain and in overall perceived nursing stress.

The present findings are consistent with previous research indicating that younger nurses tend to experience higher levels of occupational stress and burnout compared to older nurses (Moya-Salazar et al., 2023). Age may function as a protective factor, as older nurses are more likely to have developed greater emotional regulation, resilience, and adaptive coping mechanisms over time, thereby reducing vulnerability to workplace stress.

The significant variation observed in the social domain may reflect younger nurses' ongoing adjustment to professional roles, team dynamics, and organizational hierarchies. In contrast, older nurses may benefit from stronger workplace relationships, improved emotional regulation, and enhanced resilience developed through years of clinical practice. Although physical and psychological stress

domains did not reach statistical significance, the downward trend in mean ranks across age groups further suggests that advancing age and professional maturity may contribute to reduced stress perception.

Sex

The Mann-Whitney U test was conducted to examine differences in nursing stress between male and female Filipino nurses working abroad. Results indicated significant differences in overall nursing stress ($U = 2021.500$, $p = .004$), with female nurses reporting higher mean ranks compared to male nurses.

The Mann-Whitney U test results reveal notable differences in stress levels between female and male nurses across several domains. Female nurses consistently demonstrated higher mean ranks in physical stress (86.35 vs. 65.74), social stress (87.31 vs. 63.59), and overall nursing stress (86.96 vs. 64.37), indicating that stress scores were systematically higher among females in these areas. The differences were statistically significant for physical stress ($U = 1996.500$, $p = .009$), social stress ($U = 1891.000$, $p = .003$), and overall nursing stress ($U = 1929.000$, $p = .004$). Among the domains, the largest separation in mean ranks was observed in social stress, followed by overall nursing stress and physical stress, indicating that interpersonal and relational factors may represent the most pronounced area of disparity between sexes in this sample. In contrast, psychological stress showed a smaller mean rank difference and was not statistically significant ($U = 2270.500$, $p = .113$), suggesting that internal emotional strain may be more comparable between female and male nurses. These comparative values indicate that sex-based differences significantly influence physical, social, and overall stress, with female nurses reporting higher stress levels in these domains. However, no statistically significant difference in psychological stress was found.

Table 16.

Difference in Nurses' Stress Levels Categorized According to Sex (Mann-Whitney U test)

	Sex at Birth	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	p	Q.I.
Physical Environment	Female	110	86.35	9498.50	1996.500	-2.614	.009*	Significant
	Male	49	65.74	3221.50				
Psychological Environment	Female	110	83.86	9224.50	2270.500	-1.584	.113	Not Significant
	Male	49	71.34	3495.50				
Social Environment	Female	110	87.31	9604.00	1891.000	-3.004	.003*	Significant
	Male	49	63.59	3116.00				
Nursing Stress	Female	110	86.96	9566.00	1929.000	-2.857	.004*	Significant
	Male	49	64.37	3154.00				

These findings indicate that female nurses experienced significantly higher stress levels in the physical and social domains compared to their male counterparts. The elevated physical stress among female nurses may be attributed to the dual burden of intensive patient care responsibilities and the need to continuously adapt to demanding workplace environments. Higher social stress may reflect the complexity of navigating interpersonal relationships, team dynamics, and role expectations, particularly within expatriate or culturally diverse healthcare settings. Consistent with this result, Díaz Hernández et al. (2024) reported that female nurses are more likely to experience heightened occupational stress and poorer quality-of-life outcomes, especially under heavy workloads and acute clinical demands.

The absence of a statistically significant difference in psychological stress suggests that internal coping mechanisms may be similarly developed across sexes in this sample. This finding implies that while external stressors (physical and social) may differ by sex, the internal processing of psychological demands may be relatively comparable between female and male nurses.

Marital Status

Kruskal–Wallis tests were performed to determine whether nursing stress differed across three marital status groups: married not living with family, married living with family, and single. The analysis revealed statistically significant differences in psychological environment stress ($H = 9.727$, $p = .008$) and overall nursing stress ($H = 6.421$, $p = .040$). In contrast, differences in physical environment stress ($H = 4.354$, $p = .113$) and social environment stress ($H = 4.779$, $p = .092$) were not statistically significant.

The table presents the results of the Kruskal–Wallis H test examining differences in nurses' stress levels according to marital status. For physical environment stress, the test yielded $H(2) = 4.048$, $p = .132$, indicating no statistically significant difference among groups. The mean ranks showed that single nurses ($MR = 85.82$) reported the highest physical stress, followed by married nurses living with their family ($MR = 79.16$) and married nurses not living with their family ($MR = 62.53$).

Table 17.

Difference in Nurses' Stress Levels Categorized According to Marital Status (Kruskal-Wallis Test)

	Marital Status	N	Mean Rank	Kruskal-Wallis H	df	Asymp. Sig.	Q.I.
Physical Environment	Married NOT living together with family	20	62.53	4.048	2	.132	Not Significant
	Married living together with family	69	79.16				
	Single	70	85.82				
	Total	159					
Psychological Environment	Married NOT living together with family	20	64.03	8.715	2	.013*	Significant
	Married living together with family	69	72.70				
	Single	70	91.76				
	Total	159					

Social Environment	Married NOT living together with family	20	65.03	4.315	2	.116	Not Significant
	Married living together with family	69	76.76				
	Single	70	87.47				
	Total	159					
Nursing Stress	Married NOT living together with family	20	63.00	5.757	2	.056	Not Significant
	Married living together with family	69	76.06				
	Single	70	88.74				
	Total	159					

For psychological environment stress, a statistically significant difference was observed, $H(2) = 8.715$, $p = .013$. Single nurses had the highest mean rank (MR = 91.76), followed by married nurses living with their family (MR = 72.70) and married nurses not living with their family (MR = 64.03).

In terms of social environment stress, no statistically significant difference was found, $H(2) = 4.315$, $p = .116$. However, mean ranks again indicated higher stress among single nurses (MR = 87.47) than among married nurses living with family (MR = 76.76) or those not living with family (MR = 65.03).

For overall nursing stress, the result approached but did not reach statistical significance, $H(2) = 5.757$, $p = .056$. Single nurses had the highest mean rank (MR = 88.74), followed by married nurses living with family (MR = 76.06) and married nurses not living with family (MR = 63.00). Although the omnibus test was not significant at the .05 level, the pattern suggests a consistent trend of higher stress levels among single nurses across domains.

Additionally, pairwise comparisons were further conducted for psychological stress, the only domain with a strongly significant result, as seen in Table 18. After Bonferroni adjustment, there was no significant difference between married nurses

who did not live with their family and those who did ($p = 1.000$). However, significant differences were found between married nurses who were not living with their family and single nurses ($p = .052$), and between married nurses who were living with their family and single nurses ($p = .044$). These findings indicate that the significant difference in psychological stress was primarily driven by higher stress levels among single nurses compared to their married counterparts.

Table 18.

Difference in Nurses' Stress Levels Categorized According to Marital Status (Pairwise Comparison)

	Sample 1- Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	p	Q.I.
Psychological Environment	Married NOT living together with family- Married living together with family	-8.678	11.686	-.743	.458	1.000	Not Significant
	Married NOT living together with family- Single	-27.732	11.668	-2.377	.017	.052*	Significant
	Married living together with family-Single	-19.054	7.807	-2.441	.015	.044*	Significant

The finding that marital status significantly influenced psychological stress but not physical or social stress suggests that marital relationships may function as an important source of emotional support rather than directly mitigating environmental or workload-related stressors. Psychological stress in nursing often stems from emotional labor, patient suffering, and role strain, which may be buffered by spousal or family support systems. Social support has long been recognized as a protective factor against occupational stress and burnout in nurses. According to the transactional model of stress and coping, individuals with stronger social support

systems may appraise stressors as less threatening and demonstrate more adaptive coping responses (Lazarus and Folkman, 1984).

Empirical evidence supports this interpretation. Velando-Soriano et al. (2020) found that social support received by nurses appears to play a protective role in preventing burnout syndrome, suggesting that stronger social support networks may be associated with lower burnout risk among nursing professionals. Similarly, Pinheiro et al. (2024) found that higher levels of social support from significant others, including family, are positively linked with nurses' psychological well-being. These findings align with the present study's pattern, in which single nurses consistently reported higher stress levels, particularly in the psychological domain, suggesting that the absence of close relational support may heighten vulnerability to emotional strain in demanding clinical environments.

Interestingly, married nurses who were not living with their families had lower mean ranks than those living with their families across most domains, although the differences were not statistically significant. This may reflect adaptive coping strategies among nurses working away from family or possible selection factors such as resilience among those who choose overseas or distant assignments. Nonetheless, because these differences were not statistically significant, they should be interpreted cautiously.

Overall, the results partially support the notion that marital status plays a role in nurses' stress experiences, specifically in the psychological dimension. While physical and social stressors appear to be more structurally driven by workplace conditions, psychological stress may be more sensitive to variations in personal support systems. These findings highlight the importance of institutional psychosocial

support interventions, particularly for single nurses who may lack consistent emotional support outside the workplace.

Years of Employment

To explore the influence of professional experience on nurses' stress, Kruskal–Wallis tests were conducted to examine differences in stress levels across all domains according to years of employment. These analyses aimed to determine whether early-, mid-, and late-career nurses experience stress differently. Significant findings were further examined through pairwise comparisons to identify specific differences between career stages.

Table 19 presents the results of a Kruskal–Wallis test examining differences in nurses' stress levels across physical, psychological, social, and overall domains by years of employment. Results indicated no statistically significant differences in physical environment stress among nurses with different lengths of service ($H = 6.196$, $df = 3$, $p = .102$), suggesting that physical aspects of the work environment are perceived similarly across career stages. In contrast, significant differences were observed in psychological ($H = 11.597$, $df = 3$, $p = .009$), social ($H = 11.006$, $df = 3$, $p = .012$), and overall stress ($H = 9.493$, $df = 3$, $p = .023$). Post hoc comparisons showed that nurses with 11 or more years of experience reported significantly lower psychological, social, and overall stress than those with 1–5 years of experience, highlighting that early- and mid-career nurses experience higher stress in these domains. Trends also indicated that nurses with less than one year of experience had higher stress, although differences compared to highly experienced nurses were not always statistically significant after adjustment.

Table 19.

Difference in Nurses' Stress Levels Categorized According to Years of Employment (Kruskal-Wallis Test)

	Years of employment	N	Mean Rank	Kruskal- Wallis H	df	Asymp. Sig.	Q.I.
Physical Environment	<1 year	7	77.07	6.196	3	.102	Not Significant
	1 - 5 years	70	90.11				
	6 - 10 years	28	72.88				
	11 years	54	70.96				
	Total	159					
Psychological Environment	<1 year	7	91.21	11.597	3	.009*	Significant
	1 - 5 years	70	88.83				
	6 - 10 years	28	88.52				
	11 years	54	62.69				
	Total	159					
Social Environment	<1 year	7	102.14	11.006	3	.012	Significant
	1 - 5 years	70	90.34				
	6 - 10 years	28	77.55				
	11 years	54	64.99				
	Total	159					
Nursing Stress	<1 year	7	91.36	9.493	3	.023	Significant
	1 - 5 years	70	90.35				
	6 - 10 years	28	79.70				
	11 years	54	65.27				
	Total	159					

Overall, these results suggest that years of professional experience play a meaningful role in shaping nurses' stress levels, particularly in psychological, social, and overall domains. While physical stress appears relatively stable across career stages, nurses in the early- and mid-career phases (1–5 years) consistently experience higher stress compared to their highly experienced counterparts (11+ years), highlighting the protective effect of accumulated experience. The lack of significant differences between highly experienced and very early-career nurses (<1 year)

suggests that stress reduction becomes most pronounced as nurses transition beyond the mid-career stage. These findings align with previous evidence suggesting that less experienced nurses are more susceptible to psychological and social strain, whereas professional experience functions as a protective factor against workplace stress (Woo et al., 2020). Collectively, these findings underscore the importance of targeted support and stress management interventions for less experienced nurses to enhance resilience and promote well-being, while illustrating the cumulative benefits of professional experience in mitigating workplace stress.

Country of Employment

Kruskal-Wallis tests indicated no statistically significant differences in physical ($H = 4.812, p = .307$), psychological ($H = 2.361, p = .670$), social ($H = 1.664, p = .797$), or overall nursing stress ($H = 1.264, p = .867$) across countries of employment.

The table presents the Kruskal–Wallis test results examining differences in nurses' stress levels across five countries of employment: the United Arab Emirates ($n = 14$), Australia ($n = 18$), the United Kingdom ($n = 29$), Saudi Arabia ($n = 38$), and the United States of America ($n = 60$).

For physical environment stress, the mean ranks were highest in the United Kingdom ($MR = 87.55$) and the United Arab Emirates ($MR = 85.61$) and lowest in Saudi Arabia ($MR = 68.63$), and the Kruskal-Wallis test showed no statistically significant differences among countries, $H(4) = 4.098, p = .393$. On the other hand, for psychological environment stress, mean ranks were highest in the United Arab Emirates ($MR = 91.68$) and Saudi Arabia ($MR = 87.00$), and lowest in the United States ($MR = 73.96$), which were not statistically significant, $H(4) = 3.028, p = .553$.

Table 20.*Difference in Nurses' Stress Levels Categorized According to Country of Employment*

	Country of Employment	N	Mean Rank	Kruskal- Wallis H	d f	Asymp. Sig.	Q.I.
Physical Environment	United Arab Emirates	14	85.61	4.098	4	.393	Not Significant
	Australia	18	74.00				
	United Kingdom	29	87.55				
	Saudi Arabia	38	68.63				
	United States of America	60	84.04				
	Total	159					
Psychological Environment	United Arab Emirates	14	91.68	3.028	4	.553	Not Significant
	Australia	18	75.08				
	United Kingdom	29	80.74				
	Saudi Arabia	38	87.00				
	United States of America	60	73.96				
	Total	159					
Social Environment	United Arab Emirates	14	93.14	2.024	4	.731	Not Significant
	Australia	18	77.92				
	United Kingdom	29	78.21				
	Saudi Arabia	38	84.11				
	United States of America	60	75.83				
	Total	159					
Nurse Stress	United Arab Emirates	14	91.64	1.265	4	.867	Not Significant
	Australia	18	75.33				
	United Kingdom	29	81.84				
	Saudi Arabia	38	80.00				
	United States of America	60	77.79				
	Total	159					

Additionally, for social environment stress, the highest mean rank was observed in the United Arab Emirates (MR = 93.14), followed by Saudi Arabia (MR = 84.11), with Australia showing the lowest rank (MR = 77.92). The Kruskal-Wallis test indicated no significant differences, $H(4) = 2.024$, $p = .731$. Moreover, overall

nursing stress mean ranks were highest in the United Arab Emirates (MR = 91.64) and the United Kingdom (MR = 81.84), and lowest in the United States (MR = 77.79); however, no significant differences were also observed, $H(4) = 1.265$, $p = .867$.

The results demonstrate that country of employment does not significantly influence nurses' stress levels across physical, psychological, social, or overall domains. Although descriptive mean ranks varied slightly between countries, these differences were not statistically meaningful. For instance, nurses in the United Arab Emirates consistently reported higher stress levels, yet this pattern did not reach significance due to small subgroup sizes and overlapping stress distributions.

The results suggest that, within this sample, the country of assignment did not meaningfully influence stress levels among Filipino nurses, despite variations in healthcare systems, cultural norms, patient acuity, and organizational expectations. This aligns with research indicating that, while workplace context contributes to nursing stress, individual and professional factors exert a stronger influence than country-specific variables (Choi et al., 2020; Shah et al., 2021). For Filipino nurses working abroad, this may manifest as a relatively stable baseline of occupational stress associated with cross-cultural adjustment, independent of geographic location or differences in healthcare systems.

It is also important to consider statistical power. Smaller group sizes, particularly in the United Arab Emirates ($n = 14$) and Australia ($n = 18$), may have limited the Kruskal-Wallis test's sensitivity to detect subtle differences. Consequently, while no significant differences were found, this should not be interpreted as absolute equivalence across countries.

Relationship Between Cultural Intelligence and Stress

Table 21 presents the Pearson correlation coefficients examining the relationships between cultural intelligence (CQ) and nurses' stress levels across four domains: physical, psychological, social, and overall stress. It specifically answers the research question "Is there a significant relationship between nurses' cultural intelligence and stress?"

Descriptive correlations indicate that overall CQ was negatively associated with all stress domains, suggesting that higher CQ is associated with lower stress. Specifically, physical stress showed a weak negative correlation ($r = -.101$, $p = .203$), and psychological stress also demonstrated a small negative correlation ($r = -.152$, $p = .056$). Social stress exhibited a small but statistically significant negative correlation ($r = -.172$, $p = .030$), while overall stress was similarly negatively correlated with CQ ($r = -.160$, $p = .045$). These values suggest that nurses with higher overall cultural intelligence may experience lower stress, particularly in social interactions and overall stress levels, whereas the relationship with physical and psychological stress was weaker and not statistically significant.

Table 21.
Relationship Between Cultural Intelligence and Stress

	N	Pearson Correlation	Sig. (2-tailed)	Q.I.
Physical Environment	159	-.101	.203	Not Significant
Psychological Environment	159	-.152	.056	Not Significant
Social Environment	159	-.172	.030*	Significant
Overall Stress	159	-.160	.045*	Significant

Although limited nursing studies have directly tested this relationship, the results align with Cultural Intelligence theory, which posits that individuals with higher CQ navigate social interactions more effectively and demonstrate better

psychological adjustment in culturally diverse contexts (Earley & Ang, 2003). This interpretation is further supported by general theories of cross-cultural adjustment, which indicate that individuals who can effectively interpret and respond to culturally novel situations experience lower psychological and social strain, highlighting cultural adaptability as a protective factor against stress in multicultural environments (Ward et al., 2001).

The non-significant correlations with physical and psychological stress may indicate that CQ primarily buffers stress in interpersonal or culturally complex situations rather than in situations arising from workload, physical demands, or internal emotional strain. This is consistent with prior research demonstrating that cultural intelligence serves as a protective factor for relational stressors, helping healthcare professionals adapt to culturally diverse settings and maintain psychosocial well-being (Ng et al., 2009).

These results have practical implications for overseas Filipino nurses, who often work in multicultural environments. Developing CQ may help reduce social stress and support overall stress management, though additional interventions may be needed to address physical and psychological stressors.

Relationship Between Organizational Citizenship Behavior and Stress

Table 22 presents the Pearson correlation coefficients examining the relationships between Organizational Citizenship Behavior (OCB) and nurses' stress levels across physical, psychological, social, and overall stress domains. It specifically answers the research question, "Is there a significant relationship between nurses' organizational citizenship behavior and stress?"

Table 22 presents the relationship between overall OCB and nurses' stress across the physical, psychological, and social domains. Across all domains, correlations were extremely weak and did not reach statistical significance ($p > .05$).

Physical stress showed the smallest association with OCB ($r = .001$), while psychological stress displayed a small, positive but non-significant correlation ($r = .058$). Social stress had a negligible negative correlation ($r = -.004$), and overall stress showed a minimal positive correlation ($r = .020$). These values suggest that, within this sample, higher engagement in organizational citizenship behaviors is not associated with lower or higher stress levels.

Table 22.

	N	Pearson Correlation	Sig. (2-tailed)	Q.I.
Physical Environment	159	.001	.987	Not Significant
Psychological Environment	159	.058	.469	Not Significant
Social Environment	159	-.004	.963	Not Significant
Overall Stress	159	.020	.805	Not Significant

Relationship Between Organizational Citizenship Behavior and Stress

Although OCB has been shown to positively influence employees' well-being at work (Santos et al., 2023), the current findings suggest that these benefits do not directly translate to lower stress in high-demand nursing contexts. Engagement in OCB alone may not buffer stress due to the intensive workload, emotional demands, and complexity of patient care, which can overshadow the potential protective effects of prosocial behaviors. Overall, these results highlight that while OCB may contribute to positive work outcomes, it does not directly mitigate occupational stress among nurses in this study.

Predictors of Nurses' Stress

This section presents the results of the multiple linear regression analyses conducted to determine the significant predictors of nurses' stress across physical, psychological, social, and overall domains. Only variables that emerged as significant predictors are discussed.

Table 23.
Predictors of Overall Nursing Stress

	B	β	t	Sig (p)	R2	R² change	Q.I.
Motivational CQ	-.246	-.386	-4.615	.000	.093	.093	Significant
Behavioral CQ	.110	.184	2.199	.029	.120	.027	Significant
F (2,156) = 10.669 , p = .000			R = .347				

Table 23 presents the regression model predicting overall nursing stress. The analysis identified motivational cultural intelligence (CQ) as a significant negative predictor ($B = -.246$, $\beta = -.386$, $t = -4.615$, $p < .001$), indicating that nurses with stronger intrinsic motivation to engage in cross-cultural interactions tend to experience lower overall stress. In contrast, behavioral CQ emerged as a small but significant positive predictor ($B = .110$, $\beta = .184$, $t = 2.199$, $p = .029$), suggesting that frequent behavioral adaptation to cultural norms may be associated with slightly higher stress levels.

The model was statistically significant, $F(2,156) = 10.669$, $p < .001$, accounting for 12% of the variance in overall stress ($R^2 = .120$). Motivational CQ explained 9.3% of the variance, while behavioral CQ contributed an additional 2.7%. These findings highlight the protective function of motivational CQ, alongside the modest stress-related demands associated with behavioral adaptation.

Table 24.
Predictors of Physical Stress

	B	β	t	Sig (p)	R2	R² change	Q.I.
Motivational CQ	-.219	-.316	-3.706	.000	.049	.049	Significant
Behavioral CQ	.141	.217	2.549	.012	.087	.038	Significant
F (2,156) = 7.393 , p = .001			R = .294				

As shown in Table 24, motivational CQ significantly and negatively predicted physical stress ($B = -.219$, $\beta = -.316$, $t = -3.706$, $p < .001$), whereas behavioral CQ was a significant positive predictor ($B = .141$, $\beta = .217$, $t = 2.549$, $p = .012$). The overall model was significant, $F(2,156) = 7.393$, $p = .001$, explaining 8.7% of the variance ($R^2 = .087$). Motivational CQ accounted for 4.9% of the variance, with behavioral CQ contributing an additional 3.8%. These results suggest that motivational engagement in culturally diverse settings may reduce physical manifestations of stress, while sustained behavioral adjustments may incrementally increase physical strain.

Table 25.
Predictors of Social Stress

	B	β	t	Sig (p)	R2	R² change	Q.I.
Motivational CQ	-.323	-.424	-5.142	.000	.112	.112	Significant
Behavioral CQ	.145	.204	2.474	.014	.145	.034	Significant
F (2,156) = 13.247 , p = .000			R = .381				

Table 25 indicates that motivational CQ was a strong negative predictor of social stress ($B = -.323$, $\beta = -.424$, $t = -5.142$, $p < .001$), while behavioral CQ again emerged as a small positive predictor ($B = .145$, $\beta = .204$, $t = 2.474$, $p = .014$). The regression model was significant, $F(2,156) = 13.247$, $p < .001$, explaining 14.5% of the variance in social stress ($R^2 = .145$). Motivational CQ accounted for 11.2% of the variance, with behavioral CQ contributing an additional 3.4%. These findings underscore the substantial role of motivational CQ in mitigating interpersonal and relational stress in multicultural environments.

Table 26.
Predictors of Psychological Stress

	B	β	t	Sig (p)	R2	R² change	Q.I.
Motivational CQ	-.205	-.298	-3.801	.000	.066	.066	Significant
OCBO	.175	.172	2.190	.030	.094	.028	Significant
F (2,156) = 8.091 , p = .000			R = .307				

Table 26 presents the regression results for psychological stress. Motivational CQ remained a significant negative predictor ($B = -.205$, $\beta = -.298$, $t = -3.801$, $p < .001$), whereas organizational citizenship behavior toward the organization (OCB-O) emerged as a small positive predictor ($B = .175$, $\beta = .172$, $t = 2.190$, $p = .030$). The model was statistically significant, $F(2,156) = 8.091$, $p < .001$, explaining 9.4% of the variance ($R^2 = .094$). Motivational CQ accounted for 6.6% of the variance, while OCB-O contributed an additional 2.8%. These findings highlight the protective role of motivational CQ in buffering psychological stress, while suggesting that discretionary organizational engagement may carry modest emotional demands.

Overall, the regression analyses across Tables 25 to 28 reveal a consistent and theoretically meaningful pattern: motivational cultural intelligence (CQ) emerged as the strongest and most stable predictor of stress across all domains (physical, psychological, social, and overall stress). In contrast, behavioral CQ and organizational citizenship behavior toward the organization (OCB-O) demonstrated small but positive associations with certain stress dimensions. Collectively, these findings suggest that while intrinsic cross-cultural motivation functions as a protective resource, behavioral adaptation and discretionary organizational engagement may carry subtle stress costs.

Across all models, motivational CQ consistently predicted lower stress levels. Its strongest effect was observed in the domain of social stress, followed by overall, psychological, and physical stress. This pattern aligns with meta-analytic evidence demonstrating that cultural intelligence is positively associated with expatriate

adjustment and effective functioning in multicultural contexts (Han et al., 2022), highlighting the critical role of culturally driven motivation and adaptive capacity in managing cross-cultural challenges and promoting psychosocial well-being.

Motivational CQ reflects an internal drive to engage across cultures, which may enhance coping, reduce perceived threat in unfamiliar interactions, and foster adaptive appraisal of cross-cultural challenges. From the perspective of the transactional model of stress and coping, personal resources such as intrinsic motivation are likely to influence both primary and secondary appraisals, enabling culturally motivated nurses to perceive demanding cross-cultural interactions as manageable rather than overwhelming (Lazarus & Folkman, 1984). Empirical studies have similarly demonstrated that cultural intelligence is positively associated with improved psychological adjustment and resilience in multicultural contexts, as individuals with stronger cultural intelligence tend to exhibit greater psychological resilience and more successful cross-cultural adaptation (Chu & Zhu, 2023).

In contrast, behavioral CQ consistently emerged as a small positive predictor of physical, social, and overall stress. Although behavioral CQ involves the ability to adapt verbal and nonverbal actions to cultural contexts, continuous behavioral regulation may require sustained cognitive and emotional effort. Over time, this adaptive effort may contribute to fatigue or strain, particularly in high-intensity clinical environments. The findings of this study are consistent with research on emotional labor, which suggests that sustained emotional regulation and impression management are associated with increased emotional exhaustion and stress when they exceed individuals' emotional resources (Chen et al., 2022). Thus, while behavioral CQ enhances intercultural effectiveness, its enactment may carry an energetic cost when adaptation is frequent and prolonged.

Similarly, OCB-O was identified as a small positive predictor of psychological stress. Although organizational citizenship behaviors are generally associated with improved organizational climate and performance, recent evidence suggests that frequent or excessive engagement in OCB can contribute to emotional exhaustion and strain, especially when extrarole effort exceeds employees' available resources and recovery opportunities (Nguyen et al., 2025). In demanding healthcare settings, nurses who frequently go beyond formal role requirements may experience increased psychological strain, particularly if such behaviors are not reciprocated or institutionally supported. This finding suggests that prosocial organizational engagement, while beneficial for institutions, does not necessarily buffer individual stress and may even intensify internal pressures.

Despite the statistical significance of these predictors, the proportion of variance explained across models ranged from modest to moderate. This indicates that while cultural intelligence and organizational behaviors contribute meaningfully to stress experiences, nursing stress remains multifactorial. Structural demands, workload, staffing adequacy, and broader organizational conditions are likely to interact with personal competencies to shape stress outcomes.

Overall, the comparative analysis of the regression models suggests that intrinsic adaptive capacity (motivational CQ) serves as a central protective resource, whereas behavioral exertion and discretionary organizational effort may introduce incremental strain. For expatriate nurses operating in culturally complex healthcare systems, strengthening motivational aspects of cultural competence may be particularly beneficial in reducing stress across domains. At the same time, healthcare institutions should recognize that behavioral adaptation and extra-role contributions,

although valuable, may require structural support and workload balance to prevent unintended stress accumulation.

Chapter 5

Summary of Findings, Conclusions, and Recommendations

This chapter presents the summary of findings, conclusion, and recommendations of the study. It synthesizes the key results in relation to the research objectives and highlights the significant insights derived from the data. Based on these findings, conclusions are drawn, and practical recommendations are proposed to guide future practice, policy, and research.

Summary

This study investigated the relationship between Cultural Intelligence (CQ), Organizational Citizenship Behavior (OCB), and stress among Filipino nurses employed overseas. Filipino nurses represent a significant segment of the global healthcare workforce; however, working in culturally diverse environments exposes them to unique stressors related to communication barriers, workplace adjustment, social integration, and professional expectations.

Using a quantitative descriptive-correlational design, the study measured four dimensions of CQ (metacognitive, cognitive, motivational, and behavioral), two dimensions of OCB (OCB-I and OCB-O), and three dimensions of nursing stress (physical, psychological, and social environments). Standardized tools, including the CQS, OCB-C, and NSS, were administered through online surveys.

The research revealed a diverse demographic profile: 27.0 percent were 23-30 years old, 47.8 percent were 31-44 years old, and 25.2 percent were 45-60 years old. The gender of respondents was 69.2% female and 30.8% male. In terms of marital status, respondents were primarily singles (44.0%), married not living with family (12.6%), and

married living with family (43.4%). Country of employment varied, with 37.7 percent coming from the United States, 23.9 percent from Saudi Arabia, 18.2 percent from the United Kingdom, 11.3 percent from Australia, and 8.8 percent from the United Arab Emirates. Duration of employment also varied: 4.4 percent had less than a year, 44.0 percent had 1 to 5 years, 17.6 percent had 6 to 10 years, and 34.0 percent had 11 or more years of cumulative staff nurse experience.

Furthermore, results indicated that Filipino nurses working abroad generally possess high levels of cultural intelligence: metacognitive CQ (5.9623), cognitive CQ (5.0514), motivational CQ (5.5358), and behavioral CQ (5.5057). This indicates that respondents are consciously aware of cultural differences and can adjust their thinking and behavior in multicultural clinical settings. Organizational citizenship behavior was likewise reported at a high level, with behaviors directed toward the organization (3.4681) and toward individuals (3.7126). Despite these strengths, moderate levels of overall stress (1.6540) were still reported: physical (1.6352), psychological (1.6632), and social environment (1.6635).

In addition, nursing stress was compared across age groups, revealing that nurses aged 23–30 years consistently reported higher stress levels across all domains, and that, between the two sexes, females reported significantly higher physical, social, and overall stress than males. Nursing stress was also compared across marital status revealing that single nurses reported significantly higher psychological and overall stress levels compared to their married counterparts, and across different duration of employment which found out that nurses in the 1–5 years employment range experiencing the highest levels of psychological, social, and overall stress, while nurses with 11 or more years of

experience reported significantly lower stress. In contrast, the country of employment did not have a meaningful effect on stress levels.

Moreover, the study's findings revealed that cultural intelligence (CQ) demonstrated a negative overall relationship with stress, particularly in the domains of social and overall stress. This indicates that higher levels of cultural intelligence are generally associated with lower perceived stress among respondents. On the other hand, OCB did not show statistical significance when correlated with stress.

Among the four dimensions of cultural intelligence (CQ), motivational CQ consistently emerged as the strongest predictor of nurses' stress across all domains. Regression analyses indicated that motivational CQ significantly and negatively predicted overall, physical, social, and psychological stress, accounting for between 4.9% and 11.2% of the variance across stress domains. These results suggest that nurses with higher intrinsic motivation, interest, and confidence in navigating culturally diverse settings are more likely to experience lower stress across physical, social, and psychological dimensions, underscoring the protective role of motivational engagement in multicultural clinical environments.

In contrast, behavioral CQ demonstrated a small but significant positive association with overall, physical, and social stress. Although behavioral adaptability is theoretically important for functioning in culturally diverse contexts, the results indicate that frequent behavioral adjustments may incrementally increase stress, possibly due to the cognitive and emotional demands involved in continuous self-monitoring and adaptation. Behavioral CQ contributed 2.7%-3.8% additional variance to stress outcomes,

reflecting a modest but notable effect that contrasts with the protective influence of motivational CQ.

Cognitive and metacognitive CQ, while showing minimal negative correlations with stress, were generally not statistically significant predictors across stress domains, except for cognitive CQ's small, significant associations with social and overall stress. This pattern suggests that knowledge of cultural norms and strategic awareness may support reduced interpersonal stress, but their impact is weaker than that of motivational engagement.

Regarding organizational citizenship behavior (OCB), results indicated limited influence on stress. OCB directed toward the organization (OCB-O) was a small positive predictor of psychological stress, accounting for 2.8% of variance, suggesting that discretionary organizational engagement may carry modest emotional demands. In contrast, OCB directed toward individuals (OCB-I) showed negative, though non-significant, associations with stress, suggesting potential trends toward stress reduction in interpersonal contexts that were not statistically robust.

Overall, these findings indicate that cultural intelligence, particularly motivational CQ, plays a more substantial role in influencing nursing stress than organizational citizenship behaviors. While behavioral CQ and OCB-O may impose slight additional demands, the protective effects of motivational CQ underscore the importance of fostering intrinsic cultural engagement to mitigate stress. The proportion of variance explained by the regression models ranged from modest to moderate ($R^2 = .087-.145$), emphasizing that nursing stress is multifactorial. Beyond individual competencies, environmental and organizational factors likely interact with personal resources to shape

stress outcomes, consistent with contemporary occupational stress models such as the Job Demands–Resources framework.

Conclusion

Based on the study's findings, several conclusions were drawn. Female, single nurses aged 23–30 years with one to five years of staff nursing experience reported higher levels of occupational stress. This suggests that younger and early-career nurses may experience greater challenges in adapting to the demands of overseas employment and multicultural healthcare environments.

The findings also revealed that Filipino nurses working abroad generally demonstrate high levels of cultural intelligence and strong engagement in organizational citizenship behaviors, indicating substantial adaptability, cultural awareness, and commitment to teamwork and organizational functioning. Despite these strengths, respondents reported moderate levels of occupational stress, particularly in the psychological and work-environment domains. This finding supports McGrath's Multidimensional Stress Model, which explains that stress arises from multiple interacting domains, including physical, psychological, and environmental factors.

Furthermore, cultural intelligence and organizational citizenship behavior were found to be significantly related to stress, with specific dimensions serving as meaningful predictors. These results affirm the principles of the Cultural Intelligence Model, which suggests that individuals with higher cultural awareness, knowledge, and adaptive capacity are better equipped to navigate culturally diverse situations. The findings also support the concept of Organizational Citizenship Behavior, highlighting how voluntary

cooperative behaviors contribute to interpersonal support and organizational functioning within healthcare teams.

Moreover, the results align with the Transactional Model of Stress and Coping proposed by Richard Lazarus and Susan Folkman, which posits that stress results from the interaction between environmental demands and an individual's appraisal of available coping resources. The findings indicate that Filipino nurses working abroad interpret workplace and cultural challenges through personal competencies such as cultural intelligence and social resources developed through organizational citizenship behaviors, which subsequently influence their stress experiences.

Finally, demographic variables such as age, sex, marital status, years of employment, and country of employment exerted limited, context-dependent influence on stress levels. Overall, the study confirms that stress among Filipino nurses working abroad is multidimensional and dynamic, influenced by the interaction of personal competencies, interpersonal behaviors, and organizational or environmental conditions rather than by individual characteristics alone.

Recommendations

Based on the findings of the study, the following recommendations are proposed:

1. For Staff nurses, they are encouraged to establish unit-based peer support groups that meet monthly to discuss culturally challenging cases, work-related stressors, and coping strategies. Meetings may include reflective sharing, stress debriefing after difficult patient and family interactions, and peer mentoring for newly assigned nurses. Nurses may also voluntarily engage in informal social activities outside the workplace (e.g., team lunches or wellness activities) to strengthen

camaraderie and interpersonal trust. Strong peer relationships may enhance teamwork, promote organizational citizenship behaviors, and buffer work-related stress. Additionally, smaller support groups may be created for nurses who are more likely to experience higher levels of stress, particularly those who are female, single, younger (23–30 years old), or in the early stages of their professional careers. Providing targeted peer support for these groups may help address specific adjustment challenges, promote coping strategies, and facilitate smoother adaptation to the demands of multicultural healthcare environments

2. Nurse supervisors should implement monthly recognition initiatives highlighting exemplary clinical performance and teamwork. They should prioritize constructive feedback over punitive correction and ensure fair workload distribution based on competency and experience. Supportive supervision may reduce psychological stress and improve the unit work climate.
3. Unit managers should establish structured weekly “open-door” consultation hours where staff can safely raise concerns without fear of reprimand. Regular conflict-resolution discussions should also be facilitated, as conflicts with peers, supervisors, and physicians contribute to increased nursing stress.
4. For Human Resource departments, they should prioritize designing programs that promote unity and organizational citizenship behaviors, such as interdepartmental team-building activities, cultural celebration events, and peer recognition systems to foster teamwork and collaboration in the workplace, which may help lessen work stress. Additionally, the HR should also implement mandatory leadership training programs for charge nurses and head nurses, focusing on emotional

intelligence, conflict resolution, and supportive communication. Strengthening leadership competencies may reduce stress arising from supervisory conflict.

Furthermore, HR should develop specialized orientation modules for foreign or expatriate nurses covering host-country cultural norms, communication styles, patient expectations, and professional practice standards. These initiatives may enhance cultural intelligence and reduce adjustment-related stress.

5. For Policymakers, they should develop institutional guidelines that clearly define nurses' professional roles and scope of practice, limit excessive clerical and non-clinical duties, and establish safe nurse-to-patient staffing ratios. Clear job descriptions should be disseminated to reduce role ambiguity and workload overload, allowing nurses to prioritize direct patient care.
6. For Regulatory bodies, they should mandate cultural competence and cultural intelligence training as part of licensure renewal requirements, particularly in multicultural healthcare systems. National guidelines clarifying the nursing scope of practice should also be strengthened to protect role boundaries and professional standards.
7. For Healthcare administrators, they should conduct task audits to identify excessive clerical and non-nursing responsibilities assigned to registered nurses. Where necessary, clerical assistants should be hired to reduce the documentation burden. Administrators should also ensure adequate staffing ratios, implement float pools, and monitor overtime to prevent burnout.
8. For Clinical educators and trainers, they should implement structured onboarding programs (4–8 weeks) that include supervised clinical immersion, cultural case

simulations, gradual patient load progression, and competency validation prior to independent assignment. Proper integration reduces stress related to uncertainty and perceived incompetence.

9. For Nursing schools, they should continue to integrate cultural intelligence development into curricula through cross-cultural simulations, reflective journaling, clinical exposure in culturally diverse settings, and international or virtual global collaboration programs. Emphasis should be placed on strengthening motivational cultural intelligence by framing cultural diversity as a professional growth opportunity. Early preparation may enhance adaptability and reduce future workplace stress. Additionally, nursing schools may encourage students to participate in knowledge dissemination initiatives that communicate research findings to broader audiences, including international healthcare managers and organizations. For example, students may develop short educational videos, digital presentations, or online campaigns that summarize key findings from relevant studies. Disseminating research through accessible platforms can help increase awareness of evidence-based strategies that support nurse well-being and culturally competent practice in global healthcare settings.
10. For Future researchers, they should conduct further research on interventions to enhance motivational cultural intelligence, examine longitudinal relationships between CQ and stress reduction, investigate mediating variables such as leadership style, staffing adequacy, and organizational culture, compare stress adaptation between local and expatriate nurses, and utilize multisite and cross-national samples to improve generalizability. Additionally, further research on

strategies to strengthen motivational cultural intelligence at both individual and institutional levels is strongly recommended, given its significant association with reduced nursing stress in this study. Further studies are also encouraged to include larger sample sizes to enhance the generalizability of the findings.

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APPENDICES

APPENDIX A
PERMISSION LETTER FROM THE AUTHORS OF THE CULTURAL
INTELLIGENCE SCALE

from: **Van Dyne, Linnea** <vandyne@broad.msu.edu>
to: "ADAP, BIANCA KRISTIEN JUVI B" <2027741@aup.edu.ph>
cc: S Ang <soonangntu@gmail.com>
date: Oct 28, 2025, 8:27 AM
subject: RE: Request for Permission to Use the Cultural Intelligence Scale (CQS)

mailed-by: broad.msu.edu
signed-by: broad.msu.edu

Hello Bianca,

Thank you for your interest in using CQ in your academic research.
You have my permission to use the 20 item CQS in your research aimed at publication in scholarly journals.

You can create your own survey using the items in the attached file. If you do this, be sure to include the following copyright information on all electronic and paper copies of the survey:

© Cultural Intelligence Center 2005. Used by permission of Cultural Intelligence Center.
Note. Use of this scale granted to academic researchers for research purposes only.
Visit www.culturalQ.com for more information.

For information on using the scale for purposes other than academic research (e.g., consultants and non-academic organizations), please send an email to info@culturalq.com

In scholarly writing, you should cite the scale as follows:
Ang, S., Van Dyne, L., Koh, C.K.S., Ng, K.Y., Templer, K.J., Tay, C., & Chandrasekar, N.A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation, and task performance. *Management and Organization Review*, 3: 335-371.

Please remember this is a copyrighted scale and I am making it available to you ONLY for scholarly research aimed at publication in academic journals. Should you decide you want to use the scale for consulting or program evaluation in the future, please contact me to make the necessary arrangements.

In addition, please remember that you should use 1-7 Likert scale responses in research and research papers/presentations because the world-wide norms, definitions of low, moderate, and high scores, and the 1-100 scores are proprietary and should not be used in research.

You should average the items for each of the four dimensions and use these averages in your statistical analysis. If you need an overall CQ score, average the averages for the four dimensions to create one CQ score. Do not average the 20 items because this will be misleading given that there are a different number of items for some dimensions.

Please do not reproduce this copyrighted scale in any papers or books without contacting me to obtain permission.

We wish you the best with your research. Please share your results with us so that we can learn from you.

Sincerely,

Linn

APPENDIX B
PERMISSION LETTER FROM THE AUTHORS OF THE OCB- CHECKLIST

from: **Paul Spector**<paul@paulspector.com>
 to: bianca adap <bianca.adap25@gmail.com>
 date: Oct 26, 2025, 6:15 PM
 subject: RE: Request for Permission to Use the Organizational Citizenship behavior Scale (OCB-C) for Thesis
 mailed-by: paulspector.com
 signed-by: NETORGFT3505794.onmicrosoft.co

Dear Bianca:

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Thank you for your interest in my scales, and good luck with your research.

Best,

Paul Spector, PhD

-Professor, School of Management, Muma College of Business (Part-time)
 University of South Florida, Tampa, FL 33620 USA

-Organizational Behavior Science Contractor, Tampa General Hospital

-Distinguished Professor Emeritus, Department of Psychology, USF

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APPENDIX C
PERMISSION LETTER FROM THE AUTHORS
OF THE NURSING STRESS SCALE

from: **JAMES ANDERSON**<janders1@purdue.edu>
to: bianca adap <bianca.adap25@gmail.com>
date: Oct 27, 2025, 8:52 PM
subject: RE: Request to Use the Nursing Stress Scale for Research Study
mailed-by: purdue.edu
signed-by: purdue.edu

You have our permission to use the Nursing Stress Scale. It is available in the Journal of Behavioral Assessment, Vol 3 No 1 1981 pp.11-23.

James G. Anderson, PhD

APPENDIX D

REQUEST LETTER TO THE RESPONDENTS

Dear Participant,

Good day!

I am Bianca Adap, a Master of Science in Nursing and Master in Business Administration student at the Adventist University of the Philippines. I am currently conducting a research study entitled “Influence of Cultural Intelligence, Organizational Citizenship Behavior, and Stress Among Filipino Nurses Working Abroad” as part of the academic requirements for my degree. This study aims to examine the relationship among cultural intelligence, organizational citizenship behavior, and stress among Filipino nurses working overseas.

You have been identified as a potential participant in this study because of your valuable experience as a Filipino nurse abroad. Your participation will involve completing an online questionnaire consisting of three validated instruments: the Cultural Intelligence Scale (CQS), the Organizational Citizenship Behavior Scale (OCBS), and the Nursing Stress Scale (NSS). The estimated completion time is approximately 10–15 minutes.

Please be assured that your participation is voluntary. You may withdraw from the study at any time without penalty. All information you provide will be treated with the highest level of confidentiality and used solely for academic and research purposes. No identifying information will appear in any report or publication.

Should you have any questions or concerns regarding the study or the questionnaire, you may contact the designated research assistant assigned in your country. They will be available to address any inquiries and provide clarification as needed. Your contribution is highly valued, and your participation will greatly assist in the success of this research. By completing and submitting the questionnaire, you signify your informed consent to participate in this study.

Thank you very much for your time, effort, and kind cooperation.

Sincerely,

Bianca Kristien Juvi Adap, RN
Masters in Science of Nursing; Masters in Business Administration
Adventist University of the Philippines
Email: bianca.adap25@gmail.com

APPENDIX E

THESIS QUESTIONNAIRE

Part I: Demographic Profile

Age: ____

Sex at birth:

____ Male

____ Female

Marital Status:

____ Single

____ Married living together with family

____ Married not living together with family

Years of Employment: ____

Country of Employment:

____ United States

____ United Kingdom

____ United Arab Emirates

____ Saudi Arabia

____ Australia

Part II. Cultural Intelligence

The following statements ask about your cultural intelligence, or your ability to understand,

adapt to, and work effectively with people from different cultural backgrounds.

Directions: Read each statement carefully and rate each statement based on your own experiences, attitudes, and behaviors in multicultural situations. There are no right or wrong

answers. Choose the response that best reflects how much you agree with each statement.

Select the number that best describes your answer based on the following scale:

1 – Strongly Disagree

2 – Disagree

3 – Somewhat Disagree

4 – Neither Agree nor Disagree (Neutral)

5 – Somewhat Agree

6 – Agree

7 –Strongly Agree

CULTURAL INTELLIGENCE SCALE	1	2	3	4	5	6	7
Metacognitive CQ							
1. I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.							
2. I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.							
3. I am conscious of the cultural knowledge I apply to cross-cultural interactions.							
4. I check the accuracy of my cultural knowledge as I interact with people from different cultures.							
Cognitive CQ							
5. I know the legal and economic systems of other cultures.							
6. I know the rules (e.g., vocabulary, grammar) of other languages.							
7. I know the cultural values and religious beliefs of other cultures.							
8. I know the marriage systems of other cultures.							

9. I know the arts and crafts of other cultures.							
10. I know the rules for expressing non-verbal behaviors in other countries.							
Motivational CQ							
11. I enjoy interacting with people from different cultures.							
12. I am confident that I can socialize with locals in a culture that is unfamiliar to me.							
13. I am sure I can deal with the stresses of adjusting to a culture that is new to me.							
14. I enjoy living in cultures that are unfamiliar to me.							
15. I am confident that I can get accustomed to the shopping conditions in a different culture.							
Behavioral CQ							
16. I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it							
17. I use pause and silence differently to suit different cross-cultural situations							
18. I vary the rate of my speaking when a cross-cultural situation requires it.							
19. I change y non-verbal behavior when a cross-cultural situation requires it.							

20. I alter my facial expressions when a cross-cultural interaction requires it.							
--	--	--	--	--	--	--	--

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Part III. Organizational Citizenship Behavior

The following statements focus on behaviors you may show at work that go beyond your formal job duties, such as helping colleagues and supporting your organization.

Directions: Read each situation. Indicate how often how often have you done each of the following things on your present job using the scale:

- 1 – Never
- 2 – Once or Twice
- 3 – Once or Twice/month
- 4 – Once or Twice/week
- 5 – Everyday

ORGANIZATIONAL CITIZENSHIP BEHAVIOR CHECKLIST	1	2	3	4	5
OCB- Directed toward Organization (OCB-O)					
1. Helped new employees get oriented to the job.					
2. Offered suggestions to improve how work is done.					
3. Offered suggestions for improving the work environment.					
4. Volunteered for extra work assignments.					
5. Said good things about your employer in front					

of others.					
6. Gave up meal and other breaks to complete work.					
7. Decorated, straightened up, or otherwise beautified common work space.					
OCB- Directed toward Individuals (OCB-I)					
8. Lent a compassionate ear when someone at work had a work problem.					
9. Lent a compassionate ear when someone had a personal problem.					
10. Changed vacation schedule, workdays, or shifts, to accommodate co-worker's needs.					
11. Helped a less capable co-worker lift a heavy box or other object.					
12. Went out of the way to give co-worker encouragement or express appreciation.					
13. Defended a co-worker who was being "put-down" or spoken ill of by other co-workers or supervisor.					
14. Picked up meal for others at work					
15. Took time to advise, coach, or mentor a co-worker					
16. Helped co-worker learn new skills or shared job knowledge.					
17. Finished something for co-worker who had to leave early.					

18. Helped a co-worker who had too much to do.					
19. Took phone messages for absent or busy co-worker.					
20. Volunteered to help a co-worker deal with a difficult customer, vendor, or co-worker.					

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Part IV. Nursing Stress

The following statements ask about situations at work that may cause stress in your nursing role.

Directions: Read each situation. Indicate how often it has been stressful for you in your nursing role during the past month using the scale:

0 - Never stressful

1 - Occasionally stressful

2- Frequently stressful

3 - Very frequently stressful

NURSING STRESS SCALE	0	1	2	3
Physical Environment				
1. Breakdown of a computer				
2. Unpredictable staffing and scheduling				
3. Too many non-nursing tasks required, such as clerical work				
4. Not enough time to provide emotional support to a patient				

5. Not enough time to complete all of my nursing tasks				
6. Not enough staff to adequately cover the unit				
Psychological Environment				
7. Performing procedures that patients experience as painful				
8. Feeling helpless in the case of a patient who fails to improve				
9. Listening or talking to a patient about his or her approaching death				
10. The death of a patient				
11. The death of a patient with who you developed a close relationship				
12. Physician not being present when a patient dies				
13. Watching a patient suffer				
14. Feeling inadequately prepared to help with the emotional needs of a patient's family				
15. Being asked a question by a patient for which I do not have a satisfactory answer				
16. Feeling inadequately prepared to help with the emotional needs of a patient				
17. Lack of an opportunity to talk openly with other unit personnel about problems in the unit				
18. Lack of an opportunity to share experiences and feeling with other personnel on the unit				

19. Lack of an opportunity to express to other personnel on the unit my negative feelings toward a patient				
20. Inadequate information from a physician regarding the medical condition of patient				
21. A physician ordering what appears to be inappropriate treatment for a patient				
22. A physician not being present during a medical emergency				
23. Not knowing what a patient or a patient's family ought to be told about the patient's condition and its treatment				
24. Uncertainty regarding the operation and functioning of specialized equipment				
Social Environment				
25. Criticism by a physician				
26. Conflict with a physician				
27. Fear of making a mistake in treating a patient				
28. Disagreement concerning the treatment of a patient				
29. Making a decision concerning a patient when the physician is unavailable				
30. Conflict with a supervisor				
31. Floating to other units that are short-staffed				
32. Difficulty in working with a particular nurse(or nurses)outside the unit				

33. Criticism by a supervisor				
34. Difficulty working with a with a particular nurse (or nurses)on the unit				



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CENTER OF GRADUATE STUDIES

Name of Researcher(s):	Bianca Kristien Juvi Adap
Program Course:	Master of Science in Nursing Master in Business Administration
Adviser:	Raymond C. Caagbay, Ph. D., MSN, RN
Similarity Index:	5%
Date of Test Conducted:	Wed, 04 Mar 2026 13:59:24 +0800 PM PST

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BEHAVIOR ON STRESS AMONG FILIPINO NURSES WORKING ABROAD

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RAYMOND C. CAAGBAY, PH. D., MSN, RN / Mar. 04, 2026

Signature above printed name of Adviser / Date

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CURRICULUM VITAE

BIANCA KRISTIEN JUVI B. ADAP

Celanova St. Sta Rosa Heights Subd,
Brgy Puting Kahoy, Silang Caivte, Philippines
Mobile: 090595909855 Email: bianca.adap25@gmail.com

Educational Background:

- Bachelor of Science in Nursing: Adventist University of the Philippines, 2017
- Secondary Education: Adventist University of the Philippines, 2013
- Elementary Education: Adventist University of the Philippines, 2009

Work Experience:

- Staff Nurse : The Medical City South Luzon - Surgery and Delivery Suite
(August 2018-present)
- Clinical Preceptor: Our Lady of Fatima Laguna (2024-2025)
- Clinical Preceptor: Olivarez College Tagaytay (2023-2024)
- Clinical Preceptor: Philippine Christian University (2025)

License and Organization:

- Philippine Registered Nurse (2018-present)
- US Registered Nurse (2020-present)
- Philippine Nurses Association (active, 2025)
- Perioperative Nurses Association of the Philippines (active, 2025)
- Basic Life Support (active, 2026)
- Advance Cardiac Life Support (active, 2026)

Awards:

- Daisy Award Nominee (October, 2022)
- Best Nurse, SDS (December, 2025)