



ETCOR Educational Research Center Inc.
SEC Reg. No. 2024020137294-00
 Sta. Ana, Pampanga, Philippines
 Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

Stress, Coping, and Resilience of Ward Nurses in Private Hospitals in Bulacan: Implications for Stress Management

Jairo Zen SJ. Agustin^{*1}, Leanfel A. Batrina², Ravenal ST. Sacdalan³, Margaux R. Salamat⁴, Lei Ann D. Salvador⁵, Elena I. Bombita⁶, Richard A. Mamayson⁷, Allan M. Manaloto⁸
^{1, 2, 3, 4, 5, 6, 7} La Consolacion University Philippines
⁸ Bulacan State University
 Malolos, Bulacan, Philippines, 3000

*Corresponding author email: jairozen.agustin@email.lcup.edu.ph

Received: 10 July 2025

Revised: 12 August 2025

Accepted: 14 August 2025

Available Online: 15 August 2025

Volume IV (2025), Issue 3, P-ISSN – 2984-7567; E-ISSN - 2945-3577

<https://doi.org/10.63498/etcor435>

Abstract

Aim: This study aimed to evaluate the stress levels, resilience, and coping behaviors of ward nurses in selected private hospitals in Malolos and Guiguinto, Bulacan, to guide the development of an evidence-based Nurse Empowerment Program for stress management.

Methods: A descriptive–correlational research design was employed. Ethical approval was obtained from the Ethics Committee of La Consolacion University Philippines prior to data collection. A total of 114 ward nurses from participating private hospitals were selected through purposive sampling based on their direct patient care roles. Data were gathered using three standardized tools: the Perceived Stress Scale (PSS), Coping Inventory for Stressful Situations (CISS), and Connor–Davidson Resilience Scale (CD-RISC). Descriptive statistics, normality testing, and Pearson's correlation were used for analysis.

Results: Most respondents were young (22–29 years), female, single, and had 1–5 years of clinical experience. The majority handled 5–10 patients per shift, and nearly all had no prior stress management training. Stress levels were generally moderate, with task-oriented and avoidance coping strategies being most frequently used. High resilience scores were reported, particularly in faith, persistence, and optimism. Pearson's r showed a moderate positive correlation between stress and coping ($r = .420, p < .001$), a weak but significant positive relationship between coping and resilience ($r = .269, p = .004$), and a non-significant negative correlation between stress and resilience ($r = -.106, p = .260$).

Conclusion: The findings underscore the need for structured psychosocial interventions that reinforce adaptive coping and resilience, especially for young and unmarried nurses with limited experience. An evidence-based Nurse Empowerment Program is recommended to help reduce stress and strengthen psychological well-being in private hospital settings.

Keywords: Ward Nurses, Occupational Stress, Coping Strategies, Resilience, Private Hospitals, Philippines

INTRODUCTION

For several decades, nurses have been the backbone of the global healthcare delivery system, directly assisting doctors and contributing immensely to patients' well-being. As frontliners in health education, promotion, and implementation, nurses have increasingly taken on the role of global health leaders (Salinda et al., 2021). However, the nursing profession is inherently stressful due to its high-stakes responsibilities involving human life and health (Betke et al., 2021). Stress is described as a feeling of discomfort resulting from activities perceived as overly intense or frequent (Bolado et al., 2024). A global study by Gill et al. (2020) found that general ward nurses experience higher levels of pressure than their counterparts in critical care units, as workplace stressors can compromise both a healthy working environment and patient safety. This aligns with local findings emphasizing that frontline nurses, regardless of specialization, face increasing emotional demands that can affect both their personal health and professional performance (Pangilinan, 2025).



ETCOR

INTERNATIONAL
MULTIDISCIPLINARY
RESEARCH CONFERENCE

Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

In the Philippines, workplace stress continues to be a serious concern among nurses, especially in understaffed and high-demand settings. Recent studies have shown that Filipino nurses experience moderate to high levels of occupational stress, largely attributed to long shifts, inadequate staffing, and minimal access to institutional mental health resources (Labrague & De los Santos, 2020). The COVID-19 pandemic further amplified these issues, with over 58% of frontline nurses reporting emotional exhaustion and anxiety (Labrague et al., 2021). Amid these challenges, resilience has emerged as a protective factor that enables nurses to adapt positively to adversity and sustain work performance. In a recent integrative review, Delgado et al. (2017) noted that resilience helps buffer the effects of chronic stress and supports emotional regulation in high-pressure environments. Similarly, a local study by Adefuin and Elisan (2023) emphasized that Filipino nurses who demonstrate higher resilience levels are more likely to engage in constructive coping strategies and report greater psychological well-being. This is consistent with research showing that developing adaptive coping skills is essential for sustaining morale and productivity in demanding healthcare roles (Punzalan et al., 2025). These findings confirm that strengthening resilience is not only essential for individual health but also for reducing turnover and maintaining workforce stability in Philippine hospital settings.

Although numerous studies have explored resilience, stress, and coping strategies among nurses, critical gaps remain. One significant issue is the inconsistent implementation of stress management programs across hospitals (Dayrit & Jabonete, 2018). In addition, research has primarily focused on emergency and critical care nurses, under the assumption that they experience the highest stress levels (Gill et al., 2020). However, studies suggest that ward nurses also endure occupational stress due to administrative duties, high patient loads, and long working hours—factors that remain underexplored in the literature (Betke et al., 2021). Addressing such gaps requires a nuanced understanding of workplace stress dynamics that considers both institutional systems and individual coping capacities (Amihan & Sanchez, 2023).

Additionally, despite the growing body of literature on stress and coping in nursing, few studies focus specifically on private duty nurses in hospital ward settings in the Philippines. Existing research often generalizes findings across hospital types or nurse categories, leaving a gap in understanding the unique experiences of ward nurses in private institutions, especially within the province of Bulacan. Furthermore, little is known about how demographic factors—such as work experience, hospital type, and ward assignment—affect stress management and resilience.

This study intends to address these gaps by offering a contextualized perspective on stress, coping, and resilience among ward nurses in private hospitals in Bulacan. The findings aim to inform healthcare administrators and policymakers in designing support systems and interventions that enhance nurse well-being and sustainability in the profession. Beyond its academic contributions, this research provides practical benefits: it serves as a platform for nurses to share their experiences, supports the development of effective stress management and resilience-building strategies, and offers evidence-based insights for hospital managers. Furthermore, it enriches the local understanding of the professional challenges faced by general ward nurses and supports the creation of policies and programs that foster a healthier, more resilient nursing workforce.

It is anchored on Lazarus and Folkman's (1984) Transactional Model of Stress and Coping, which posits that stress arises from the interaction between an individual and their environment, mediated by the person's cognitive appraisal of the situation and available coping resources. The model outlines two key processes: primary appraisal, where an individual evaluates whether a situation is threatening or challenging, and secondary appraisal, where they assess their capacity to manage the stressor. Coping mechanisms—including task-oriented, emotion-focused, and avoidance strategies—are selected based on these appraisals. Within this framework, resilience serves as a moderating factor, influencing how stress is perceived and how effectively individuals employ coping strategies (Biggs et al., 2017). The application of this model is particularly relevant to the present study, which examines stress, coping, and resilience among ward nurses. It provides a theoretical basis for understanding how personal and contextual factors shape nurses' responses to workplace stress, thereby informing targeted and evidence-based interventions.

Objectives

The study aimed to assess the level of stress, limits, and coping mechanisms of ward nurses in selected private hospitals in Malolos and Guiguinto, Bulacan, to build resilience that serves as a basis for establishing stress management programs.

Specifically, it sought to answer the following questions:

1. What is the demographic profile of the respondents?
 - 1.1. Age
 - 1.2. Sex



ETCOR

INTERNATIONAL
MULTIDISCIPLINARY
RESEARCH CONFERENCE

Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

- 1.3. Marital Status
- 1.4. Years of experience as ward nurse
- 1.5. Average number of patients handled per shift
- 1.6. Hospital Affiliation
- 1.7. Training in Stress Management
2. What are the levels of stress and perceived limits among ward nurses?
3. What coping mechanisms do ward nurses practice in managing stress?
4. What is the level of resilience among ward nurses?
5. Is there a significant relationship between stress levels, perceived limits, and resilience among ward nurses?

Hypothesis

H₀₁: There is no significant relationship between perceived stress levels and coping mechanisms among ward nurses in selected private hospitals in Bulacan.

H₀₂: There is no significant relationship between perceived stress levels and resilience among ward nurses in selected private hospitals in Bulacan.

H₀₃: There is no significant relationship between coping mechanisms and resilience among ward nurses in selected private hospitals in Bulacan.

METHODS

Research Design

The study employed a descriptive-correlational research design to assess stress levels, perceived limits, coping mechanisms, and resilience among ward nurses. Correlational design is a non-experimental approach used to examine the relationships between two or more variables within a single group, without manipulating any of them. It allowed the researchers to investigate whether variables were associated—positively or negatively—by analyzing the strength and direction of their relationships. However, it must be emphasized that correlation does not imply causation, even if the relationship appears strong. Many variables relevant to nursing, such as attitudes, behaviors, and responses to stress, cannot be experimentally manipulated, making correlational research both appropriate and ethical in this context (Devi et al., 2022; Pangilinan, 2025).

Population and Sampling

The study employed purposive sampling to deliberately select participants who possessed specific characteristics relevant to the research objectives. According to Sugiyono (2012), purposive sampling is a technique in which participants are chosen based on predefined criteria and specific considerations. It is appropriate when the target population has particular attributes, and individuals who do not meet these criteria are excluded from the sample. In this study, the selected participants—ward nurses from private hospitals in Malolos and Guiguinto, Bulacan—were expected to have direct experience with workplace stressors, coping mechanisms, and resilience in the healthcare setting. This sampling strategy ensured that only those who met these essential characteristics were included, thereby enhancing the validity and contextual relevance of the findings (Punzalan et al., 2025). It was particularly suitable for a descriptive-correlational design, as it aligned the sample selection closely with the study's focus.

By establishing clear inclusion parameters, such as professional role and clinical experience, the study ensured that participants had adequate exposure to stress-inducing work environments and the coping demands of ward nursing. This focus on nurses from private hospitals, combined with a minimum experience requirement, strengthened the precision and applicability of the results while limiting potential confounding variables.

A total of one hundred fourteen (114) registered nurses, each with at least six months of ward experience, were included in the study. This sample size met the minimum threshold for generating meaningful variability in correlational analysis and was determined based on practical constraints such as time, resource availability, and institutional access.

Instruments

The researchers utilized a structured, four-part questionnaire to gather data on the variables of interest: demographic profile, perceived stress levels, coping mechanisms, and resilience. The instruments used were either adopted from established scales or adapted for contextual suitability, and all underwent expert validation prior to full deployment.



ETCOR

INTERNATIONAL
MULTIDISCIPLINARY
RESEARCH CONFERENCE

Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

The first section gathered demographic and occupational information relevant to the study. This included age, sex, civil status, years of experience as a ward nurse, average number of patients handled per shift, hospital affiliation, and prior training related to stress management. These variables were used to contextualize the findings and identify possible associations with stress, coping, and resilience.

The second section measured perceived stress using the Perceived Stress Scale (PSS-10) developed by Cohen et al. (1983). This 10-item instrument is designed to assess the degree to which individuals find their lives unpredictable, uncontrollable, and overloaded. Participants rated items such as "How often have you been upset because something that happened unexpectedly?" on a 5-point Likert scale, ranging from 0 (never) to 4 (very often). Total scores ranged from 0 to 40, with higher scores indicating greater perceived stress. The PSS-10 is widely validated across diverse populations and demonstrates good internal consistency, typically with Cronbach's alpha coefficients between 0.74 and 0.91.

The third section assessed coping strategies using a modified version of the Coping Inventory for Stressful Situations (CISS) by Endler and Parker (1990). The version used in the study included 21 items, evenly distributed across the three primary coping dimensions: task-oriented coping, emotion-oriented coping, and avoidance-oriented coping. Each item was rated on a 5-point scale from 1 (not at all) to 5 (very much), with sample statements such as "Focus on the problem and see how I can solve it" (task-oriented) and "Feel anxious and unable to concentrate" (emotion-oriented). Subscale scores were computed to determine dominant coping styles. The adapted CISS version was pre-tested and validated for local use.

The fourth section measured psychological resilience using the Connor-Davidson Resilience Scale (CD-RISC-25). This scale consists of 25 statements reflecting characteristics of resilient individuals, such as adaptability, control, and persistence. Respondents rated each item on a 5-point scale from 0 (not true at all) to 4 (true nearly all the time), with total scores ranging from 0 to 100. Higher scores indicated greater resilience. Sample items included "I am able to adapt to change" and "I can deal with whatever comes." The CD-RISC-25 has consistently shown high internal reliability ($\alpha = .89$) and construct validity across occupational and clinical populations.

All instruments were either adopted directly or adapted slightly for clarity and contextual relevance to the Filipino nursing population. Expert validation was conducted by three professionals in nursing education and psychology (Carvajal et al., 2025). A pilot test was also carried out with a small sample of ward nurses (excluded from the main study) to confirm the clarity and reliability of the items. Cronbach's alpha values from the pilot indicated acceptable to strong reliability across all sections.

Data Collection

Data collection was conducted in a systematic and ethical manner to ensure participant confidentiality and data integrity. Prior to implementation, the researchers secured administrative approval from the management of selected private hospitals in Malolos and Guiguinto, Bulacan through a formal request letter. Ethical clearance was also obtained from the Research Ethics Committee of La Consolacion University Philippines and the respective hospital review boards to ensure compliance with established ethical protocols.

Informed consent was secured from all participating ward nurses after explaining the study's purpose, procedures, risks, benefits, and their right to voluntary participation. The respondents were informed that they could withdraw at any time without penalty. Those who opted out were replaced with individuals possessing similar characteristics and who met the inclusion criteria, to maintain the representativeness and methodological consistency of the sample.

Data collection was carried out at a time convenient to the respondents, minimizing disruptions to their work schedules. The researchers emphasized autonomy, fairness, and respect throughout the process. Confidentiality was strictly maintained. Survey responses were stored securely in a password-protected Google Drive accessible only to the research team. In accordance with Republic Act No. 10173, or the Data Privacy Act of 2012, principles of transparency, proportionality, and legitimate purpose were applied in the handling of personal information. After the completion of the study, all collected data were disposed of in accordance with institutional guidelines provided by the Research Ethics Board, ensuring secure and ethical data destruction.

Data Analysis

The study utilized quantitative methods, employing a structured questionnaire survey to collect data from the respondents in order to address the research questions. All gathered data underwent careful tabulation and cross-verification to ensure completeness and accuracy. The responses were then manually encoded and processed using Microsoft Excel for initial organization and SPSS Statistics Version 20 for statistical analysis. Descriptive statistics—

410



ETCOR Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

including frequencies, percentages, means, and standard deviations—were applied to summarize the respondents' demographic profiles. To examine the relationships among stress levels, perceived limits, coping mechanisms, and resilience, Pearson's correlation coefficient (r) was employed. This inferential test was selected to determine the strength and direction of linear associations between variables (Amihan & Sanchez, 2023).

While the Shapiro-Wilk test showed a slight deviation from normality in the coping mechanism variable ($p = .036$), histograms for all variables approximated normal distributions. Given the robustness of Pearson's r to minor normality violations in large samples ($N = 114$) and acceptable kurtosis values, parametric analysis was deemed appropriate. This approach aligns with Field's (2013) guidance that Pearson's r is generally robust against mild deviations from normality, especially in samples exceeding 100 participants.

Ethical Considerations

The study received ethical approval from the Research Ethics Committee of La Consolacion University Philippines and administrative clearance from participating private hospitals. Data collection began only after securing all necessary authorizations. Informed consent was obtained from all participants, who were fully informed of the study's purpose, procedures, risks, benefits, and their right to withdraw at any time. Participation was voluntary, and all respondents were treated equitably. Only those meeting the inclusion criteria were included. No financial incentives were provided, though participants received health-related materials as a token of appreciation. The study posed minimal risk but offered potential institutional benefits by informing stress management and resilience-building programs. Data handling complied with the Data Privacy Act of 2012 (RA 10173). All information was anonymized, stored securely, and accessed only by the research team. Data will be retained for up to five years, then permanently deleted or destroyed in accordance with REC guidelines.

The researchers declared no conflicts of interest.

RESULTS and DISCUSSION

This section presents the findings of the study based on the data gathered from 114 ward nurses in selected private hospitals in Malolos and Guiguinto, Bulacan. The demographic characteristics of the respondents are first described to contextualize the analysis of stress levels, coping mechanisms, and resilience.

Demographic Profile of Respondents

Table 1

Frequencies and Percentages of Respondents According to Age, Sex, Marital Status, and Length of Service ($N = 114$)

Demographic Variable	Category	Frequency	Percentage (%)
Age Group (years)	22–29	71	62.30
	30–37	23	20.20
	38–45	12	10.50
	46–53	5	4.40
	54–61	3	2.60
	Total	114	100.00
Sex	Male	30	26.30
	Female	84	73.70
	Total	114	100.00
Marital Status	Single	76	66.70
	Married	36	31.60
	Separated	1	0.90
	Widowed	1	0.90
	Total	114	100.00
Length of Service	6 months to 1 year	26	22.81
	1–5 years	53	46.49
	6–10 years	25	21.93
	11–15 years	7	6.14
	More than 15 years	3	2.63
	Total	114	100.00



Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

Table 1 presents the demographic characteristics of the 114 ward nurses in selected private hospitals in Malolos and Guiguinto, Bulacan. The majority of respondents (62.30%) belonged to the 22–29 age group, indicating a predominantly young nursing workforce. This was followed by those aged 30–37 (20.20%) and 38–45 (10.50%), while less than 10% were aged 46 and above. In terms of sex, the respondents were largely female (73.70%), consistent with the global trend of a female-dominated nursing profession. Male nurses comprised 26.30% of the sample. The marital status distribution showed that two-thirds (66.70%) of the nurses were single, while about one-third (31.60%) were married. Only a small fraction were separated (0.90%) or widowed (0.90%). This profile further supports the conclusion that the sample was predominantly young and early in their personal and professional lives—an important context when examining stress and resilience.

Regarding professional experience, nearly half (46.49%) had been in service for 1 to 5 years, and 22.81% had less than one year of experience. About 21.93% had worked for 6 to 10 years, while a minimal proportion had been in the field for over a decade. These findings suggest a relatively inexperienced workforce, both personally and professionally, which may influence their stress responses, resilience levels, and preferred coping strategies. The youth and transitional life stages of many respondents underscore the need for strong institutional and psychosocial support systems to mitigate potential vulnerabilities in high-stress healthcare environments.

Table 2

Frequencies and Percentages of Respondents According to Patient Load, Hospital Affiliation, and Training in Stress Management (N = 114)

Demographic Variable	Category	Frequency	Percentage (%)
Patients per Shift	Less than 5	10	8.80
	5–10	81	71.10
	11–15	14	12.30
	More than 15	9	7.90
	Total	114	100.00
Hospital Affiliation	Hospital 1	15	13.20
	Hospital 2	20	17.50
	Hospital 3	10	8.80
	Hospital 4	10	8.80
	Hospital 5	19	16.70
	Hospital 6	10	8.80
	Hospital 7	10	8.80
	Hospital 8	10	8.80
	Hospital 9	10	8.80
	Total	114	100.00
Stress Management Training	Yes	3	2.60
	No	111	97.40
	Total	114	100.00

Table 2 presents the respondents' average patient load per shift, their hospital affiliation, and exposure to formal stress management training. These organizational and experiential variables are critical to understanding the work environment and available psychosocial support systems that may affect stress levels and coping capacities.

A majority of the respondents (71.10%) reported handling 5 to 10 patients per shift, reflecting a moderately high nurse-to-patient ratio that is common in Philippine private hospitals. Meanwhile, 20.20% reported caring for more than 10 patients per shift, indicating that a significant portion of the workforce operates under demanding caseloads.

In terms of institutional distribution, the participants were fairly spread across nine hospitals, with Hospital 2 (17.50%) and Hospital 5 (16.70%) having the highest representation. Although the specific institutions were anonymized for confidentiality, the balanced distribution minimizes institutional bias and supports generalizability across private hospital settings in Malolos and Guiguinto, Bulacan. A particularly concerning finding is that 97.40% of nurses reported having no prior stress management training, highlighting a critical gap in institutional support.



ETCOR Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

Perceived Stress and Limits

Table 3

Perceived Stress and Limits

Perceived Stress and Limits	Mean	SD	Verbal Interpretation
1. In the last month, how often have you been upset because of something that happened unexpectedly?	2.42	0.851	Fairly Often
2. In the last month, how often have you felt that you were unable to control the important things in your life?	2.25	0.937	Sometimes
3. In the last month, how often have you felt nervous and stressed?	2.67	0.947	Fairly Often
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	2.77	0.776	Fairly Often
5. In the last month, how often have you felt that things were going your way?	2.67	0.993	Fairly Often
6. In the last month, how often have you found that you could not cope with all the things that you had to do?	2.13	0.973	Sometimes
7. In the last month, how often have you been able to control irritations in your life?	2.56	0.912	Fairly Often
8. In the last month, how often have you felt that you were on top of things?	2.4	0.909	Sometimes
9. In the last month, how often have you been angered because of things that happened that were outside of your control?	2.24	0.944	Sometimes
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	2.23	1.089	Sometimes
Grand Mean	2.43	0.454	Fairly Often

Table 3 presents the perceived stress and limits experienced by ward nurses in selected private hospitals in Malolos and Guiguinto, Bulacan. The highest mean score was recorded on the item, "In the last month, how often have you felt confident about your ability to handle your personal problems?" ($M = 2.77$, $SD = 0.776$), interpreted as "Fairly Often." This suggests that many nurses retained a sense of self-efficacy in managing personal issues, despite workplace stressors—an encouraging indicator of psychological resilience. Conversely, the lowest mean score was found on the item, "In the last month, how often have you found that you could not cope with all the things that you had to do?" ($M = 2.13$, $SD = 0.973$), with a "Sometimes" interpretation. This implies that while moments of overwhelm were present, they were not frequent or dominant in the nurses' daily experiences. The grand mean across all 10 items was 2.43 ($SD = 0.454$), corresponding to "Fairly Often." This reflects a moderate level of perceived stress among the respondents—indicating that stress is a consistent, though not debilitating, part of their work life. Such findings underscore the routine emotional and cognitive demands faced by nurses in general ward settings.

Coping Mechanisms of Ward Nurses

Table 4. *Coping Mechanism Practices among Ward Nurses*

Task-Oriented Coping	Mean	SD	Verbal Interpretation
1. Focus on the problem and see how I can solve it.	3.48	1.015	Somewhat
2. Think about how I solved similar problems.	3.61	1.101	Somewhat
3. Determine a course of action and follow it.	3.41	1.071	Somewhat
4. Work to understand the situation.	3.61	0.964	Somewhat
5. Take corrective action immediately.	3.47	0.997	Somewhat
6. Think about the event and learn from my mistakes	4.01	0.907	Somewhat
Grand Mean	3.61	0.602	Somewhat
Emotion-Oriented Coping	Mean	SD	Verbal Interpretation
1. Blame myself for having gotten into this situation.	2.71	1.173	Neutral
2. Feel anxious about not being able to cope.	3.04	1.222	Neutral
3. Blame myself for being too emotional about the situation.	2.67	1.239	Neutral
4. Become very upset.	2.75	1.218	Neutral



ETCOR Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

5. Blame myself for not knowing what to do.	2.75	1.187	Neutral
6. Wish that I could change what had happened or how I felt.	3.3	1.064	Neutral
7. Focus on my general inadequacy	3.48	1.041	Somewhat
Grand Mean	2.96	0.782	Neutral
Avoidance Coping	Mean	SD	Verbal Interpretation
1. Take some time off and get away from the situation.	3.44	1.039	Somewhat
2. Treat myself to a favorite food or snack.	3.74	1.04	Somewhat
3. Visit a friend.	3.17	1.204	Neutral
4. Buy myself something.	3.5	1.135	Somewhat
5. I spend time with a special person.	3.91	0.946	Somewhat
6. Go out for a snack or meal.	3.68	1.05	Somewhat
7. Phone a friend.	2.94	1.083	Neutral
Grand Mean	3.48	0.611	Somewhat
Overall Grand Mean	3.35	0.457	Neutral

Table 4 presents the coping strategies employed by ward nurses, categorized into task-oriented, emotion-oriented, and avoidance coping. The findings indicate that respondents utilized a range of mechanisms in managing workplace stress, with a moderate preference for task- and avoidance-oriented strategies. In the task-oriented domain, the highest-rated strategy was *"thinking about the event and learning from mistakes"* ($M = 4.01$, $SD = 0.907$), suggesting that nurses often engage in reflective problem-solving. The lowest score was for *"determining a course of action and following it"* ($M = 3.41$), which may reflect occasional indecision or lack of control in high-pressure scenarios. The grand mean of 3.61 indicates that nurses generally employ active and analytical strategies to manage stress.

In contrast, emotion-oriented coping yielded a lower grand mean of 2.96, interpreted as "Neutral." The most frequently endorsed item was *"focusing on general inadequacy"* ($M = 3.48$), reflecting internalized stress responses such as self-doubt. Other items related to blame and anxiety received lower scores (e.g., *"blaming oneself for being too emotional,"* $M = 2.67$), indicating that while emotion-focused strategies were present, they were not dominant.

In the avoidance domain, the grand mean was 3.48, indicating moderate engagement with activities like *"spending time with a special person"* ($M = 3.91$) and *"treating oneself"* ($M = 3.74$). These responses suggest that nurses turn to social and behavioral distractions as a form of relief. The overall grand mean of 3.35, interpreted as "Neutral," suggests that nurses use a balanced mix of coping strategies, with no overreliance on any single approach.

Resilience Among Ward Nurses

Table 5. Level of Resilience Among Ward Nurses

Level of Resilience	Mean	SD	Verbal Interpretation
1. I am able to adapt when changes occur.	3.85	0.707	Agree
2. I have one close and secure relationship.	3.88	0.884	Agree
3. Sometimes fate or God helps me.	4.11	0.958	Agree
4. I can deal with whatever comes my way.	3.94	0.915	Agree
5. Past successes give me confidence.	3.92	0.97	Agree
6. I try to see the humorous side of things when I am faced with problems.	3.82	0.875	Agree
7. Having to cope with stress can make me stronger.	3.9	0.968	Agree
8. I tend to bounce back after illness, injury or other hardships.	3.77	0.842	Agree
9. I believe most things happen for a reason.	4.08	0.811	Agree
10. I make my best effort, no matter what.	4.04	0.856	Agree
11. I believe I can achieve my goals, even if there are obstacles.	4.02	0.852	Agree
12. Even when hopeless, I do not give up.	3.97	0.926	Agree
13. In times of stress, I know where to find help.	3.68	0.896	Agree
14. Under pressure, I stay focused and think clearly.	3.66	0.948	Agree
15. I prefer to take the lead in problem-solving.	3.69	0.863	Agree
16. I am not easily discouraged by failure.	3.55	0.799	Agree



ETCOR Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

17. I think of myself as a strong person when dealing with life's challenges and difficulties.	3.91	0.868	Agree
18. I make unpopular or difficult decisions.	3.16	0.955	Neutral
19. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	3.67	0.749	Agree
20. I have to act on a hunch.	3.4	0.993	Neutral
21. I have a strong sense of purpose in life.	3.78	0.975	Agree
22. I feel like I am in control.	3.46	0.933	Agree
23. I like challenges.	3.32	1.092	Neutral
24. I work to attain goals.	3.96	0.977	Agree
25. I take pride in my achievements.	3.96	1.042	Agree
Grand Mean	3.78	0.46	Agree

Table 5 presents the level of resilience among ward nurses working in selected private hospitals in Malolos and Guiguinto, Bulacan. The results reveal that respondents generally exhibit a high degree of psychological resilience when managing the demands of their professional roles.

The highest-rated item was *"Sometimes fate or God helps me"* ($M = 4.11$, $SD = 0.958$), verbally interpreted as "Agree." This underscores the significant role of faith and spirituality as a resilience anchor among Filipino nurses. Cultural and religious values often serve as internal resources for strength, especially during times of uncertainty or emotional burden. On the other hand, the lowest mean was recorded for the item *"I make unpopular or difficult decisions"* ($M = 3.16$, $SD = 0.955$), interpreted as "Neutral." This may suggest hesitancy in asserting independent judgment in high-stakes or conflict-prone situations—possibly due to hierarchical workplace dynamics, perceived repercussions, or limited autonomy. It reflects an area where nurses may benefit from enhanced assertiveness and leadership training, particularly in decision-making under pressure.

The grand mean of 3.78 ($SD = 0.46$), interpreted as "Agree," reflects a generally high level of resilience across the sample. Nurses demonstrated confidence in adapting to change, seeking support when needed, maintaining purpose, and recovering from adversity. These results highlight the presence of both internal assets (e.g., self-efficacy, optimism, goal orientation) and external buffers (e.g., supportive relationships and belief systems) that contribute to sustained psychological functioning in the face of stress.

Relationships Among Stress, Coping Mechanisms, and Resilience

Table 6. Pearson Correlation

Variables	Pearson's r	Correlation	p-value	Decision	Interpretation
Stress and Perceived Limits * Coping Mechanism	0.420***	Positive Moderate Relationship	<.001	Reject H0	Significant
Stress and Perceived Limits * Resilience	-0.106	Negative Very Weak Relationship	0.26	Fail to Reject H0	Not Significant
Coping Mechanism * Resilience	0.269**	Positive Weak Relationship	0.004	Reject H0	Significant

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Negative values indicate an inverse relationship.

Table 6 presents the Pearson correlation coefficients examining the relationships among stress and perceived limits, coping mechanisms, and resilience among ward nurses in selected private hospitals in Malolos and Guiguinto, Bulacan. A moderate positive correlation was found between stress and perceived limits and coping mechanisms ($r = .420$, $p < .001$). This relationship is statistically significant and suggests that nurses experiencing higher levels of stress are more likely to engage in coping strategies. The finding confirms Hypothesis 1, which posited that stress and coping are positively associated. It indicates that coping mechanisms, particularly task-oriented and avoidance strategies as seen in prior tables, are likely mobilized when stress is present in the work environment.

Conversely, the correlation between stress and resilience was very weak and negative ($r = -.106$, $p = .260$), and not statistically significant. As such, Hypothesis 2 is not supported, and the null hypothesis is retained. This finding implies that resilience, as a psychological trait or capacity, may not be directly influenced by current levels of stress, at least not in a linear manner.

Lastly, a positive weak but statistically significant correlation was observed between coping mechanisms and resilience ($r = .269$, $p = .004$). This supports Hypothesis 3 and indicates that nurses who utilize a broader or more

415



ETCOR

INTERNATIONAL
MULTIDISCIPLINARY
RESEARCH CONFERENCE

Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

effective range of coping strategies tend to exhibit higher resilience. While the relationship is weak, it is meaningful in the context of psychological adaptation, suggesting that coping behaviors may serve as building blocks or reinforcers of long-term resilience.

This study assessed the stress levels, coping behaviors, and resilience of ward nurses in selected private hospitals in Malolos and Guiguinto, Bulacan. The findings confirm that while most ward nurses are relatively young and early in their professional careers, they experience moderate levels of stress, engage in a variety of coping strategies, and exhibit high overall resilience.

Workload emerged as a key stressor, with the majority of nurses managing between 5 and 10 patients per shift. Heavy caseloads in understaffed hospitals are well-documented stress inducers, reducing job satisfaction and increasing burnout risk (Labrague et al., 2017). Despite this, nearly all respondents (97.4%) reported no prior training in stress management—highlighting a glaring gap in institutional support systems. As Delgado et al. (2017) emphasized, structured resilience-building programs are essential for nurses to effectively manage stress and sustain work performance. Similarly, Adefuin and Elisan (2023) observed that nurses with formal coping training reported lower emotional strain and greater psychological well-being. These contextual findings point to a moderately burdened workforce that is underserved in terms of psychosocial support, which must be considered when interpreting patterns of stress, coping, and resilience.

Perceived stress scores reflected a moderate level of stress among ward nurses, particularly involving feelings of nervousness, unpredictability, and pressure. However, confidence in managing personal problems remained high—indicating a protective sense of self-efficacy. These results echo those of Dantis et al. (2024), who found that Filipino nurses encounter persistent stressors from both personal and institutional domains. Global studies further confirm that while nurses are routinely exposed to emotional labor, they often maintain functionality through self-regulation and organizational support (WHO, 2014; Zhu & Chen, 2019). These findings signal the need for institutional responses such as psychological debriefings, improved workload protocols, and accessible stress training.

Nurses in the study predominantly relied on task-oriented and avoidance coping strategies. Task-focused behaviors—like analyzing problems and learning from past mistakes—were the most common, while emotion-focused responses, including self-blame and anxiety, were less frequent. This aligns with Canlas (2021) and Endler and Parker (1990), who noted the advantages of task-oriented coping in complex environments like hospitals. While avoidance coping is sometimes seen as maladaptive, moderate use can provide short-term emotional relief, especially in high-pressure settings (Zaman et al., 2020). The overall “neutral” interpretation of coping scores suggests psychological flexibility, yet also highlights the need for reinforcement of consistently effective coping strategies through training.

Resilience among ward nurses was rated high, with the strongest responses linked to beliefs in divine support and personal perseverance. These reflect the enduring role of faith as a cultural coping resource in the Philippines (Abaan et al., 2023). Respondents also demonstrated confidence, optimism, and purpose—key traits in resilience literature. As Dimal et al. (2025) noted in their study of island-based nurses, despite the inadequacy, [nurses] showed their resiliency through strategies, collaboration, and reinforcement of positive change, echoing the adaptive strengths demonstrated by the participants in this study. However, items related to assertiveness and decision-making scored lower, which may indicate discomfort with autonomy or limited decision-making opportunities in hierarchical institutions. Delgado et al. (2017) emphasized the importance of empowering nurses to act independently and handle adversity assertively. This implies a need for structured leadership and communication training to enhance proactive coping in difficult situations.

Correlation analysis yielded three key findings. First, stress and coping mechanisms showed a significant moderate positive correlation ($r = .420$), supporting Lazarus and Folkman's (1984) theory that stress activates adaptive coping behaviors. Second, there was no significant relationship between stress and resilience ($r = -.106$), suggesting that resilience may be a stable trait rather than a reactive state (Delgado et al., 2017). Lastly, the positive association between coping and resilience ($r = .269$) supports prior evidence that effective coping strategies contribute to building long-term psychological strength (Labrague, 2021). These relationships affirm the importance of investing in adaptive coping skills to improve nurses' well-being and buffer them from the cumulative toll of workplace stressors.

In summary, this study presents a clear profile of ward nurses in selected private hospitals: young, moderately stressed, moderately equipped with coping tools, and generally resilient—yet lacking formal institutional support. The integration of structured, culturally sensitive mental health and resilience-building programs is imperative to protect and empower this essential healthcare workforce.



ETCOR Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

Conclusions

The nursing workforce in the selected private hospitals is primarily composed of young professionals in the early stages of their careers. While this demographic demonstrates adaptability, their limited clinical experience may heighten their vulnerability to workplace stress. Most nurses reported managing 5 to 10 patients per shift, with a substantial proportion handling more than 10—suggesting a workload that could contribute to stress if not managed properly. Furthermore, the vast majority lacked formal stress management training, indicating that many rely on self-developed coping strategies and informal peer support. This highlights a critical gap in institutional provisions for psychological well-being.

The study revealed a statistically significant, moderate positive relationship between stress and coping mechanisms, suggesting that increased stress triggers greater reliance on coping strategies. However, no significant relationship was found between stress and resilience, indicating that resilience may be influenced more by enduring traits or environmental supports than by momentary stress levels. A weak but significant positive correlation between coping mechanisms and resilience suggests that effective coping contributes to nurses' capacity to recover from stress. These findings point to a direct opportunity for institutional interventions that build structured coping resources to promote resilience and support mental health among ward nurses.

Recommendations

In light of the study's findings, it is recommended that healthcare institutions implement structured support systems to address nurse stress and promote resilience. Regular team debriefings and peer support programs—especially for new and younger nurses—can foster emotional well-being and collaboration. A fair rotation system for high-stress units and designated rest areas can help reduce fatigue and improve job satisfaction. Stress management discussions should also be integrated into staff orientations and routine meetings to normalize mental health awareness.

Nursing educators are encouraged to include brief modules on coping and resilience in continuing professional development (CPD) activities. Case-based learning on stressful clinical scenarios should be used to enhance reflective and emotional regulation skills. Hospital administrators should gather anonymous feedback and conduct regular stress assessments to inform staffing and wellness policies. Recognition programs that reward positive coping and teamwork may further boost morale.

Lastly, future research should explore the use of digital coping tools—such as mobile apps or group chats—and evaluate the effectiveness of low-cost interventions like peer mentoring and recharge spaces in improving stress management and resilience among nurses. These practical, cost-efficient strategies may significantly enhance nurse well-being in private hospital settings.

REFERENCES

- Abaan, R. A., Montayre, J., Galvez, K. A., & Barroga, E. F. (2023). Faith as a source of strength: Spirituality and resilience among Filipino nurses. *Philippine Journal of Nursing*, 93(1), 55–62.
- Adefuin, J. A., & Elisan, R. I. (2023). Coping mechanism of nurses in life and death situations of patients in Dr. Jose Rizal Memorial District Hospital in Brgy. Bucal, Calamba City, Laguna. *Philippine E-Journals*. <https://ejournals.ph/article.php?id=19633>
- Amihan, S. R., & Sanchez, R. D. (2023). Connecting Workplace Literacy Gaps through Innovative Academe-Industry Collaboration. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 2(2), 515-528.
- Betke, K., Basińska, M. A., & Andruszkiewicz, A. (2021). Sense of coherence and strategies for coping with stress among nurses. *BMC Nursing*, 20(1), Article 107. <https://doi.org/10.1186/s12912-021-00631-1>
- Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's psychological stress and coping theory. In C. L. Cooper & J. C. Quick (Eds.), *The handbook of stress and health: A guide to research and practice* (pp. 351–364). Wiley Blackwell. <https://doi.org/10.1002/9781118993811.ch21>
- Bolado, G. N., Ataro, B. A., Gadabo, C. K., Ayana, S., Kebamo, T. E., & Minuta, W. M. (2024). Stress level and associated factors among nurses working in the critical care unit and emergency rooms at comprehensive specialized hospitals in southern Ethiopia, 2023: Explanatory sequential mixed-method study. *BMC Nursing*, 23, Article 341. <https://doi.org/10.1186/s12912-024-02004-w>
- Canlas, L. L. (2021). Stress and coping mechanisms of Filipino nurses in public and private hospitals. *Journal of Advanced Nursing Studies*, 8(1), 35–42.



ETCOR
INTERNATIONAL
MULTIDISCIPLINARY
RESEARCH CONFERENCE

Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

- Carvajal, A. L. P., Fernandez, T. M., Pangilinan, A. M., Obod, M. M., Amihan, S. R., Sanchez, R. D., Sanchez, A. M. P., Sanchez, J. J. D. (2025). Future-Proofing Teachers in Reframing Teacher Education Curriculum in the Philippines: Basis for Policy Recommendations. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 4(2), 235-252. <https://doi.org/10.63498/nxz2st271>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396. <https://doi.org/10.2307/2136404>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76-82. <https://doi.org/10.1002/da.10113>
- Dantis, M. L., Arellano, M. V., & Cruz, P. M. (2024). Perceived stress and its sources among Filipino nurses in tertiary hospitals. *Philippine Journal of Health Research*, 11(1), 22-30.
- Dayrit, M. M., & Jabonete, J. M. (2018). *The Philippines health system review* (Health Systems in Transition, Vol. 8 No. 2). World Health Organization, Regional Office for the Western Pacific. <https://apps.who.int/iris/handle/10665/274579>
- Delgado, C., Upton, D., Ranse, K., Furness, T., & Foster, K. (2017). Nurses' resilience and the emotional labour of nursing work: An integrative review. *International Journal of Nursing Studies*, 70, 71-88. <https://doi.org/10.1016/j.ijnurstu.2017.02.008>
- Devi, S., Sharma, R., & Walia, I. (2022). Assessment of perceived stress and coping strategies among nurses during COVID-19 pandemic in India. *Journal of Family Medicine and Primary Care*, 11(1), 150-156.
- Dimal, P. V. E., Dela Cruz, J. L. D. C., Vista, A. P., Adriano, J. B. S. C., Bautista, A. M., De Silva, R. B. C., Dela Cruz, A., Delfin, A. L. T., Hilario, M. D. L., Pangan, L. M. C., Roque, E. R. S., Sotto, M. J. L., Manaloto, A. M., & Cuevas, J. E. T. (2025). Isla is life: The enduring healthcare of an isolated island from the lens of the local nurses. *Globus: An International Journal of Medical Science, Engineering and Technology*, 14(1), 22-27.
- Endler, N. S., & Parker, J. D. A. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, 58(5), 844-854. <https://doi.org/10.1037/0022-3514.58.5.844>
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). SAGE Publications.
- Gill, F. J., Leslie, G. D., Grech, C., & Latour, J. M. (2020). A review of critical care nursing staffing, education and practice standards. *Australian Critical Care*, 33(6), 540-551.
- Labrague, L. J. (2021). Psychological resilience, coping behaviours and social support among health care workers during the COVID-19 pandemic: A systematic review of quantitative studies. *Journal of Nursing Management*, 29(7), 1893-1905. <https://doi.org/10.1111/jonm.13336>
- Labrague, L. J., & De los Santos, J. A. A. (2020). COVID-19 anxiety among frontline nurses: Predictive role of organisational support, personal resilience and social support. *Journal of Nursing Management*, 28(7), 1653-1661. <https://doi.org/10.1111/jonm.13121>
- Labrague, L. J., De los Santos, J., & Fronda, D. C. (2021). Perceived COVID-19-associated discrimination, mental health and professional-turnover intention among frontline clinical nurses: The mediating role of resilience. *International Journal of Mental Health Nursing*, 30(2), 634-643. <https://doi.org/10.1111/inm.12920>
- Labrague, L. J., McEnroe-Petitte, D. M., Gloe, D., Tsaras, K., Artech, D. L., & Maldia, F. (2017). Organizational politics, nurses' stress, burnout levels, turnover intention and job satisfaction. *International Nursing Review*, 64(1), 109-116. <https://doi.org/10.1111/inr.12347>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Pangilinan, A. M. (2025). Challenges and Commitment to Teaching: A Quantitative Descriptive-Correlational Study of Filipino Teachers in Select Coastal Villages. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 4(2), 1684-1692. <https://doi.org/10.63498/etcor397>
- Punzalan, F. R. A., Bontuyan, J. O., Sanchez, R. D., Pangilinan, A. M., & Sanchez, A. M. P. (2025). Teaching Learners with Special Educational Needs: A Descriptive-Correlational Study of Teachers' Challenges, Coping Strategies, and Support Needs. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 4(3), 314-325. <https://doi.org/10.63498/etcor428>
- Salinda, K., Reyes, M. A., & Gutierrez, C. (2021). Exploring the lived experiences of Filipino nurses during the COVID-19 pandemic: A phenomenological study. *Philippine Journal of Nursing*, 91(1), 26-33.
- Smith, G. D., Ng, F., & Ho Cheung Li, W. (2021). COVID-19: Emerging compassion, courage and resilience in the face of misinformation and adversity. *Journal of Clinical Nursing*, 30(7-8), e1-e3. <https://doi.org/10.1111/jocn.15231>



ETCOR

INTERNATIONAL
MULTIDISCIPLINARY
RESEARCH CONFERENCE

Educational Research Center Inc.
SEC Reg. No. 2024020137294-00

Sta. Ana, Pampanga, Philippines



Website: <https://etcor.org>



iJOINED ETCOR
P - ISSN 2984-7567
E - ISSN 2945-3577



The Exigency
P - ISSN 2984-7842
E - ISSN 1908-3181

- World Health Organization. (2014). *Mental health: Strengthening our response*. <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
- Zaman, S., Sheikh, S., & Waqas, A. (2020). Coping strategies and their relationship with stress, anxiety and depression among medical students in Pakistan. *BMC Psychiatry*, 20, 456.
- Zhu, W., & Chen, Y. (2019). Stress and coping among Chinese hospital nurses: A literature review. *Journal of Nursing Management*, 27(5), 1140–1158. <https://doi.org/10.1111/jonm.12761>