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Rev. Fr Mars P. Tan, SJ

Abstract

This study investigates how sedimentation dynamics within the ridge-river-reef continuum of the Cagayan de Oro River catchment influence erosion and affect marine coastal ecosystems, and what integrated management strategies can mitigate these impacts to promote ecosystem resilience. Rainfall patterns in the region exhibit a moderate shift, punctuated by extreme rainfall events that can lead to significant sedimentation and flooding, particularly in vulnerable sub-catchments. Utilizing the Soil and Water Assessment Tool (SWAT) modeling approach, the research identifies specific challenges associated with erosion and sedimentation, emphasizing the impact of land cover and anthropogenic activities on erosion rates.

Using the Delft3D modelling, The assessment of sediment concentrations revealed that the highest levels occur at the river mouth, with sediment dispersal predominantly directed east and southeast, aligning with coastal current patterns. While high sedimentation poses a threat to coral and seagrass communities, mangroves appear resilient.

The distribution of mangroves, corals, and seagrasses correlates with sediment dynamics, underscoring the need for targeted management interventions. The study proposes four key management principles—integration, sustainability, precautionary, and adaptive—designed to comprehensively address sedimentation issues throughout the continuum.

Overall, the findings highlight the critical need for effective management strategies that focus on land cover stabilization and river rehabilitation to mitigate the adverse effects of sediment deposition, thereby ensuring the health of the ridge-river-reef ecosystem.

Keywords: Ridge-River-Reef Continuum, Sedimentation Dynamics, Erosion Management, SWAT Modeling, Delft3D Modelling, Marine Coastal Habitat Resilience

Introduction

This study highlights the major findings from the previous three chapters of the Sedimentation Dynamics of the Cagayan de Oro River Catchment and the Implications for Its Coastal Marine Environments regarding the effects of erosion and sedimentation dynamics on both the catchment area and its coastal marine environments, as well as key principles for managing the ridge-river-reef continuum.

The interplay between terrestrial and marine ecosystems along the Cagayan de Oro River presents a critical area for study and management. Understanding the dynamics of the ridge-river-reef continuum is essential for preserving biodiversity and ensuring the sustainability of both freshwater and marine environments. The Cagayan de Oro River catchment is characterized by a seasonal rainfall pattern that, while generally moderate, is occasionally interrupted by extreme weather events such as typhoons. These events have significant implications for sediment transport and deposition, influencing the health of coastal ecosystems, including mangroves, coral reefs, and seagrasses.

Given these findings, the study aims to investigate the sediment dynamics influenced by varying discharge conditions within the catchment. By analyzing sediment transport patterns and their effects on marine habitats, the research seeks to provide evidence-based management strategies to mitigate adverse impacts and promote ecosystem resilience.

This study is motivated by the increasing threats posed by climate change and human activity, which have magnified risks associated with land use and hydrological changes in the region. As such, the introduction lays the groundwork for a comprehensive understanding of the interconnectedness of land and sea, emphasizing the need for integrated management approaches that adapt to the unique challenges presented by the **ridge-river-reef continuum**.

Through the synthesis of findings and analysis, this research aspires to contribute to sustainable coastal management practices that can safeguard the future of these vital ecosystems by addressing the identified challenges.

Importance of the Research Question in the Ridge-River-Reef Continuum

The research question, "How do sedimentation dynamics within the ridge-river-reef continuum influence catchment erosion and affect marine coastal ecosystems, and what integrated management strategies can mitigate these impacts to promote ecosystem resilience?", is critically important as it addresses the interactions and dynamics within the ridge-river-reef continuum, particularly in the context of sedimentation and its impact on coastal ecosystems. Understanding these interactions is essential for several reasons:

1. **Ecosystem Health:** The health of mangroves, corals, and seagrasses is vital for marine biodiversity, fisheries, and coastal protection. By exploring how sedimentation affects these ecosystems, the research can inform conservation and management strategies to protect critical habitats.
2. **Disaster Preparedness:** Given the variability in rainfall and the occurrence of extreme weather events, the findings can help local authorities and communities better prepare for floods and erosive events. Such preparation is crucial for reducing the risks associated with natural disasters.
3. **Sustainable Management:** The research demonstrates the importance of integrated management approaches that consider the entire continuum from ridges to reefs. This integration is essential for developing sustainable land-use practices that minimize erosion and sedimentation, ensuring the long-term resilience of coastal environments.
4. **Policy Formation:** Understanding the sediment dynamics provides valuable insights for policymakers. The proposed management principles can help shape legislation and funding allocations directed toward effective land and water management practices.
5. **Human Impact Mitigation:** With the pressure of human activities on land and water resources, the research emphasizes the need to address anthropogenic influences on sedimentation. The findings can lead to interventions that mitigate negative impacts and promote environmental stewardship among local communities.

In summary, the research question is vital in bridging the knowledge gap regarding sediment dynamics and its ecological implications, guiding effective management strategies, and fostering resilience in the face of environmental challenges.

Objectives of the Study

This study aims to provide a comprehensive understanding of the interconnectedness of the ridge-river-reef systems and inform future management decisions for maintaining ecological integrity.

1. Highlight key factors influencing outcomes**:** The study aims to summarize the methods, results, and outcomes, and recommend management measures based on the findings from the analysis of erosion and sedimentation processes.
2. Develop management strategies**:** To propose integrated management principles aimed at reducing the negative effects of erosion and sedimentation across the ridge-river-reef continuum and enhancing the stability of coastal ecosystems.
3. Promote sustainable practices**:** To advocate for sustainable land management practices that mitigate the impacts of human activities on sediment dynamics, ensuring the health of the river and coastal ecosystem.

Method

The Cagayan de Oro River catchment underwent a multi-method investigation to study sedimentation dynamics and their effects on the ridge-river-reef continuum.

The SWAT served as a modelling tool to predict sediment yield and erosion patterns and sediment transport across different sub-catchments. The model used rainfall data along with land use information and topographic and hydrological data to detect areas prone to erosion and measure sediment concentration.

Using the Delft3D modelling, the research evaluated how rainfall variability and extreme weather events like typhoons interact with coastal currents and tidal movements affect sediment transport and deposition near and at the river mouth.

The research team performed sediment concentration assessments through field data collection at different locations extending from the river mouth. The field observations served to verify SWAT model predictions while identifying sediment dispersal patterns with special focus on east and southeast directions that follow coastal currents.

Finally, the marine ecological field assessment methods evaluated the spatial patterns of mangrove and coral and seagrass distributions together with their resistance to sedimentation changes. The result analysis revealed that sediment deposition correlates with the coral, seagrass, and mangrove distribution albeit on different degrees. Mangroves showed better resistance to sediment encroachment than corals and seagrasses did.

The research integrated its results into a management framework which followed four essential principles: integration, sustainability, precautionary and adaptive management. The principles served to create recommendations for catchment rehabilitation and erosion control and coastal ecosystem protection throughout the ridge-river-reef continuum.

Results

Major Findings across the Ridge-River-Reef Continuum

Rainfall in the Cagayan de Oro River catchment is governed by a seasonal shift that is generally moderate all year round. However, a few extreme and prolonged rainfall events or typhoons also occur in the region, particularly during the rainy months and towards the end of the year. Therefore, the catchment is largely stable but possesses a small number of erosion-prone sub-catchments (see Figure 2.1), which have a high potential to cause massive floods of water and mud during extreme rainfall events.

In both average and extremely high river discharge conditions, the sediment and associated materials were highest in concentration at the river mouth (see Figure 2.1). Regarding the dispersed offshore sediments, the flow direction was predominantly east and southeast, following the general coastal current circulation. In extreme discharge events with high-sediment volumes, sedimentation poses a direct threat to both corals and seagrass communities, but not to mangroves.

The distribution and abundance of mangroves, corals, and seagrasses within the Cagayan de Oro River coastal environment indicate their response to the sedimentation dynamics they experience (see Figure 2.1). Therefore, this study acknowledges the need to conduct management interventions at different points along the ridge-river-reef continuum where sedimentation has become anomalous.

Four key management principles—integration, sustainability, precautionary, and adaptive (Boesch, 2006)—are proposed here as overarching themes to address the ridge-river-reef continuum challenges in an integrated way. In particular, through this approach, the study aims to reduce the erosion-sedimentation process and its effects on the ridge-to-reef continuum (see Figure 2.1). These four principles serve as normative guides for every proposed management or rehabilitation activity.

Highlights of Ridge-to-Reef Sedimentation and Some Management Implications

The diagram below shows the entire flow and summarizes the highlights of methods, results, and outcomes of the three main chapters with recommended management measures.

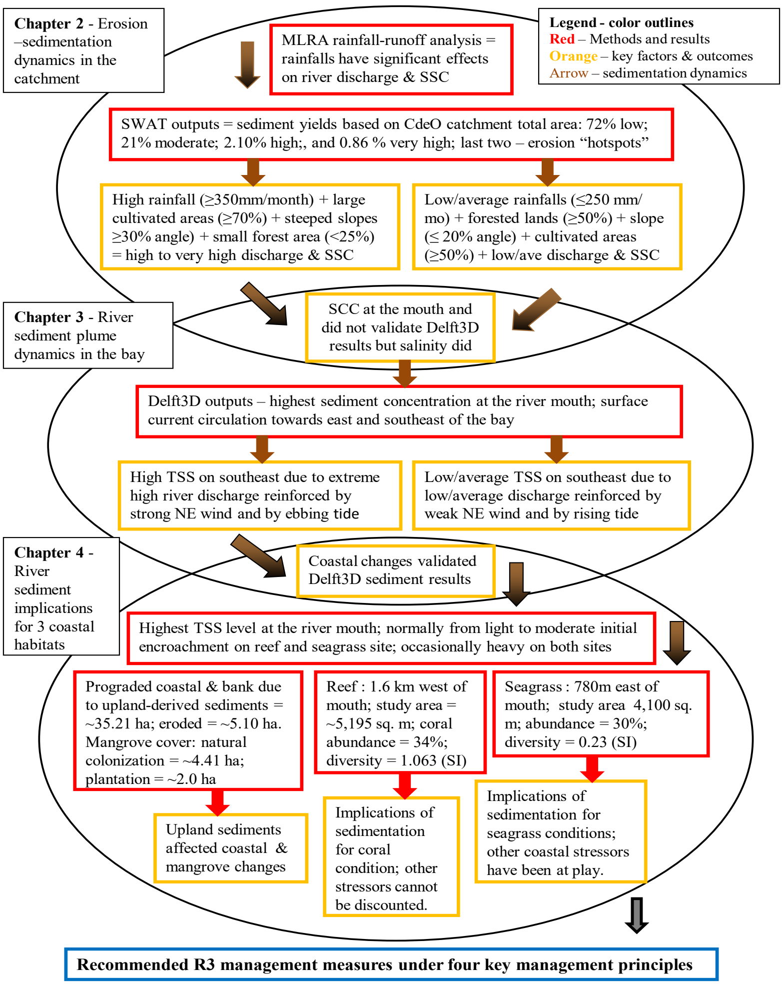


Figure 2.1: *Flow diagram of the three main chapters: each chapter contains the specific methods used and their corresponding results, and the key factors that have influenced or not influenced the outcome of the process. The brown arrows indicate the flow direction of sediments with river discharge. Final outcomes are the recommended management programs for the entire continuum.*

Erosion and River Sedimentation: Key Management Challenges

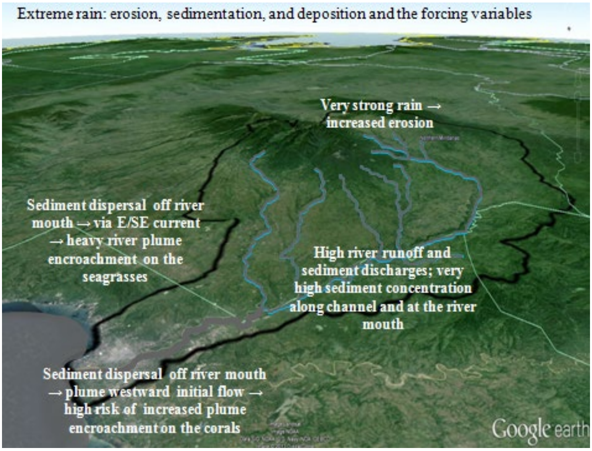
Erosion and sedimentation rates in the Cagayan de Oro River catchment vary from sub-catchment to sub-catchment due to the diverse characteristics of hydrological response units (HRU) comprising a sub-catchment. Catchment erosion-sedimentation dynamics are initially dictated by extreme rainfall input or typhoon events (see Figures 2.2a and b). However, more importantly for management intervention, catchment physical features—particularly steep slopes (≥30%) and vast areas of cultivated land/pastureland (>70%) or the lack of forest and dense vegetation—have largely determined the rain factor's influence on soil erosion and subsequent sedimentation.

Generally, the model has assessed the Cagayan de Oro River catchment as mostly made up of slightly erosion-prone sub-catchments (107,014 ha, or 76% of the total catchment). However, several moderately erosion-prone (28,798 ha or 20.5%) sub-catchments could become highly vulnerable to severe and widespread erosion during extreme rainfall events. Fortunately, the catchment has mostly average monthly discharges; however, extremely high discharge events do occur intermittently a few times during the year.

According to the SWAT model results, one key potential contributory risk to severe erosion in the catchment is the unstable 'disturbed' land cover. This instability may be exacerbated by extreme rains and continuing anthropogenic pressure. Thus, the focus of management intervention should be both the land cover component and destructive land-based activities.

Another key risk factor for massive flooding in lowland areas is the increasingly shallow river water depth caused by the gradual deposition of sediments on the river bottom. This is due to the river's sloping topography and unstable banks, where houses and human activities proliferate. Here, the focus is river rehabilitation from abnormally high sediment deposition caused by both natural processes and human activities. The riverbanks and the human activities within the vicinity need to be well managed

Based on Delft3D modelling, the heaviest sediment concentration under all discharge conditions was within the river mouth and its vicinity. In fact, heavy sediment depositions on the river bottom have made the river mouth zone very shallow. Additionally, upland-derived sediments that have accumulated over time at the river mouth have formed into a large mudflat. Other coastal manifestations exhibiting the deposition of eroded catchment sediments included the accreted landmasses and dumped dredged materials. This particular issue necessitates a two-pronged remedy: rehabilitation of the affected sites and similar intervention measures for the erosion sites.



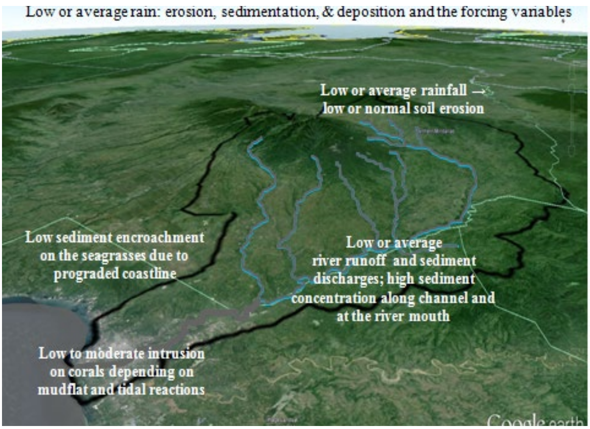


Figure 2.2a and b: *Two scenarios: (top) strong rain and high discharge posing high-risk encroachment of river plume on both corals and seagrasses; (bottom) low and average rains and discharge resulting in high-sediment deposition at the river mouth and minimal encroachment on corals and seagrasses (base map from Google Earth,*

2015).

Finer river sediment particulates were dispersed on the east and southeast portions of the bay. With extremely high discharge from Typhoon Washi, model simulations suggest dispersed sediment concentration along inshore waters at 300 to 400 mg/L, or 20% of the total TSS input value. Receding ebb tides carried more sediment materials seaward than did the flood tides. Thus, there is a looming threat to seagrass and coral communities from river-borne sediments during high and continuous rain events, exacerbated by ebb tides and mudflat erosion. This issue must be addressed at the sediment source and along the banks, where most terrigenous materials can be trapped and impounded.

Sedimentation, Coastal Changes, and the Marine Coastal Habitats: Key Management Challenges.

Through the years, river sedimentation has brought benefits to the coastal environment due to the accretion and expansion of landmasses, and later the subsequent colonization of mangrove trees. However, it has also paved the way for major physical modifications to the coast and riverbank, facilitated by human intervention at the expense of naturally growing mangroves.

Moreover, physical and vegetation cover changes demonstrate some influence on the extent and direction of river discharge and sediment dispersal in the bay. With the Cagayan de Oro River coastal environs, these changes have exacerbated river sedimentation, as well as plume dispersal off the river mouth. For example, the continued westward expansion of the mudflat inflicts a high-sediment encroachment on corals, particularly during erosion and the further transport of loose sediments to the reefs.

Coastal and bank changes may not have exacerbated the river plume encroachment and concentration on seagrass meadows. In fact, the prograded coastline of Macabalan has partly impeded the downstream flow eastward toward the meadows. However, coastal development, particularly at Macabalan, has also resulted in a much larger current coastal population and human activities close to the seagrass sites.

The issue here is the lack of integration of coastal habitats—such as mangroves, corals, and seagrasses—as important components into the city's coastal development program. This gap has led to the loss of mangroves and the continuing decline of corals and seagrasses due to pressure from human-induced activities and other related stressors. This can be addressed by effort from the coastal communities themselves and by the local government prioritizing its concern for coastal and marine ecosystems, even as the city's coastal development continues

Key Management Principles for Ridge-River-Coastal Challenges

The present study uses four key management principles to examine each recommended management measure (see Figure 2.3). These principles are important requirements for any ecosystem-based management and can be used to assess rehabilitation and management plans (e.g., Chesapeake Bay and Louisiana Coast) (Boesch, 2006).

Integration is understood as multi-dimensional: a management approach is interdisciplinary (science, management, sociology); the employed variables are inter-medium (land and water); and the stakeholders originate from different sectors (multi-sectoral and intergovernmental) (Knecht & Archer [1993], as cited in Boesch [2006]).

Sustainability is intergenerational, ensuring that the needs of the present generation are met without compromising the ability of future generations to produce enough for themselves (Brundtland et al., 1987).

The precautionary principle is another management requirement; it prevents any potentially harmful action from proceeding, even without an established cause-and-effect relationship.

Finally, the adaptive management principle requires continuous learning and refining of management strategies, based on set goals, while trying to reduce uncertainties through constant monitoring, assessment, or experimentation (Lee, 2001).

In the present study, the scientific findings are crucial inputs for an effective management plan based on these four key principles. According to the integration principle, erosion-sedimentation as a common stressor must be addressed appropriately while also considering human needs and uses. Therefore, any rehabilitation activities, such as land use conversion, riparian vegetation, coastal clean-up programs, and dredging, should be assessed in terms of their impacts on the lives and needs of affected human communities

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Sedimentation, Its Factors and the Four Key Management Principles

Sedimentation as influenced by rainfall events and other factors is shown below.

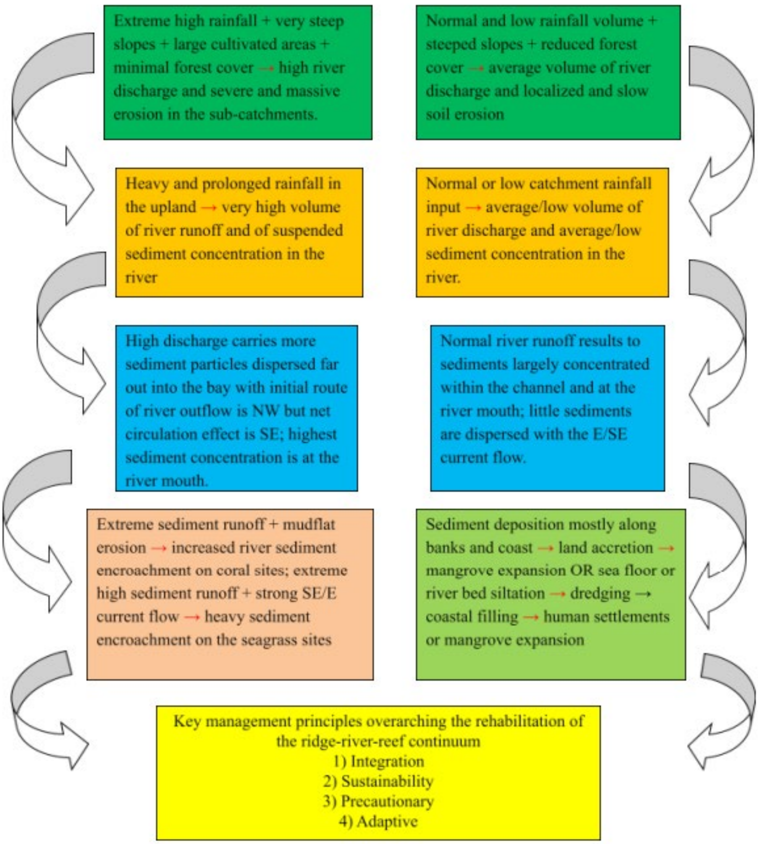

Figure 3.1: *Sedimentation processes under two scenarios and the factors influencing each; the four key management principles proposed to mitigate erosion and sedimentation effects.*

For sustainability, catchment rehabilitation initiatives should be able to lessen the vulnerability of each system and increase its resilience against stress from erosion-sedimentation effects.

Regarding precaution, rehabilitation plans should include strict bans on activities that may increase erosion and sedimentation rates, such as steep-slope cultivation, large-scale plantation, near-bank human settlements, riverbank concreting, and mangrove cutting.

Finally, adaptive management calls for setting clear goals for rehabilitating the Cagayan de Oro River catchment and its river system. These goals must be revisited or revised if required. Such revision should be based on the results of constant sedimentation impact monitoring in relation to the coastal environment and habitats, and the overall effectiveness of management strategies applied to the entire ridge-river-reef continuum.

The Cagayan de Oro River Catchment Management and Rehabilitation Measures as Guided by the Four Key Management Principles

The primary culprit for high soil loss in certain sub-catchments (from a management perspective) is the sub-catchment's very low forest density, which is due mainly to large-scale plantations, logging, and other destructive practices in the catchment.

Rehabilitation of the river catchment should include all moderate- and high-sediment-yielding sub-catchments and their adjacent sub-catchments (see Figure 3.2). Initially, the identified "erosion hotspots" should receive this treatment. Next, the focus should be on the moderately sediment-yielding sub-catchments that have relatively low rainfall inputs (≤287 mm/day), very steep slopes, large, cultivated areas, and significantly reduced vegetation cover.

Following the integration principle, ongoing rehabilitation initiatives include the greening of sites, involving the organized communities who are co-owners of the commodities and beneficiaries of the fruits of their labor. Therefore, rehabilitation programs must take a multi-sectoral and interdisciplinary approach. Further, rehabilitation efforts should consider the establishment of various conservation practices across all highly erosion-prone parts of the catchment.

The sustainability principle means that each sub-catchment must be stable enough to withstand severe erosion and resilient enough to return to its normal functioning after physical disturbances. Therefore, catchment stability entails dense forest cover, particularly on steep slopes; effective conservation methods on large areas of cultivated lands; and minimal destructive land-based activities. A dynamic, stable, and less-disturbed catchment will be sufficiently resilient to withstand physical disturbances.

The precautionary principle in catchment management calls for the banning of any activity that is potentially destructive to the catchment's physical landforms and its vegetation cover. This specifically includes deforestation activity in any part of the catchment, along with agricultural cultivation and human settlement on the slopes and sites near the riverbanks.

Finally, adaptive management requires constant monitoring of rain and river measurements to assess quantitatively the rainfall seasonality response of given sub-catchment land features and management practices. This may require more SWAT modeling in the future. Specific management strategies applied to sub-catchments should be constantly evaluated against established goals. New data from regular monitoring activities will be used to refine or readjust the present management plan for the Cagayan de Oro River catchment and for other study sites.

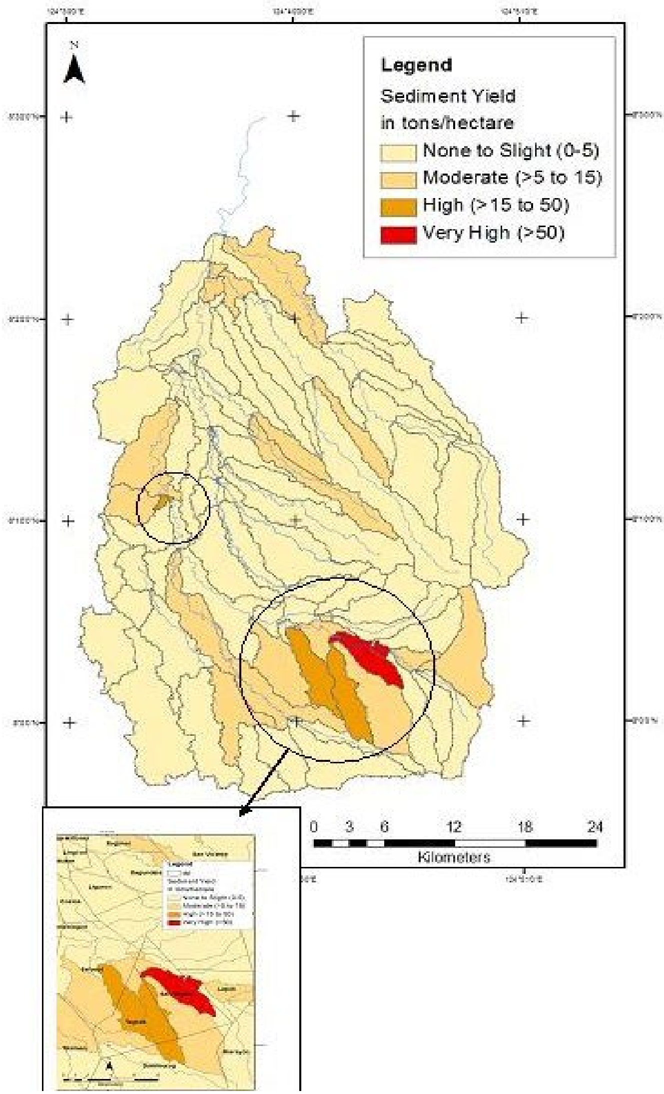

Figure 3.2: *High and very high sediment-yielding sub-catchments as 'erosion hotspots' (encircled) in Barangays Tagbak and San Miguel in Talakag, Bukidnon Province.*

Ongoing rehabilitation activities in the Cagayan River Catchment.

The National Greening Project is an ongoing activity of the Cagayan de Oro River Basin Management Council (CDORBMC) for rehabilitating the river catchment. It is spearheaded by the DENR-Region 10 in partnership with various community-based organizations in the three local government units—Talakag, Baungon, and Libona—within the catchment.

The project, which started in 2011, includes planting timber, cacao, coffee, and rubber in selected sites within each municipality (see Figure 3.3).

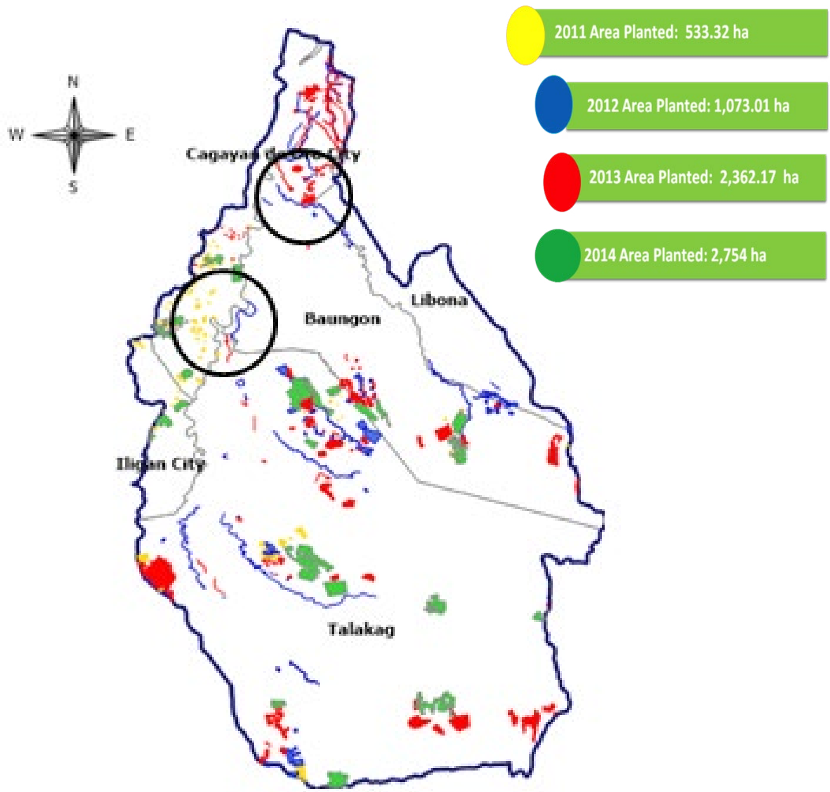

Figure 3.3: *Cagayan de Oro River catchment with the various locations of ongoing greening projects from 2011 to 2014. Encircled sites are 'erosion hotspots' (source: DENR-10)*

The project is commendable as it empowers local communities to plant and grow commodities and take their due share after harvest. This strategy is based on the belief that local communities will conserve natural resources that are integrated into their economic and social life (Brandon et al., 1998). However, as with previous practices, this integrated conservation and development approach may encounter certain problems for various reasons, such as exploitation and alteration of commodities (Ludwig et al., 1993; Soulé & Lease, 1995; Langholz, 1999; Redford & Richter, 1999). In light of this, adaptive management (e.g., regular evaluation) is even more important (Walters, 1997).

The Greening Project also includes sub-catchments identified by the present study as being highly prone to erosion (encircled in Figures 3.1 and 3.2). However, it is not clear within the project what contribution of site attributes to erosion risks (e.g., steep slopes, barren spaces) would be addressed by planting selected commodities. Further, greening activity could be limited to sites close to human communities for effective support and maintenance, at the expense of 'erosion hotspots' in more isolated sites.

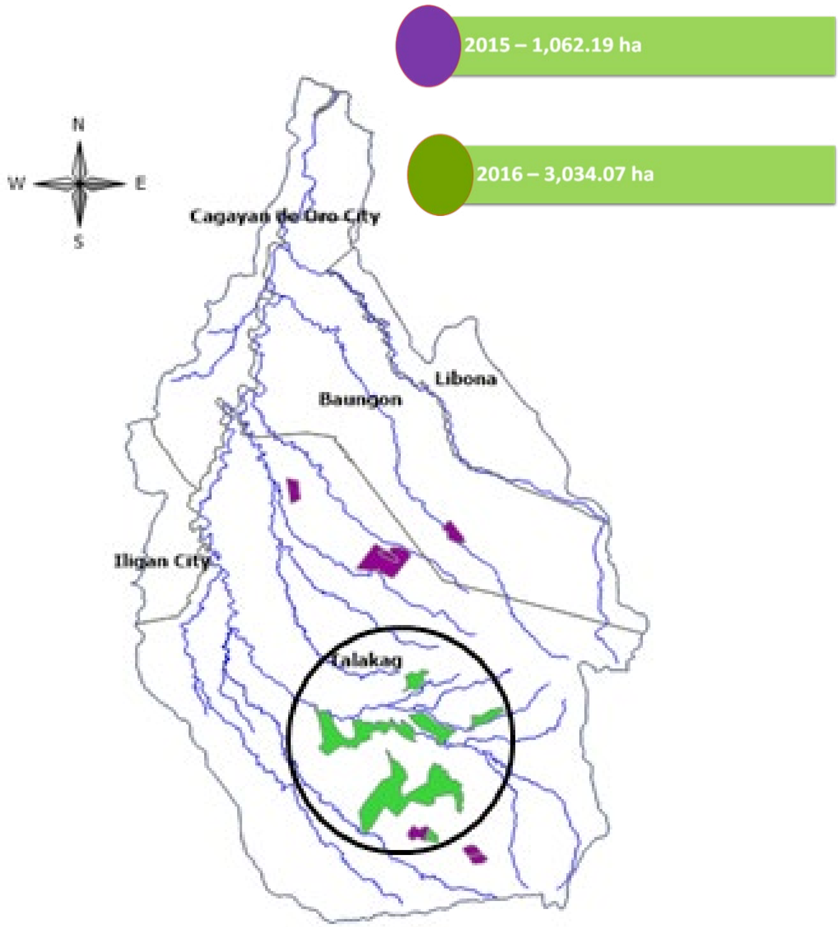

Figure 3.3: *The Cagayan de Oro River catchment with locations of sites targeted for future greening projects. Encircled sites are 'erosion hotspots' (DENR-10).*

Regarding the 2016 Greening Project, it is notable that the targeted areas for development (see Figure 3.3) are located within the same sub-catchments identified by the present study (see Figure 3.1) as very high in sediment yields. These sites are located at the foot of Mt. Kitanglad and lie within the confluence zone of a tributary/stream network.

Recommended Management Measures for the Cagayan de Oro River Catchment.

This study recommends the following concrete management measures, guided by the four key management principles. These measures are also recommended for incorporation into the *Integrated River Basin Management and Development Master Plan for the Cagayan de Oro River Basin* (see DENR-RBCO, 2015).

1. Public education and awareness building. This includes explaining the contextual perspectives on disaster risk and involving local people in the interactive process of awareness raising (Burningham et al., 2008). The present SWAT map of the sub-catchments' sediment yield values (t/ha/yr) and their corresponding geographical locations within the barangay and municipality should be made publicly accessible. In this way, the local people can realistically appraise the gravity of the risk and their possible contribution to it.
2. Banning large-scale cultivation in 'erosion hotspots'. The strict enforcement of prohibited plantation expansion in 'erosion hotspots' should be established. To reduce the impact of slope cultivation on food production (Pimentel et al., 1987), government should prioritize the farming of staple plants and high-value crops in available agricultural lands.
3. Improve slope conservation efforts. Appropriate conservation practices and planting systems (e.g., contour farming) (Mercado Jr. et al., 2001; Poudel et al., 2000) should be enforced in cultivated lands along sloping or hilly areas (≤15%). Local government technical officials can initiate training and field demonstrations on conservation practices to assist local farmers in increasing food production and minimizing soil erosion. Soil conservation and food production must be carefully balanced for sustainability (Partap, 2004).
4. Removal, transfer, and resettlement of informal bank settlers. The identification of new, safer resettlement zones through city mapping and land surveys is vital, as is the preparation of resettlement areas through various activities, such as the construction of basic infrastructure facilities. Informal settlements should be removed from hazardous sites, and a strict enforcement of a 'no human settlements' policy on these sites should be established. Finally, evicted informal settlers can be resettled in new homes (Kothari, 2007).

5. Implement land use conversion. Appropriately sized 'hotspots' can be converted into forested areas. Appropriate soil conservation measures can be implemented. The plan consists of tree planting/growing on bare or grassy portions of the following sub-catchments:
   - SC 66 (very high): 470 ha of pasture land
   - SC 68 (very high): 70 ha of pasture land
   - SC 63 (very high): 557 ha of pasture land
   - SC 62 (high): 761 ha of pasture land
   - SC 65 (high): 1,122 ha of pasture land
6. Immediate rehabilitation of mountain and bank slopes (e.g., tree planting, bank reinforcement, and bans on cultivation)**.** All 'priority' sites for rehabilitation are within the vicinity of the river/stream confluence zone at the base of Mt. Kitanglad. This action should target 'erosion hotspot' areas, particularly the mountain and river banks with ≥30% slopes:
   - SC 66: 247 ha
   - SC 68: 100 ha
   - SC 63: 29.7 ha
   - SC 62: 161 ha
   - SC 65: 168 ha
7. Dredging in shallow parts of the river channel**.** A bathymetric survey of the entire river channel should be conducted to identify 'priority' parts close to human communities. Proper dredging guidelines should be followed (DPWH, 2000).

The Cagayan de Oro River Mouth and Its Coastal Marine Habitat Management Measures as Guided by the Four Key Management Principles

Major research findings have revealed that sedimentation exhibits different levels of association with each of the three coastal habitats. Sedimentation has a beneficial effect by promoting land accretion and land filling, which subsequently create new sites colonized by mangroves (e.g., *Sonneratia* sp.). With corals and seagrasses, sediment plume encroachment on the coastal habitats' sites during heavy catchment rains may affect either community.

Based on the four key management principles, rehabilitation plans should sustain the 'healthy' condition and expansion of each coastal habitat. First, the coastal environment itself must be sustainably stable and resilient, which means it can receive sediments and other stressors but can later restore itself to normal functioning conditions. This means the ecosystem should have components such as mangrove trees to mitigate the harmful effects of sediments. Second, the coastal habitats themselves should be sustainably resilient and balanced so they can withstand disturbances adequately. Thus, there is a need to rehabilitate the three coastal habitats and their environs and then to manage their subsequent growth and development appropriately.

The principle of integration requires that rehabilitation of the coast and its marine habitats should first consider the needs of coastal human communities. It presupposes the active participation of concerned stakeholders in both the planning and execution phases. Important concerns such as resilience, coastal habitat diversity, human consumption and needs, coastal development, disaster preparedness, and financial/economic implications should be properly established for discussion so that decisions can be made.

To uphold the precautionary principle, it is essential to prohibit specific human activities that could harm the ecosystem and its coastal habitats, including waste production or disposal in coastal waters, illegal fishing methods, converting mangrove swamps into human settlement areas, deliberately disturbing corals and seagrasses, and extensive upland land-based activities.

As for the adaptive management principle, this requires continuous learning about the river mouth and the coastal habitat conditions in response to the impact. This can be done through a constant assessment of the distribution, abundance, and diversity of each major habitat, while also monitoring sedimentation flow patterns and where high concentrations are located in coastal waters. Tests for other limiting variables must also be undertaken to determine the sources of variation in the results. Overall management strategies should be evaluated based on the targeted goals. This knowledge can then be used to correct or refine present management plans or to apply strategies to other study sites.

Management Plans and Ongoing Rehabilitation Activities for the Cagayan de Oro River Mouth and its Coastal Marine Environments.

Barangay Bonbon has implemented advocacy and education programs to raise awareness among the population. This initiative includes regular rubbish collection, proper waste disposal, sanitation-related projects, and a coastal clean-up drive (Barangay Peace and Development Plan, 2015–2020). The plan identifies certain limitations to the program's success, such as the lack of funds and the minimal cooperation from local inhabitants. The plan does not address the monitoring and evaluation necessary for a sustained, effective program.

The city government, in collaboration with the DENR-10, is undertaking a mangrove-planting project under its integrated coastal management project along the Bonbon coasts (Jose Reyes, personal communication, 19 Aug 2015).

Barangay Macabalan has planned and initiated a program for a clean environment, including solid waste management, a coastal clean-up drive, repair of existing drainage systems, and the installation of sanitary toilets for all residents (Barangay Development Plan, 2016). It also adopted, through a *barangay* resolution, a disaster-risk reduction program that includes construction of a dike and a breakwater seawall and the relocation of residents from identified danger areas. However, there is no mention of a plan or activity for the coastal waters and their marine resources under any of the *barangay* programs; namely, clean environment, healthy population, and productive constituency.

Under the flood-risk management project for the Cagayan de Oro River (FRIMP CDOR), a 12 km structure for flood control will be built from the Pelaez Bridge up to the river mouth (see Figure 3.4). The mega-dike project is expected to mitigate risks in flood-prone areas along the CdeO River. The construction of the dike will affect 15 *barangay*s and might displace over a thousand households. The P5-billion project was proposed by the Japan International Cooperation Agency (JICA) after Typhoon *Washi* (*Sendong*) devastated Cagayan de Oro City in 2011. The mega-dike is expected to protect people and properties from large floods in the future. However, the dike will be detrimental to the river ecosystem, isolating it from the rest of the larger terrestrial ecosystem. It is also unfavorable to groundwater replenishment and storage. Finally, the sediment load dispersed into the bay will increase. Nonetheless, this present study suggests that natural buffers, such as dense riparian vegetation, should be planted between the wall and the inland communities on both sides of the bank along the entire extent of the dike (Wolanski, 2006). The forest serves as a second barrier after the dike, in case the concrete wall provides way to large floods. The vegetation also maintains the bank's soil stability and intactness against erosion.

Dredging activity at the river mouth continues up to the time of writing. Dredged materials (240 m^3/hr; 80% liquid and 20% solid) (DPWH, 2000) are stockpiled on the Bonbon coast and are supplied to the city for various purposes (DPWH engineer, personal communication, 27 Aug 2015). A pre-dredging report identified no corals or seaweeds at the dredging site; seagrass had only 2.57% cover, while fish species numbered six, with *Bolinao (Stolephorus* sp.*)* as the most abundant. Given the flow dynamics of river discharge and bay currents, monitoring of potential sedimentation impacts should include the existing corals and seagrasses during the actual dredging phase. Regular assessments of dredging impacts on the Bonbon and Macabalan coastal population should also be conducted.

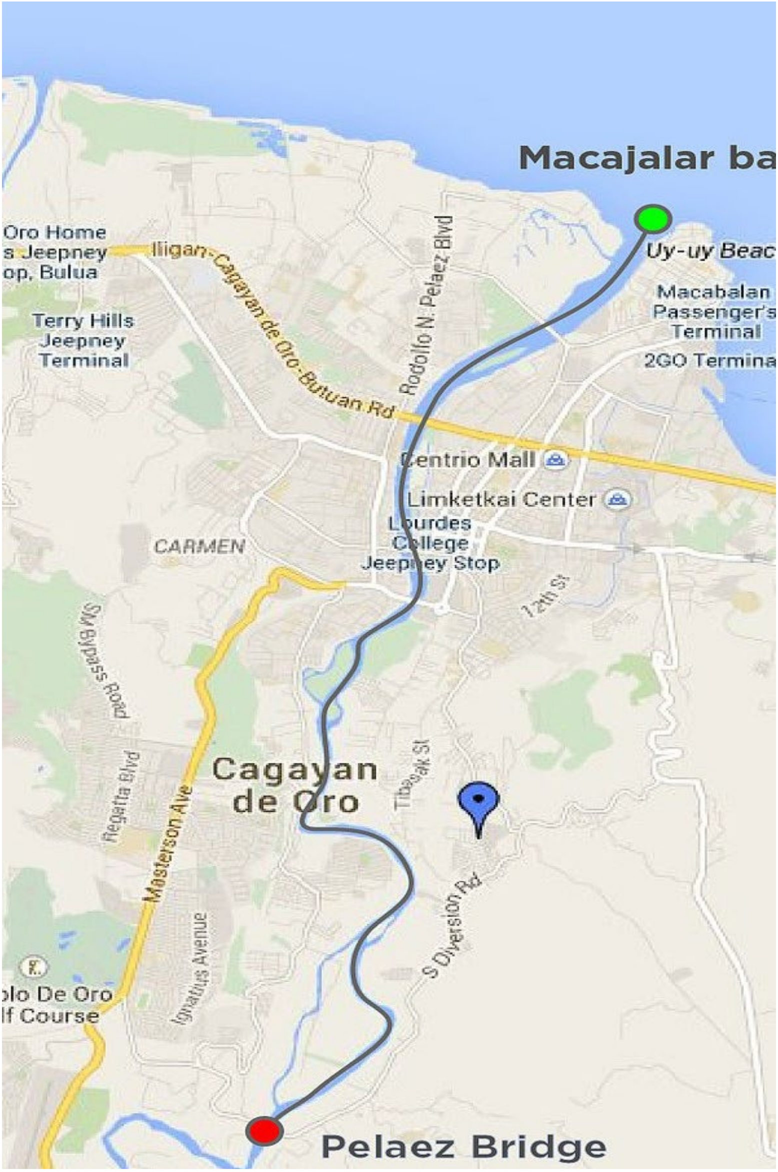

Figure 3.4*: Map showing the proposed 12 km mega dike straddling the Cagayan de Oro River from the Pelaez Bridge to the river mouth(Tolinero, 2014).*

Some Recommendations to Further Improve the Present Study and Similar Research Initiatives

Erosion-Sedimentation Process in the Catchment

This part of the research's strength lies in its concepts and modeling work. The field data collection provided initial insights into catchment rainfall-river dynamics and final evaluations of the closeness between the simulated results and the actual conditions. The SWAT model itself generated reasonably adequate estimations of discharge volumes and sediment yields from each HRU. The variability of discharge and sediment yield results across the catchment reflected the unique condition of each unit's vulnerability to erosion. With these data, catchment rehabilitation measures became more direct and specific in their applications.

However, the prescribed model data inputs, which were then limited, could be improved:

1. **Increase the duration of rain and river gauge data collection to three years or beyond.** The SWAT model simulations need adequate time to adjust to the changing performance of input variables. A longer simulation run will provide a better appraisal of the actual rain and river processes.
2. **Increase the frequency of river data collection to an hourly rate, using an automatic data logger.** A daily single-event measurement does not capture the complete pattern of performance exhibited by a river parameter during an entire day and night. Further, river dynamics, particularly during rainfall events, are characterized by high and low flows that must be accounted for in the study.
3. **Enhance the prescribed data inputs for better representation of the entire catchment characteristics, especially the spatial heterogeneity of each unit being studied.** In particular, these model data inputs should include rainfall, LUC, soil condition, and topography.

River-Suspended Sediment Distribution in the Bay

Using Delft3D as the modeling tool, the research study demonstrated the general coastal surface current circulation (near the river mouth) as influenced by the bay-forcing factors in Macajalar Bay. The tool also kept track of the physical movement of the river plume from the river opening to the site of persistent concentration and subsequent deposition under different discharge conditions. Simulated outputs helped locate the sites most likely affected by river-borne sediments in view of the presence of coral and seagrass communities within the river's coastal environs.

However, the results and analyses could still be further improved; hence, the following recommendations:

1. Extend the sampling period for both river and coastal data collections to include the southwest monsoon months of July, August, September, and October. This may show variations in coastal surface current circulation and sediment-dispersal patterns with the prevalence of strong southwest winds in the bay.
2. Use a floater with an attached GPS to track the surface current flow from the river mouth to the sea. This exercise will reveal the actual flow velocity and directional patterns of surface current circulation. Field results will be used to validate the Delft3D model's simulated results.
3. Identification of river-borne sediments from bottom re-suspended ones. Proper classification of sediments, based on their immediate sources, can clarify the extent and concentration of river sediment plumes in inshore waters during actual field sampling.

Implications of River and Coastal Sedimentation for the Distribution, Composition, and Abundance of the Three Coastal Marine Habitats

This study included the three important existing coastal communities at the mouth of the Cagayan de Oro River and their basic ecological conditions in relation to the extent and concentration of the river sediment plume. Temporal and spatial variations in the distribution, abundance, and diversity of coastal habitats were accounted for in the case of mangroves. However, in relation to the coral and seagrass communities, their temporal variations were not included. The omission was due to the limited time for monthly sampling and the unavailability of previous studies and reports.

Hence, the following recommendations are made to increase data inputs:

1. Establish monthly monitoring of seagrass growth (morphometrics), cover percentages, coral health conditions, and recruitment rates

for a duration of one year or more. Monitoring results will show temporal variations in seagrass and coral growth and abundance due to sedimentation effects. Sedimentation rates at the site will also be measured monthly.

2. ***Conduct regular water quality monitoring*** of the sampling sites (seagrass and coral). Parameters of the seawater quality analysis should include the following: salinity, temperature, TSS, water clarity, dissolved oxygen, nitrite, nitrate, ammonia, grease, and trace metals. The results will furnish vital information about the level of coastal water pollution that may account for the limited distribution and low abundance and diversity of seagrass and coral habitats.
3. Use the geochemical tracing method to identify and compare upland-derived sediment deposits in accreted coastal and bank landforms with the sediment types in eroded sub-catchments. This will confirm the specific upland sites as sources of sediments concentrated and deposited within coastal marine environs.

Key Takeaways for Managers and Planners

1. Understanding Rainfall Patterns: Recognize the seasonal shifts and occasional extreme rainfall events in the Cagayan de Oro River catchment, as these significantly influence erosion and sedimentation processes.
2. Erosion-Prone Areas**:** Identify and monitor the small number of erosion-prone sub-catchments that have a high potential for severe flooding during extreme rainfall events.
3. Sediment Concentration Insights: Utilize findings that indicate the highest sediment concentrations occur at the river mouth during both average and extreme discharge conditions to plan for sediment management.
4. Impact on Ecosystems**:** Acknowledge that while sedimentation poses significant threats to corals and seagrass communities, mangroves appear to be less affected. Tailor management strategies accordingly.
5. Management Principles**:** Implement the four proposed management principles—integration, sustainability, precautionary, and adaptive—to effectively address challenges throughout the ridge-river-reef continuum.

6. Focused Intervention Areas: Target management interventions at locations where sedimentation dynamics are anomalous and where there is unstable land cover due to anthropogenic pressures.
7. River Rehabilitation: Prioritize the river rehabilitation initiatives to combat sediment deposition that heightens flooding risks. Enhance the management of riverbanks and surrounding human activities.
8. Adaptive Strategies: Emphasize adaptive and precautionary measures to mitigate risk from severe erosion and flooding, particularly in areas with steep slopes and significant cultivated land.

By synthesizing these key takeaways, managers and planners can create effective strategies and interventions to protect the catchment area of the Cagayan de Oro River and its surrounding ecosystems.

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About the Author

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As President, he emphasizes the integration of academic excellence, social transformation, and environmental stewardship, aligning with the Jesuit mission of forming leaders in service of others and our common home. He is dedicated to advancing the university's research agenda to address pressing environmental and social challenges.

Professional Identity and Academic Optimism of Public High School Teachers: The Mediating Role of Self-Compassion

Claire Kate T. Alvarez

Abstract

As teachers assume a multifaceted role, they are faced with a wide array of responsibilities that significantly impact their well-being. While there is growing literature focusing on teacher well-being, there is a significant lack of information about the relationship of professional identity and academic optimism, and the mediating role of self-compassion. This study attempts to fill that gap by conducting a mediation analysis on 198 public high school teachers in Molave Vocational Technical School, Molave, Zamboanga del Sur. Data were gathered through survey questionnaires and analyzed though jamovi. A regression analysis showed that a linear relationship exists between the three variables. The mediation analysis also revealed a significant result with self-compassion as the mediator. This led to the conclusion that teachers with a robust professional identity can develop self-compassion— utilize it as a protective factor when faced with negative experiences— and would then result in a positive outlook. This optimism would enhance their self-efficacy, enable them to build a trusting relationship with both parents and students, and create an effective learning environment.

Keywords: professional identity, self-compassion, academic optimism, mediation, public high school teachers

Introduction

Teaching is considered as a noble profession that teaches other professions. Teachers are considered as flexible and well-rounded individuals who are tasked with a profound duty of shaping productive and goal-driven individuals (Fabrigas et al., 2022). Such a complex and demanding role brought forth a vast array of responsibilities and multifaceted challenges which include pedagogical, infrastructure and system issues.

In the Philippines, pedagogical challenges and responsibilities include utilizing effective teaching strategies to sustain student interest (Barcelona et al., 2023), limited research experience and inadequate access to resources (Esteban et al., 2022) and decreasing role and influence teachers hold in the education process brought by factors such as societal attitude and reliance on technology (Dominguez & Ospina, 2023). System challenges and responsibilities in the profession encompass insufficient infrastructure and increased workload (Kim et al., 2023), chronic overwork due to multiple roles and constant exposure to stress leading to burnout (Naparan & Castañeda, 2021), low salaries and high student-pupil ratio (Chua, 2019), additional non-teaching tasks (i.e., home visitations)(Esguerra, 2018) and adhering and adapt to various educational reforms (i.e., K-12 Basic Education Curriculum, No Child Left Behind).

Considering these challenges and the weight of these responsibilities afforded to them, more essentially after a two-year distance learning shift due to the global pandemic, this resulted in a decline in their psychological well-being and job satisfaction (Oducado, 2024). According to De Campo (2023), educators are expected to have a lot of responsibilities on their plate but often lack the means to deal with emotional problems of being a teacher, such as practicing self-compassion in the workplace.

This serves as the basis for the present study which aims to examine how internal resources such as self-compassion are beneficial to teachers and how it can assist the development and strengthening of one's professional identity and academic optimism. In the present study, teacher professional identity (teacher professional identity (Tprofessional identity (PI))) refers to how teachers see and define themselves as educators and professionals (Lucman, 2015). Moreover, teacher professional identity (Tprofessional identity (PI)) is defined as the integration of the professional self with the personal self and is shaped by various factors such as personal beliefs, societal views, and challenges in the workplace (Lucman, 2015). Academic optimism (academic optimism (AO)), on the other hand, is defined in this study as the teachers' ability to provide a positive learning environment through manifesting high levels of self-efficacy, trust in parents and students and academic emphasis which impacts student's learning and achievement (Hoy, Tarter, Woolfolk-Hoy, 2010). These constructs are chosen as variables of this study since these constructs are closely associated with teacher efficacy and influences classroom behavior and outcomes.

While professional identity and academic optimism are widely studied, their relationship remains unexplored, especially in the public high school contexts in the Philippines. Self-compassion is also well-studied because of its role as a protective resource that positively relates with psychological well-being. However, its role as a mediator between professional identity and academic optimism in public high school teachers lacks empirical evidence. Specifically, this study aims to answer the question-- does self-compassion mediate the relationship between teachers' professional identity and academic optimism?

Method

The present study aims to explore the relationship of professional identity and academic optimism among public high school teachers in Molave Vocational Technical School, Molave, Zamboanga del Sur, Philippines. This study utilized a quantitative approach, specifically, a mediation analysis approach, employing questionnaires with standardized scales to ensure data reliability and validity. For preliminary analysis, descriptive statistics, such as mean scores, standard deviation, and correlations of each variable relationship were calculated to provide an overview of the sample's characteristics and mediation is utilized to gauge the potential role of self-compassion in uncovering the mechanism through which professional identity affects academic optimism.

Respondents

The participants of this study are composed of 198 public high school teachers from Molave Vocational Technical School, Molave, Zamboanga del Sur. The present study employed a random sampling and with an inclusion criteria taken into consideration. Respondents of this study are those who were: (1) currently teaching in MVTS, and (2) with at least 1 year public school teaching experience. The one year of teaching experience is considered as the minimum requirement to participate in this study to ensure that the participant had sufficient time to adjust with the demands of the profession, engage in classroom practices and hopefully begin the career-long journey of professional identity formation.

Instruments

Self-Compassion Scale – Short Form (Self-Compassion Scale–Short Form (SCS-SF)). The Self-Compassion Scale- Short Form was developed by Neff (2011), and is composed of 12 items divided into six subscales– Self-Kindness (e.g. "I try to be understanding and patient towards those aspects of my personality I don't like."), Self-Judgment (e.g. "I'm disapproving and judgemental about my own flaws and inadequacies"), Common Humanity (e.g. "I try to see my failings as part of the human condition.") , Isolation (e.g. "When I'm feeling down, I tend to feel like most other people are probably happier than I am."), Mindfulness (e.g. "When something painful happens I try to take a balanced view of the situation."), and Over-Identification (e.g "When I fail at something important to me I become consumed by feelings of inadequacy."). Respondents are to rate each statement on a 5-point scale (1- Almost Never; 5- Almost Always) and are instructed to consider how they would typically react towards themselves during difficult times. The Self-Compassion Scale–Short Form (SCS-SF) obtained an overall good internal reliability with Cronbach's α =.761 (n = 198), of each subscales obtained an alpha of .6 - .7.

Questionnaire on Perceived Professional Identity among Teachers (Questionnaire on Perceived Professional Identity among Teachers (QIPPE)). The Questionnaire on Perceived Professional Identity among Teachers (QIPPE) scale (Lentillon-Kaestner et al., 2018) is an 11-item questionnaire used to measure the perceived professional identity among teachers. This scale includes two subscales– (1) six items measuring pedagogical expertise ("I take care of the wellbeing of my students from the beginning of the lesson"), (2) five items measuring subject matter expertise ("I am interested in new developments in my subject matter") – where respondents can rate each item on a 5-point Likert scale ranging from 1 (never) to 5 (always). This scale was given to 350 French secondary school teachers to test its internal reliability and validity where it attained a Cronbach's alpha for the two subscales are 0.72 and 0.74 respectively. The present study obtained a high internal consistency of Cronbach a = 0.9. Both subscales showed an average response of high professional identity.

Teacher Academic Optimism Scale-Secondary (Teacher Academic Optimism Scale–Secondary (TAOS-S)). The Teacher Academic Optimism Scale - Secondary (Teacher Academic Optimism Scale–Secondary (TAOS-S)) was developed by Fayh, Wu, & Hoy (2010) and is composed of three parts: (1) Teacher Sense of Self Efficacy (e.g. "I can motivate my students who show low interest in school work."), (2) Trust in Student and Parents (e.g "Most of my students are honest"), (3) Academic Emphasis (e.g. "I press my students to achieve academically"). The Teacher Sense of Self-Efficacy scale obtained an internal reliability of .85, Trust in Student and Parents obtained an internal reliability of .87, and Academic Emphasis obtained an internal reliability of .83. In the present study, the internal reliability was Cronbach a=.7. After computing for the overall standardized score, the results showed a mean of 500 which is interpreted as average academic optimism.

Data Collection Procedure

Prior to the data gathering process, the researcher complied all necessary requirements mandated by the ethics board of Xavier University. Upon securing approval from the relevant authorities in the department as well as in the institution, the researcher then identifies the respondents of the present study, taking into consideration the criteria that need to be met.

After collecting the questionnaires from the respondents, paper-based questionnaires were encoded in a spreadsheet file that is protected by a password that only the researcher can access. Responses that were obtained electronically will be saved in a password protected folder as well. The names of the respondents, as well as their other personal information (contact numbers, email address, etc.) were not included in the stored data, numerical codes were utilized instead, to protect and ensure their privacy.

Ethical Considerations

The researcher declares her affiliation as one of the teachers in the institution where the study will be conducted. The researcher ensures that all efforts to obtain reliability and validity, as well as minimizing potential bias or undue influence on the respondents and their responses, will strictly be implemented and adhered to throughout the duration of the study. To minimize potential bias, the researcher will make sure to draw a clear distinction between her role as a colleague and as researcher by avoiding direct recruitment, instead make use of online survey links (google docs) for the participants not to feel pressured when answering the questionnaire. Furthermore, the researcher will avoid directly recruiting colleagues who she shares a close relationship with to avoid potential biased responses.

Participation is entirely voluntary; anonymity and confidentiality will be maintained using numerical codes instead of using the names of the respondents. Specific measures to ensure anonymity will be considered such as providing a box for teachers to secure a copy of the questionnaire at their own expense, as well as providing a locked and secure box for them to return their questionnaires after answering. The box will be secured with a heavy-duty lock that only the researcher can access, and the researcher will check and empty the contents every hour to ensure that no one can tamper with the contents of the box. Through this, anonymity will be ensured. Additionally, any decisions related to recruitment, data collection and analysis adheres to the ethical standard set by the Xavier University's Research Ethics Office.

Data Analysis

To test if the assumptions are met before conducting the mediation analysis, skewness and kurtosis values are tested and checked to ensure normality of the data, scatterplot to check if a linear relationship exists, and must not show multicollinearity. If normality is violated, bootstrapping techniques will be utilized to further gauge accurate results on the indirect effects of the mediation path, since this technique ensures validity and reliability of findings even if the results are not normally distributed (Hayes, 2018).

Pearson correlation coefficient was computed to establish linear relationship between variables, the coefficient yielded significant results with $p=<.001$, confirming that there exists a linear relationship between the variables.

Before conducting the mediation analysis, checks for assumptions were done to ensure that the data complies with these assumptions. Upon checking for normality, the results showed significant value of the Shapiro Wilk test, indicating that the data is not normally distributed. Negative value for skewness and kurtosis were also obtained, indicating that the data is negatively skewed for Academic Optimism and Professional Identity. To mitigate this, bootstrapping techniques were used to create confidence intervals for mediation effects and enhance estimation accuracy. Indirect effects were estimated using 95% bias-corrected and accelerated bootstrap confidence intervals based on 10,000 resamples in Jamovi. Bootstrapping is a nonparametric resampling method that allows for the accurate estimation of indirect effects, particularly in small or non-normally distributed samples (Preacher & Hayes, 2004). This technique is also used to mitigate the rather small sample size of this study. Lastly, the variables yielded a VIF = 1.28, tolerance = 0.780, showing that multicollinearity does not exist.

Results

The total sample size of this study is n = 198 ($\bar{x}$ = 36.6, s = 9.10), wherein 73% are females, 27% are males, 3% have 31-above years of teaching experience, 5% have 20-30 years of experience, 10% have 10-19 years, and 82% have 1-9 years of teaching experience.

Problem 1. Does self-compassion mediate the relationship between teacher's professional identity and academic optimism?

Table 1. *Mediation analysis between self-compassion, professional identity, and academic optimism*

95 % Confidence Interval								
Effect	**Label**	**Estimate**	**SE**	**Lower**	**Upper**	**Z**	**p**	**% Mediation**
Indirect	a x b	0.0857	0.0267	0.0357	0.139	3.21	0.001	18
Direct	c	0.3998	0.2914	0.2914	0.516	7.04	<.001	82
Total	c + a x b	0.4856	0.3830	0.3830	0.589	9.31	<.001	100

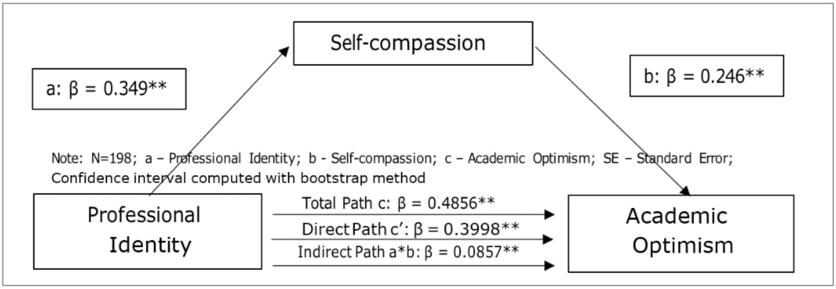

Figure 1. *A mediation model with self-compassion as proposed mediator of professional identity and academic optimism (n=19).*

*Note: Values presented are beta coefficients. **p<0.001*

Mediation analysis was performed through the MEDMOD function of jamovi to assess the mediating role of self-compassion towards the relationship between professional identity and academic optimism. To acquire more accurate results, bootstrapping with 10,000 samples were utilized since the data were not normally distributed. The table above indicates the total effect of professional identity (PI) and academic optimism (AO) was significant (B = 0.49, t = 9.31, p <.001). With the inclusion of self-compassion as the mediating variable, the direct effect of professional identity (PI) on academic optimism (AO) is still found to be significant (B= 0.3998, t=7.04, p=<.001). The indirect effect of professional identity (PI) on academic optimism (AO) through self-compassion (SC) also yielded a significant result (B=0.0857, 95% CI [0.0357 to 0.139]). This shows that the relationship between professional identity (PI) and academic optimism (AO) is partially mediated by self-compassion.

The results generated supported the decision to reject the null hypothesis since it has been established that there exists a mediating variable, self-compassion, towards the relationship of professional identity and self-compassion.

Discussion

The results support the hypothesis presented in this study, showing that self-compassion mediates the relationship between professional identity and academic optimism. Fostering self-compassion as a personal resource to navigate the demands of the teaching profession helps teachers not only develop a stable identity but also promote a positive outlook and environment for students (Qu, 2024). Moreover, Qu, (2024) further reported that self-compassion is also highly associated with improved subjective well-being, perceived school climate, and collective teacher efficacy. This aligns well with the concept of academic optimism which has efficacy as one of its components. Yang and Yue (2023) refers to professional identity (PI) as the understanding of how a teacher behaves, how much importance they attach to their profession, and results to improved attitudes and judgment, as well as enhanced engagement with the students and effectiveness in their job. This shows how important professional identity (PI) is particularly in the teaching profession. It encompasses their motivations, emotional expressions, and even future aspirations (Yang & Yue, 2023). Through a stable and robust professional identity (PI), teachers can easily navigate through challenges, developing self-compassion, resulting in the ability to provide an academic-centered environment and trusting association with students.

Public high school teachers can benefit from this result, knowing that there exists a protective factor that they can utilize when faced with negative emotions and experiences. Teachers can also utilize these findings in developing their professional identity since it has been established that a steady professional identity significantly impacts academic optimism and their overall well-being.

The results also support with the theoretical framework of the study, which sees self-compassion as a resource that promotes safeness and better well-being. Self-compassion in this context replicates a nurturing environment, where teachers can be kind to themselves instead of being over-critical when making a mistake or navigating obstacles. This can impact their identity, outlook, behavior, and lowers educator stress. This solid foundation can be the basis of developing a more authentic self which will allow them to not only make mistakes but learn and treat them as an opportunity to learn. Strategies—such as coaching and mentoring programs, reflective teaching practices, and resilience-building initiatives—can be done to mitigate the enhancement of one's professional identity, self-compassion, and academic optimism.

To further enhance the accuracy of the results of this study, other possible mediators, such as emotional intelligence, psychological resilience, and growth mindset, could also be considered. As mentioned above, emotional intelligence mediates self-compassion and resilience (Kayalar & Hiçdurmaz, 2024) thus playing a fundamental role in the enhancing self-compassion. self-compassionate individuals also enhance growth mindset as it enables them to see setbacks and failures as opportunities for growth rather than dwelling in rumination and self-pity (Briggs, 2022).

These factors could also be considered as they also play a pivotal role in terms of dealing with the stress that comes with the job and further enhances well-being.

To assess self-compassion's sustained impact over time, two longitudinal studies reported that (1) perceived stress is a mediator between self-compassion and affective well-being, suggesting that high self-compassion lowers perceived stress, and (2) higher self-compassion leads to usage of more effective coping strategies (Ewert et al., 2024). A study reported that self-compassion acts as a protective resource and enhances resilience in cancer patients (Yao, 2024). Research also found that self-compassion enhances subjective well-being and decreases stress symptoms over time leading to positive emotional health and better coping strategies (Asselmann et al., 2024). This backs up the present study's claim on the benefits of self-compassion and its lasting long-term effects as teachers progress in their careers.

Recommendations

One of the limitations of the present study is its violation on the normality of data.

While bootstrapping techniques addressed normality concerns, providing more accurate results despite the lack of normally distributed data, a larger and more diverse sample across multiple schools could provide a broader generalization of the results.

Additionally, further research should explore other possible mediators, such as professional commitment, job satisfaction, school climate and leadership roles, which may further clarify the complex relationship between professional identity and academic optimism.

The results of this study are centered around improving teacher well-being. This study aims to recommend policies and possible practices that could further develop their professional identity.

For Teachers. Workshops that focus on emotional resilience, stress management, teacher reflection activities, and peer support networks can be observed to reduce and manage stress.

For School Administrators. Structured mentoring programs which can help newly hired teachers to adjust to the demands of the profession and can be practiced assisting teachers and help them navigate the complexity of their job. Team-building activities can also help teachers build peer networks and promote social support.

For Policymakers (Department of Education). Mindfulness and compassion-based interventions, structured breaks, training incentives, resilience-building initiatives and stress-management workshops can be utilized to enhance long-term well-being and improve professional development.

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Through Women's Eyes: Exploring the Lived Experiences of Women with PCOS and Their Mental Health: Literature Review

Xela Mae Rose L. Baguio

Abstract

Polycystic ovarian syndrome (PCOS) is the most common endocrine abnormality affecting women, especially among those of reproductive age (Nasiri Amiri et al., 2014; Azziz et al., 2016; Hoeger et al., 2020; WHO, 2023). This literature review probes into the lived experiences of women diagnosed with PCOS, particularly on the psychological impacts stemming from its physical symptoms through a feminist perspective emphasizing the role of societal expectations on traditional gender norms and femininity in the experience of such a condition. This review highlights the relationship between PCOS and mental health by looking into key concepts such as motherhood, fertility, body image, and femininity. Through exploring some of the symptoms like weight gain, hirsutism, menstrual and fertility issues, this review discusses the effects of these symptoms on body satisfaction, self-confidence, quality of life, and identity as a woman as influenced by expectations and norms of society and beauty standards. This review also examines the different coping strategies employed and the experiences with the healthcare system in seeking help for PCOS, alongside exploring the treatment and management of the condition. Examining the intersection of PCOS and mental health through a feminist lens underscores the goal of this study, which advocates for a holistic approach to treatment, emphasizes the psychological aspects of this condition, and seeks to hear the voices of these women. It also aims to explore their world, the society they live in, and the experiences that impact them.

Keywords: Polycystic Ovarian Syndrome (PCOS), Mental Health, Feminist Perspective, Body Image, Gender Norms

Introduction

It is estimated that 9.2% of women of childbearing age have polycystic ovary syndrome (PCOS), which is the most common endocrine disorder and one of the most common hormonal problems in women (Nasiri Amiri et al., 2014; Azziz et al., 2016; Hoeger et al., 2020; WHO, 2023). People often regard PCOS as a heterogeneous condition with varying presentations of unknown etiology (Anagnostis et al., 2018; Balen & Michelmore, 2002; Salehi et al., 2004). This condition is commonly characterized by a hormonal imbalance of excessive androgen levels and other characteristics that may include irregular or even absent menstruation, anovulation, hirsutism or unwanted body or facial hair, acne, presence of polycystic ovaries, insulin resistance, and infertility, among others (The Amsterdam ESHRE/ASRM-Sponsored 3rd PCOS Consensus Workshop Group, 2012; Witchel et al., 2020).

Being a chronic condition with no cure yet, this affects women throughout the timeline, which can emerge during adolescence, typically during puberty, and can be found until post-menopausal age, with its presenting symptoms varying among different age groups (The Amsterdam ESHRE/ASRM-Sponsored 3rd PCOS Consensus Workshop Group, 2012; Diamanti-Kandarakis, 2010; Hsu, 2013; Witchel et al., 2020; WHO, 2023; Wright et al., 2024). In addition, the primary presentation of this condition varies with ethnicity. According to a study by VanHise et al. (2024), compared to White women, women from Middle Eastern, Mediterranean, Indian, and South Asian backgrounds have a higher prevalence and severity of hirsutism. VanHise et al. (2024) also found that South Asian, Indian, and Norwegian women had a higher risk of metabolic syndrome, Hispanic and Mexican women had a higher risk of insulin resistance, and US Black women had a higher risk of high blood pressure. With that, PCOS is often described as a syndrome with varying presentations across ages and diverse ethnicities (Dewani et al., 2023; Hoeger et al., 2021; Jain et al., 2021; Wright et al., 2024).

In line with this, the diverse presentation of this condition could explain the challenges encountered, including the occurrence of delayed diagnosis (Anagnostis et al., 2018; Dewani et al., 2023; Hoeger et al., 2021; Mendoza & Reyes, 2022). There are various diagnostic criteria utilized; however, the Rotterdam criteria, published in 2003, is the most commonly used one both in the clinical and research settings (Anagnostis et al., 2018; Dewailly, 2016; Wang & Mol, 2017). This means that a person has PCOS if at least two of the three conditions listed below are present: (1) oligo- or anovulation, which means that their periods are irregular or don't come at all, which leads to irregular ovulation; (2) hyperandrogenism, which means that their blood tests show high levels of androgen; and (3) polycystic ovary or ovaries on ultrasounds (Mendoza & Reyes, 2022; Wang & Mol, 2017). In addition to that, PCOS is associated with various health risks and complications such as type 2 diabetes, hyperlipidemia, and cardiovascular disease (Anagnostis et al., 2018; Cobin, 2013; Palomba et al., 2015; Peigné & Dewailly, 2014), obesity, hyperandrogenism, and infertility (The Amsterdam ESHRE/ASRM-Sponsored 3rd PCOS Consensus Workshop Group, 2012; Hsu, 2013; Sidra et al., 2019), or even increased risk for cancer (Bates & Legro, 2013), specifically endometrial cancer (Azziz et al., 2016).

Stein and Leventhal's work with a group of seven women in 1935 is thought to be the first time PCOS was mentioned in writing. These women had problems with their periods, hair growth, and ovaries that were too big with too many small follicles (Azziz et al., 2016; Kovacs, 2022; Syzdlarska et al., 2016). However, Rodgers et al. (2019) mentioned Lesnoy to have originally published a description of PCOS in 1928, which described PCOS similarly to Stein and Leventhal. On the other hand, Syzdlarska et al. (2016) listed Vallisneri in 1721 as the earliest description of PCOS, which was said to involve white, shiny ovaries the size of a pigeon's egg. However, according to Kovacs (2022) and Meczekalski (2023), PCOS was evident dating back to ancient history in the work of Hippocrates (460-377 BC) with his description of women with menstruation that lasted less than three (3) days with a masculine appearance who do not seem to be worried about getting pregnant themselves. Considering that PCOS has been present and mentioned as early as ancient times with a high prevalence today, questions can be asked as to how this condition remains to be understudied (Stener-Victorin et al., 2024). Despite how common it is and how it affects women's health, this condition remains to be incompletely understood, with its etiology and pathogenesis continuing to be elusive or difficult to grasp (Hajam et al., 2024).

The lack of attention given to PCOS with its limited funding allocated for research contributes to the poor understanding of this condition

(Hopkins, 2024). This mirrors the state of women's healthcare, which reflects women's place in society (Schuiling & Likis, 2016, p. 3). Throughout history, women have been silenced and oppressed for simply being women in a patriarchy-dominated society (Kim, 2001; Houston & Kramarae, 1991). This is evident in various areas of life, including health and research, especially with women, who are a marginalized population, not often being heard (Radtke, 2017; Ussher, 2023). Therefore, women's resistance led to the emergence of the women's health movement in the 1960s and 1970s, coinciding with the second wave of feminism. This movement fought for the empowerment of women's knowledge, the control of their reproductive rights, and the reclamation of power in the medical community, which is predominantly dominated by males (Shai et al., 2021). So, the women's rights movement has long fought for women to have control over their bodies and health. One way they've done this is by pushing for women's voices to be heard in research that builds and analyzes knowledge about these things (Ellerman, 2012; Shai et al., 2021). In line with that, despite being the subject of criticism by Birn (1999) regarding how reproductive aspects were only a narrow focus on women's health, its importance is emphasized as being central to the fight for women's rights (Ussher et al., 2020). The biomedical model has been commonly used throughout history in examining women's health, especially their reproductive and gynecological health (Schuiling & Likis, 2016). Wade and Halligan (2004) say that this model ruled the 20th century with its main idea of reductionism, which says that all illnesses and symptoms are caused by something wrong with the body and not by mental problems or the person's situation. However, there are criticisms in line with such a model, which were expressed by Schuiling and Likis (2016), saying how the biomedical model risks reducing women to their biological parts, hence, losing their essence. In line with this, the biomedical model often reduces women's health to their reproductive health, which is related to the body's role in reproduction (WHO, 2024).

Hence, it is important to look at the perspective emphasizing women's health and PCOS holistically, not just emphasizing its biological aspect but also considering all others as well, such as psychological and social factors. Following that, PCOS is described as a highly gendered disorder wherein its symptoms violate the standard of femininity as constructed by Western ideals on what women "should be," such as thin, hairless, and fertile (Samardzic et al., 2021). Women's bodies have been the subject of discussion, and when they do not look or do not do the part expected of them, these are labeled as abnormal or pathological (Fabricius, 2020). Women who don't conform to these standards may be labeled as "disordered" or "the other," which is why they work hard to make themselves and their bodies fit society's standards while also dealing with a long-term condition (Bartky, 1997; Piran, 2017; Shildrick, 1997, as cited by Samardzic et al., 2021). This has been one of the main problems women face, as seen by postmodern or feminist theorists (Fabricius, 2020). With that, women living with PCOS are not only bothered by the clinical and medical aspects of such a condition, but this also affects their "womanhood," where its symptoms may be associated with physical unattractiveness and shame as a result of not living up to the standards of ideal femininity (Nasiri Amiri et al., 2014). With that, it adds to the emotional burden on women, thus affecting their psychosocial and emotional well-being through the disruption of their identity as women and resulting in lowered self-esteem (Nasiri Amiri et al., 2014).

When examining women's health conditions like PCOS, which are exacerbated by societal pressures and constructs that affect their mental well-being, it's crucial to consider not only the physiological symptoms of the condition, but also its complex interplay with society and femininity, taking into account its psychological aspects. Studies have found that despite PCOS being viewed as primarily an issue with one's physical health, various psychological consequences of this condition affect these women, entailing elevated mental health problems (Chaudhari et al., 2018; Ertugrul et al., 2025; Khan et al., 2025; Mousa et al., 2009; Weiss & Bulmer, 2011; Yin et al., 2020). Studies have found higher levels of depression, anxiety, body image issues, and psychological distress among women with PCOS (Athar & Javed, 2024; Alur-Gupta et al., 2024; Berni et al., 2018; Chaudhari et al., 2018; Cutler, 2019; Ertugrul et al., 2025; Istiqomah et al., 2023; Karsten et al., 2021; Khan et al., 2025). Mousa et al., 2009; Nasiri Amiri et al., 2014; Palomba et al., 2015; Williams et al., 2015; Witchel et al., 2019; Wright et al., 2020; Wright et al., 2024; Yin et al., 2020). With that, poor mental health is often cited as commonly experienced by women with PCOS, leading some to describe it as being part of the symptoms and the aspects of the condition itself rather than as an effect of such (Elghobashy et al., 2023; Nasiri Amiri et al., 2014). Hence, in an attempt to explore and understand better the experiences these women have with PCOS, it is important to look at the whole experience, especially the angle emphasizing the role of the environment and society with its norms that affected the said population. With the implications of the physiological symptoms of PCOS leading to the violation of various standards of society on femininity and beauty that affect these women in the psychological sense, one of the best ways of looking at the experience of PCOS and their mental health is through the feminist perspective. Feminist theory is diverse and consists of multidisciplinary approaches characterized by a never-ending discourse of criticism and analysis (Kiguwa, 2019; Radtke, 2017). Furthermore, it emphasizes diving into women's lived realities, highlighting the grounds where gender social norms are being contested, and advocating for efforts to change these and the treatment of women for the better (Kiguwa, 2019; Radtke, 2017; Ussher, 2023). With that, the feminist theories approach women's health holistically, considering the context of their lives, including hearing the lived experiences through women's voices in advocating for their agency since they are considered to be the experts of their stories (Schuiling & Likis, 2016).

This literature review argues that in order to comprehend and try to understand PCOS along with the complex interplay of its physical, emotional, psychological, social, and cultural aspects, there is a need to adopt a feminist perspective. This highlights the unique experience of being a woman and the role of such in the experience of having this condition. Social norms and cultural expectations of women's roles and how they affect their chronic condition could be examined. Additionally, incorporating a feminist viewpoint necessitates understanding how these women navigate through life, particularly in relation to their identities and society at large, as they grapple with the rigid standard of femininity, its psychological implications, and the clinical aspects of PCOS itself. Moreover, this is in consideration of how deeply ingrained various societal norms are in how these physical symptoms affect these women in the affective and mental aspects. Therefore, through the feminist lens, this review aims to amplify the voices of these women and shed light on their lived experiences to pave the way for a more holistic understanding of PCOS in the eyes of those who experience it themselves, going beyond its physiological implications.

The goal of this literature review is to look at and evaluate published articles and studies that talk about the real-life experiences of women who have been diagnosed with PCOS. It will focus on how the condition affects their mental health by looking at how the physical symptoms of the condition affect their femininity, stigma, body image, fertility, healthcare experiences, and the ways they deal with these things. In order to reach this goal, this review will look at the psychological effects that came from different physical symptoms of PCOS. It will also talk about how societal expectations of femininity cause problems for women with PCOS that affect their mental health. Additionally, the accompanying experience in the physician-patient relationship will be included, and the coping strategies that these women employ to manage their PCOS involve the impact of social support.

While there have been many studies and articles written about PCOS, most of them have focused on the medical aspects of the condition and haven't paid much attention to the psychological aspects. This has led to a primary focus on the clinical aspect of the condition's physical symptoms (Dewani et al., 2023). Hence, there is a need to consider as well the psychological implications of PCOS to pave the way for a more holistic examination of PCOS and its treatment and management. After all, although PCOS affects women across the globe, its impact extends beyond their physical health.

Additionally, with it being a stigmatized and highly gendered disorder, examining PCOS through the feminist perspective is important as well. This literature review uses a feminist lens to show how societal expectations, femininity, and the shame surrounding women's reproductive health and being a woman in general can make mental health problems worse for people with PCOS. Furthermore, intersectionality, as one of the tenets of feminist theory, dives into how gender, age, ethnicity, and culture can affect the lived experiences of these women diagnosed with such a condition (Aladin, 2024). Thus, as recommended by various studies, it is important to examine and add to the body of literature the lived experiences of women from different parts of the globe and different cultures. Hence, this review can add to the existing discourse regarding women's health by listening to these women themselves and examining their lived experiences to uncover how PCOS affects their day-to-day lives, physiological and psychological health, and ultimately, their femininity and identity.

Methodology

Selection Criteria

This literature review will focus on qualitative studies published in English roughly within the last 15 years or so (2009 to 2025) and are peer-reviewed. This is to ensure that the studies provide rich insights into the experiences of women with PCOS, including the most recent findings and perspectives in the body of knowledge. Hence, the studies that will be included only are those that explore the lived experiences of women with PCOS, particularly on its mental health implications and aspects of the said condition. This includes studies that commonly report various mental health outcomes among women with PCOS, such as depression, anxiety, body image issues, quality of life, and the like. In addition to that, studies examining the narratives of these women using a feminist perspective highlighting PCOS-related challenges as influenced by societal expectations and social construction of femininity are also included. This is to investigate how various standards of society, especially those that define femininity, including how one should look and how one should function, affect the mental health of these women. Studies and other publications that meet these criteria were the only ones included in the review process to meet the objective of this review in diving into the narratives of these women and their experience with PCOS, especially with how it affects them mentally and psychologically and their femininity and identity as a woman.

Search Strategy

The search strategy for this literature review involved a systematic search across multiple academic databases, including Google Scholar, Wiley Online Library, Sage Journals, and ProQuest. These platforms were selected for their broad coverage of peer-reviewed articles in psychology, health, and social sciences. A combination of keywords was used to locate relevant literature, including "PCOS," "lived experiences," "femininity," "body image," "coping strategies," "mental health," and "feminist theory." Boolean operators and quotation marks were applied to narrow the results and enhance relevance. The strategy aimed to identify studies that explore the psychological and sociocultural dimensions of PCOS from both clinical and feminist perspectives.

Selection Process

For this literature review, select various articles and studies of interest that focus on exploring the experiences of women with PCOS and the psychological aspect and implications of such a condition. Using the keywords provided, different databases were searched for studies in line with the topic of interest. The selection process involves selecting studies that meet the inclusion criteria, including studies that dive into the experiences of these women and their mental health, including those with findings on PCOS-related factors that affect their femininity, such as those related to depression, anxiety, body image, motherhood, and various societal expectations and standards. However, studies that focus on the biological and medical aspects of PCOS and the impact of such a condition on the physical health of these women will not be included. Studies were then selected based on the year they were published. To include the most recent and most updated findings of PCOS, mental health, and femininity, considering how there are a handful of studies that include such topics over the years, a fifteen-year range was decided.

The lack of longitudinal studies that could show how PCOS affects these women and their mental health over time is a major flaw in this kind of selection process. In addition to that, there is also a lack of comparative studies examining women across different cultures, socioeconomic statuses, or age groups, which is reflected in how various studies urge researchers to dive into the aspect of intersectionality in the experience of PCOS. Lastly, the lack of studies conducted in the Philippines examining PCOS and mental health, particularly those that utilize the feminist perspective, limits the scope of this review to include findings from the local setting.

Literature Review

PCOS, Mental Health, and the Feminist Framework

The Lived Experience of Women with PCOS and Mental Health

A bulk of research on PCOS is dominated by the medical perspective being too focused on its physical symptoms, underlying biological mechanisms, and corresponding pharmacological treatment (Khan et al., 2025; Lau et al., 2022; Weiss et al., 2011; Williams et al., 2015). Accordingly, PCOS is primarily an endocrine disorder, and most studies related to it have taken a quantitative approach, with only a few adopting a qualitative approach to explore the lived experiences of women with this condition (Pfister & Remmer, 2016; Weiss et al., 2011; Williams et al., 2015). In other words, there are many quantitative but only a few qualitative studies that give voice to women with PCOS and explore their lived experiences with the syndrome. Although PCOS is primarily considered a physical health issue, its risks go beyond that, hence entailing elevated psychological symptomatology as found in various studies (Chaudhari et al., 2018; Ertugrul et al., 2025; Khan et al., 2025; Mousa et al., 2009; Weiss & Bulmer, 2011; Yin et al., 2020). In living with PCOS, mental health is influenced by the interplay between various aspects such as biological, psychological, and social, as presented in the theory by Urie Bronfenbrenner and Stephen J. Ceci (1994 as cited by Wright et al., 2024). Studies have found that women with PCOS often experience elevated levels or increased risk for depression (Athar & Javed, 2024; Chaudhari et al., 2018; Cutler, 2019; Ertugrul et al., 2025; Nasiri Amiri et al., 2014; Palomba et al., 2015; Williams et al., 2015; Witchel et al., 2019; Wright et al., 2020; Wright et al., 2024; Yin et al., 2020), anxiety (Athar & Javed, 2024; Cutler, 2019; Ertugrul et al., 2025; Nasiri Amiri et al., 2014; Wright et al., 2020), body image issues (Alur-Gupta et al., 2024; Berni et al., 2018; Chaudhari et al., 2018; Karsten et al., 2021; Mousa et al., 2009; Samardzic et al., 2021; Williams et al., 2015; Yin et al., 2020), eating disorders, stress (Biswal, 2023; Khan et al., 2025), and isolation (Khan et al., 2025; Morshedi et al., 2021) among others. These are caused by the pressures of society's ideas about what it means to be a woman, which feeds the stigma surrounding the condition (Athar & Javed, 2024; Chopra et al., 2021; Khan et al., 2025; McKellar, 2015), making the physical symptoms of PCOS worse for these women. Therefore, this model demonstrates that comprehending the mental health consequences of PCOS necessitates a comprehensive, multi-faceted examination of the condition.

Depression is commonly cited in various studies examining the psychological consequences of PCOS symptoms (Athar & Javed, 2024; Chaudhari et al., 2018; Cutler, 2019; Nasiri Amiri et al., 2014; Palomba et al., 2015; Williams et al., 2015; Witchel et al., 2019; Wright et al., 2020; Wright et al., 2024; Yin et al., 2020). On the other hand, McKellar (2015) stated how depression is an unacknowledged symptom of PCOS itself, which was similar to Elghobashy et al. (2023)'s findings, wherein poor mental health was cited as the most common symptom experienced. Furthermore, in a study by Chaudhari et al. (2018), acne, one of the PCOS symptoms, contributes to increased depressive symptoms; this is contrary to the findings of Athar & Javed (2024)'s study, which attributed such an increase to weight gain and fertility issues, and Ertugrul et al.'s (2025) study, which attributed it to alopecia or hair loss and hirsutism or unwanted hair growth. In general, Elghobashy et al. (2023)'s study found that PCOS symptoms primarily affecting appearance, such as weight gain, hirsutism, and acne, were associated with low mood or depression, as well as a lack of self-worth. Williams et al. (2015) reported not only depression but also self-harm and suicide, topics rarely discussed in literature.

In addition to that, anxiety was also one of the most commonly located mental health issues associated with PCOS symptoms (Athar & Javed, 2024; Cutler, 2019; Ertugrul et al., 2025; Nasiri Amiri et al., 2014; Wright et al., 2020) compared to those women with infertility issues only (Cutler, 2019). Also, a study by Ertugrul et al. (2025) found that alopecia, along with infertility and irregular periods, was linked to a higher risk of anxiety. Chaudhari et al. (2018) also mentioned alopecia as a PCOS symptom. Similarly, Wright et al. (2020) noted these associations. In contrast, Cutler (2019) highlighted hirsutism as the primary factor contributing to anxiety. In line with this, hirsutism was described to be the most disturbing of the symptoms, as found in the study by Wright et al. (2020), with the stress that comes from unwanted hair growth with its demand on one's money, time, and energy in an attempt to hide it. Aside from that, with PCOS being a chronic condition, this also contributes to a lower quality of life, as found in the studies by Istiqomah (2023), Nasiri Amiri et al. (2014), Sidra et al. (2019), and Weiss & Bulmer (2011). Stress over body image and eating disorders (Alur-Gupta et al., 2024; Berni et al., 2018; Biswal, 2023; Chaudhari et al., 2018; Karsten et al., 2021; Khan et al., 2025; Mousa et al., 2009; Yin et al., 2020) and more mental distress (Istiqomah et al., 2023) are some of the psychological effects of PCOS symptoms.

Femininity and PCOS

Dealing with PCOS was described as not exactly painful, physiologically speaking; rather, it is the accompanying emotional and mental issues that can be burdens heavy enough to carry (Nasiri Amiri et al., 2014). Studies by Athar & Javed (2024), Nasiri Amiri et al. (2014), Chopra et al. (2021), Elghobashy et al. (2023), McKellar (2015), Pfister & Rømer (2016), Samardzic et al. (2021), Ting (2018), Weatherhead (2024), Weiss & Bulmer (2011), Williams et al. (2015), and Wright et al. (2020) all found that different PCOS symptoms often went against societal expectations of what it means to be a woman. Women who have PCOS often feel "abnormal" because their symptoms often go beyond what is considered normal for women and make them feel like men (Nasiri Amiri et al., 2014; Pfister & Rømer, 2016; Samardzic et al., 2021; Ting, 2018). Hormonal problems, weight gain, alopecia, hirsutism, and acne are some of the symptoms that can make people feel "unfeminine" and "freak" (Elghobashy et al., 2023; McKellar, 2015; Nasiri Amiri et al., 2014; Samardzic et al., 2021; Ting, 2018; Weatherhead, 2024; Weiss & Bulmer, 2011; Wright et al., 2020). In a study by Chopra et al. (2021), women even described themselves as "ugly" due to these symptoms.

According to the rigid definition of femininity concerning motherhood, one of the main functions of being a woman is hampered by fertility issues, which is one of the primary concerns associated with PCOS (Weatherhead, 2024). With PCOS cited as the leading cause of infertility by WHO (2023), it is no wonder that infertility was found to be the primary source of the struggle that these women face. According to Weatherhead's (2024) study, women often discover their PCOS diagnosis due to its symptoms, unlike Istiqomah et al. (2023) who found that menstrual irregularities were the first symptom they encountered. Furthermore, studies by McKellar (2015), Samardzic et al. (2021), Sharma & Mishra (2017), Ting (2018), and Weatherhead (2024) have shown that fertility issues can lead to women losing their identity and feeling less of a woman when faced with the possibility of not being able to bear a child in the future, as it does not align with societal expectations, particularly for married women. Furthermore, Elghobashy et al.'s study from 2023 revealed that these women experienced feelings of shame and guilt, which in turn strained their relationships and social status. Hence, motherhood as disrupted by fertility issues from PCOS ultimately affects their womanhood of being a mother, which is closely tied to the identity of being a woman (Samardzic et al., 2021; Weatherhead, 2024). Additionally, women commonly view menstruation as a symbol of womanhood, closely associated with reproductive health and fertility (McKellar, 2015). According to Sharma and Mishra's (2017) study, talking about periods is taboo in India. Because of this, PCOS is called a taboo disease, which makes people feel ashamed and embarrassed.

Contributing to these as well are the symptoms of PCOS, mainly affecting one's appearance, which were of primary concern because they are more visible to other people (McKellar, 2015), even if these symptoms were often overshadowed by fertility issues as demonstrated by the lack of clinical attention given to peri-postmenopausal women with PCOS even if comorbidities such as type 2 diabetes and depression were still present (Wright et al., 2024). Nonetheless, according to Weatherhead (2024), with similar findings as Athar & Javed (2024) and Samardzic et al. (2021), infertility coupled with unwanted facial hair and weight gain contributed to these feelings of not being feminine because failing to look and do their part as women can make them feel less as a person and contribute to feelings of insecurity for failing to conform to the expectations set by society. This was supported by Weiss & Bulmer (2011), stating how dealing with PCOS-related symptoms that change one's appearance was described as traumatic, especially for young women, who are in their late teens and early 20s, including those transitioning from girlhood to adolescence (Samardzic et al., 2021), which were said to be at the peak of awareness of their body image. Among these symptoms, women most often complained about having unwanted body or facial hair (Weiss & Bulmer, 2011), which can lead to low self-esteem and confidence (Nasiri Amiri et al., 2014) and self-worth (Ting, 2018). Hirsutism, which is so traditionally male, was often called "unfeminine" (Wright et al., 2020), which added to their sense of being a normal woman (McKellar, 2015).

Overweight is another sign of PCOS that can change how someone looks. It happens to eight out of ten women with PCOS (McKellar, 2015), and this has been found in many studies (Weiss & Bulmer, 2011; McKellar, 2015; Wright et al., 2020). On top of that, women were being blamed for the worsening of their PCOS symptoms since they were said to hold control of losing weight, hence, adding to their struggle (Athar & Javed, 2024). Therefore, these commonly cited symptoms were among the primary concerns of women with PCOS, particularly when they clashed with the ideal standards of beauty upheld by Western societies, which associate beauty with being thin and hairless (Elghobashy et al., 2023; McKellar, 2015). Then, even if these women are aware of how unrealistic femininity norms are, this does not remove the emotional burden brought about by stigma concerning these symptoms of PCOS (McKellar, 2015) affecting their self-concept and body image (Samardzic et al., 2021; Williams et al., 2015).

The study by Nasiri Amiri et al. (2014) also found that negative social reactions, such as being embarrassed by comments about their weight or body appearance, have even affected how they interact with others. As the study by Nasiri Amiri et al. (2014) demonstrated, their experience with PCOS, particularly in relation to irregular periods, influenced their participation in various activities and social interactions. Additionally, it led them to isolate themselves due to their dissatisfaction with their body's appearance. However, in the study by Chopra et al. (2021), these withdrawals were the result of physical restrictions, such as side effects of medications, on top of mental restrictions, such as feelings of embarrassment.

PCOS Management: Healthcare Experience and Coping Strategies

When symptoms of PCOS began to be felt by these women, they tried coping by dealing with the problem directly and seeking professional help in the healthcare system (McKellar, 2015; Pfister & Rømer, 2016; Samardzic et al., 2020; Weiss & Bulmer, 2011; Williams et al., 2015), especially in dealing with its biological symptoms such as fertility (Ting, 2018). However, frustration was often used to describe this kind of experience, as seen in the research by Chopra et al. (2021), McKellar (2015), Weiss & Bulmer (2011), and Williams et al. One of the contributing factors described was clinicians lacking knowledge about the condition itself and its management, resulting in inadequate delivery of information and thus failing to give those women the means to have control over their health and condition (Athar & Javed, 2024; McKellar, 2015; Pfister & Rømer, 2016; Samardzic et al., 2020; Ting, 2018; Weiss & Bulmer, 2011). In addition to that, other studies found how these women commonly experience being dismissed by their physicians who do not take their symptoms seriously (Pfister & Rømer, 2016), making them feel as if their symptoms were not real (Williams et al., 2015). This was experienced especially for adolescents, according to the study by Samardzic et al. (2020), where physicians just brushed off the presenting symptoms of these young women, saying how they would just grow out of them, and were just told to come back when they would want to have children themselves (Samardzic et al., 2021; Soucie et al., 2020). On the other hand, contributing to such dismissal from physicians is rooted in the idea that women are considered less credible sources, thus having their reported symptoms brushed off, saying how they are just "female" problems, implying their insignificance (Athar & Javed, 2024; Samardzic et al., 2021).

Aside from that, these physicians were often described as lacking empathy and care when their focus revolved too much around fertility issues, often neglecting other concerning symptoms of PCOS such as weight gain and hirsutism since these are not necessary for reproduction (Weiss & Bulmer, 2011; Wright et al., 2024). This contrasts with the findings of McKellar's (2015) study, which highlighted the physicians' excessive focus on weight. Furthermore, Samardzic et al.'s study from 2021 revealed that some physicians frequently blamed these women for the negative effects of PCOS symptoms, attributing their weight gain and inability to lose weight to poor diet and hirsutism, which were influenced by their ethnicities. These findings aligned with those of studies conducted by Athar & Javed (2024), Pfister, G., & Remmer, K. (2016), Samardzic et al. (2021), and Soucie et al. (2020).

Due to the dissatisfaction experienced with the help received from these physicians, women opted to take matters into their own hands (Athar & Javed, 2024). The studies by Pfister & Rømer (2016), Soucie et al. (2020), Williams et al. (2015), and Wright et al. (2024) show that they were unhappy with the information they got from their doctors. They did their own research to learn more about their condition and make plans for how to better handle it. Furthermore, Williams et al. (2015) sought this information from other women experiencing PCOS, while Soucie et al. (2020) turned to the Internet.

Furthermore, managing symptoms directly also necessitates modifying one's diet and overall lifestyle (Ting, 2018; Weiss & Bulmer, 2011). Making changes in one's diet and lifestyle was described by some to be not that hard since these are ways of becoming healthy and, hence, do not involve many adjustments (Weiss & Bulmer, 2011). With that, some became successful in managing their symptoms and gained a sense of control over their condition (Ting, 2018). However, for others, doing so was quite difficult since it was quite difficult to lose weight even with exercise, and these women even experienced feelings of guilt in consuming food (Weiss & Bulmer, 2011). Also, even sticking to the routine of removing unwanted hair, especially on one's face, can be quite taxing as well since this hair would just grow right back (Pfister & Rømer, 2016; Weiss & Bulmer, 2011).

Alternatively, some women employed coping strategies, such as humor, to indirectly address their concerns and symptoms, as documented in studies by Istiqomah et al. (2023) and Pfister & Rmer (2016). These women would make light of their excessive facial hair growth as a coping mechanism for the negative experiences associated with this unwanted growth. However, such a strategy requires tremendous self-confidence in overcoming the challenge that comes with that symptom (Pfister & Rømer, 2016). Others resorted to covering their faces or bodies either with makeup or hiding their bodies altogether, especially when having physical education classes (Pfister & Rømer, 2016). Wright et al. (2024) say that other strategies include choosing to change your mindset by either resigning to an unpleasant situation that you can't change or positively reframing a situation that you find difficult to see in a more positive light. In addition, women in Islam and Christianity used prayer and faith to manage PCOS symptoms (Ting, 2018).

In addition, individuals frequently sought out social support to cope with the symptoms of PCOS and manage the condition. These were commonly reported coming from their family, significant others or male partners, close friends, even connections or networks formed online through social media, or from women dealing with PCOS themselves, or from their community (Athar & Javed, 2024; Chopra et al., 2021; Istiqomah et al., 2021; Ting, 2018). However, even though social support can be quite helpful, social prejudice and stigma stemming from various misconceptions about PCOS hinder their access to healthcare (Athar & Javed, 2024). Hence, this calls for raising awareness of such a condition in hopes of lessening, if not removing, its associated stigma as well as advocating for a deeper understanding of the condition to better educate those with PCOS, the physicians dealing with such a condition, and the community in general and calling for better treatment of women in the healthcare system and in society.

Discussion

This literature review goes into great detail about the experiences of women with Polycystic Ovary Syndrome (PCOS), focusing on how different it is and how complicated physical symptoms, mental health, being a woman, and ways of coping are. The synthesis of themes demonstrates how PCOS can significantly affect women's health, which is often expressed through depression and anxiety (Athar & Javed, 2024; Chaudhari et al., 2018; Cutler, 2019; Ertugrul et al., 2025; Nasiri Amiri et al., 2014; Palomba et al., 2015; Williams et al., 2015; Witchel et al., 2019; Wright et al., 2020; Wright et al., 2024; Yin et al., 2020) among other psychological symptomatology associated with the condition. The social idea of femininity and how it interacts with the physical symptoms of PCOS (Athar & Javed, 2024; Weiss & Bulmer, 2011; Nasiri Amiri et al., 2014; Chopra et al., 2021; Elghobashy et al., 2023; McKellar, 2015; Pfister & Rømer, 2016; Samardzic et al., 2021; Ting, 2018; Weatherhead, 2024; Williams et al., 2015; Wright et al., 2020). This affects these women and their identity (McKellar, 2015; Samardzic et al., 2021; Sharma & Mishra, 2017; Ting, 2018; Weatherhead, 2024) as well as how they see themselves and their bodies (Athar & Javed, 2025; McKellar, 2015; Samardzic et al., 2021; Williams et al., 2015).

The physiological symptoms of PCOS, especially those that affect appearance, have implications on their "womanhood" as they fail to live up to the standards set by society on beauty involving being thin and hairless to not look "manly" (Athar & Javed, 2024; Chopra et al., 2021; Elghobashy et al., 2023; Nasiri Amiri et al., 2014; McKellar, 2015; Pfister & Rømer, 2016; Samardzic et al., 2021; Ting, 2018; Weatherhead, 2024; Weiss & Bulmer, 2011; Williams et al., 2015; Wright et al., 2020). Fertility problems, which are one of the main problems women with PCOS face (Weatherhead, 2024), also make them feel less of a woman because they can't have children (McKellar, 2015; Samardzic et al., 2021; Sharma & Mishra, 2017; Ting, 2018; Weatherhead, 2024). Hence, with the impact of the various physiological symptoms of PCOS, particularly appearance-changing symptoms and fertility issues, through failing to look the part and function as a "woman" according to the ideals of femininity set by society, these affect these women's mental health as it adds to their emotional burden by resulting in lowered self-esteem (Nasiri Amiri et al., 2014), increased feelings of insecurity (Athar & Javed, 2024; Samardzic et al., 2021; Weatherhead, 2024), thus affecting their self-concept and body image (Samardzic et al., 2021; Williams et al., 2015). Therefore, it is crucial to examine the psychological aspects of women's experiences with PCOS from a feminist perspective. Thus, these findings emphasize that examining the experiences of these women with PCOS can benefit from being explored through a feminist framework, seeing how deeply ingrained various societal norms are in how these physical symptoms affect these women in the affective and mental aspects.

Various studies recommend examining the lived experiences of women with PCOS in different cultures and societies, considering the significant role society and culture play in shaping these experiences. Additionally, this review highlights the need for examining the spiritual aspects of PCOS and its coping mechanisms as well since there are cultures and societies deeply immersed in their spiritual beliefs and the like. Aside from that, with the bulk of literature often prioritizing the biological or medical aspects of PCOS, there is a need for studies to examine the experiences of women through their own eyes and their perspectives on how they deal with the condition's accompanying psychological aspects. Aside from that, considering how various factors such as socioeconomic status, educational attainment, gender, culture, and age group (adolescence, adult, post-menopausal) can have different implications on the experiences of women with PCOS but are often unexplored by these studies (Elghobashy et al., 2023; Pfister & Rømer, 2016), future studies should investigate the role that these factors or intersectionality play in such a condition. In addition to that, more diverse samples and exploring PCOS through the intersectional lens are recommended by various studies as well (Nasiri Amiri et al., 2014;

Samardzic et al., 2021; Soucie et al., 2020; Weatherhead, 2024; Weiss & Bulmer, 2011; Wright et al., 2020).

The implications of this review extend beyond its contribution to the expanding body of knowledge and the consolidation of literature. It encompasses a holistic view of PCOS, taking into account its psychological aspects and the impact of societal constructs of femininity. This would then pave the way for improved treatments and management of these women's conditions, enabling the healthcare system to better address their concerns and needs, particularly regarding their psychological health and well-being. This holistic approach would take into account the physiological and psychological consequences of PCOS, as well as the impact of societal expectations on being a woman.

Conclusion

Therefore, this literature review highlights the critical need to understand the lived experiences of women with PCOS and explore such through a feminist lens. This is to examine PCOS holistically, which includes the aspects often overlooked by most of the studies conducted—its psychological and emotional impacts. This review highlights a gap in existing literature by revealing that many women struggle with their mental health, often overshadowed by the biological and medical aspects of PCOS. Moreover, societal norms and expectations intensify the experiences and concerns of these women, particularly in relation to their femininity, identity, and body image, areas that are often overlooked by various studies.

This literature review aims to fill in that gap by including studies that look at the topic from a broader perspective, covering psychological aspects as well as different mental health effects. This review also lists and summarizes the studies that have been done on PCOS, mental health, and femininity over the years. This highlights the importance of viewing PCOS as more than just an endocrine disorder mainly affecting women physiologically and advocates the exploration of their experiences through their eyes, using a feminist perspective. With that, future studies could explore the mechanisms that underlie these findings, including the aspect of intersectionality concerning how race, class, and gender can have different implications on the experiences of these women. Additionally, local studies conducted in the Philippines could also be added to the body of knowledge to contribute to a more diverse sample and context of this study, as the country is home to different rich cultures across the archipelago. In general, by giving voices to women with PCOS from various cultures and backgrounds as well as addressing the stigma and mental health implications that come with such a condition, women across the globe can be empowered by giving them a platform to be heard and giving them more control over their health and their bodies.

Ultimately, the goal is to pave the way for the development of various psychological treatments, in addition to managing the physiological concerns associated with PCOS. With that, it advocates for the development of more holistic and targeted interventions that do not narrowly focus on one aspect only since such a condition is ingrained in one's experience, in a woman's experience, which is so multifaceted that it requires viewing it through the lenses of physiological, psychological, social, and cultural. Also, with increasing awareness of the condition, this could pave the way for the development and implementation of policies that could help improve these women's experience in seeking help professionally and in managing their condition and its corresponding experiences as well.

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From Likes to Career Strikes: Why Early Professionals Turn to Virtual Social Networks – A Qualitative Insight

Retche P. Colegado

Abstract

This qualitative study investigates the motivations of early career professionals for engaging with virtual social networking sites (VSNSs) and examines their role in personal and professional development. Guided by the Uses and Gratifications Theory (UGT), the study draws on semi-structured interviews with early career professionals from a higher education institution in Southern Philippines. Five key themes emerged: entertainment and coping mechanisms, resource access, professional networking and growth, social support and community, and personal-professional balance. Entertainment was a primary motivator, with participants using VSNSs to relieve stress and mitigate feelings of social exclusion, aligning with UGT's entertainment gratification. VSNSs also provided practical utility for accessing academic and professional resources, supporting knowledge sharing and career growth. Professional networking and growth were central, as participants leveraged virtual platforms to expand their networks, pursue opportunities, and adapt to new professional environments. Additionally, virtual communities offered social support, fostering self-efficacy, motivation, and emotional encouragement. A recurring challenge was balancing personal and professional identities online, prompting participants to implement strategies such as managing digital footprints and creating separate accounts. This study fills a gap in understanding how early-career professionals in the southern Philippines integrate VSNs into career strategies, offering insights into the evolving intersection of digital professionalism, career self-management, and personal well-being. The findings underscore the need for digital literacy training, professional identity management strategies, and organizational support in leveraging VSNs for career growth.

Keywords: Career Development, Digital Identity Management, Motivation, Uses and Gratifications Theory (UGT), Virtual Social Networking (VSN)

Introduction

The rise of virtual social networks (VSNs) has significantly transformed how individuals communicate, share information, and engage with one another. Platforms initially designed for social interactions, such as LinkedIn, Twitter, and Instagram, now play pivotal roles in professional development, personal branding, and career advancement (Bret & Willet, 2023; Urdaneta-Ponte et al., 2023; Ruparel et al., 2020; Davis et al., 2020; Bridgstock, 2019). As technological advancements reshape the professional landscape, young professionals increasingly turn to VSNs to overcome early career challenges, expand their networks, and enhance visibility in competitive job markets (Jung et al., 2023; Khousa & Atif, 2017; Allan & Lewis, 2016).

While the widespread adoption of VSNs has broadened opportunities for networking and information exchange across time and space (Fuciu, 2019), most existing studies have focused on their use among college or university students (Gonzalez & Deng, 2023; Niraula & Bohora, 2023; Meşe & Aydin, 2019; Kim et al., 2011; Hung & Yuen, 2010). This leaves a notable gap in understanding the specific motivations, experiences, and impacts of VSNs on early-career professionals, particularly in the Philippines. To address this gap, the current study explores how and why early-career professionals adopt virtual social networks as tools for career development, particularly in higher education settings.

This study was conducted at Bukidnon State University (BukSU), a premier institution in the southern Philippines. Serving students from the cities of Malaybalay and Valencia, as well as several municipalities, BukSU experiences a significant increase in enrollment, particularly during the first semester of each academic year. Consequently, the demand for early-career professionals remains high. Preliminary interviews indicate that many professionals rely on virtual social networks (VSNs) to stay informed about job opportunities, access recruitment announcements, and track industry trends. These platforms provide immediate, cost-effective, and convenient tools for career exploration, allowing professionals to identify opportunities that might be overlooked through traditional channels, such as physical job boards or career fairs. To better understand this phenomenon, this study applies the Uses and Gratifications Theory (UGT), which examines how individuals actively engage with media to fulfill specific needs. In this context, UGT helps explain how early-career professionals utilize VSNs to satisfy career-related needs, such as job searching, professional networking, and industry awareness.

This study provides qualitative insights into the motivations of early-career professionals who utilize VSN. By examining their experiences, the research highlights the evolving role of virtual social networks in shaping career trajectories. It underscores how these platforms bridge the gap between personal engagement and professional success.

The Uses and Gratifications Theory (UGT) provides a valuable lens for understanding early career professionals› engagement with Virtual Social Networks (VSNs) by focusing on the motivations behind their usage. UGT posits that individuals actively use media platforms to fulfill specific needs, including entertainment, information seeking, social interaction, and personal identity management (Katz, Blumler, & Gurevitch, 1973). This study adopts UGT to examine how early career professionals effectively leverage VSNs to navigate their professional and social landscapes.

A key component of UGT is the concept of personal identity, which relates to individuals' use of media to reinforce their self-concept and express their values (McQuail, 2010). In the context of VSNs, professionals engage in strategic self-presentation, curating their online personas to align with industry expectations and enhance career prospects. Platforms like LinkedIn serve as digital portfolios, enabling users to showcase their expertise and professional accomplishments (Kleppinger & Cain, 2015). This process reinforces personal identity and establishes credibility within professional communities.

Integration and social interaction represent another critical dimension of UGT, highlighting the role of media in facilitating relationships and fostering a sense of belonging (Rubin, 2002). Early career professionals utilize VSNs to expand their professional networks, engage in industry discourse, and seek mentorship opportunities. These interactions contribute to professional development by providing access to valuable insights, career advice, and peer support (Hayes et al., 2024). Additionally, social networking platforms enable users to maintain connections with colleagues, strengthening professional ties and enhancing career mobility.

Entertainment remains a fundamental gratification sought through VSN engagement as individuals turn to these platforms for stress relief and leisure. Many participants in this study reported consuming humorous or lighthearted content to alleviate workplace stress, demonstrating how VSNs serve as a coping mechanism for maintaining work-life balance. The entertainment dimension of UGT explains why professionals engage with content that offers relaxation and escapism, reinforcing their overall well-being and productivity.

Information seeking is another core tenet of UGT that underscores why early career professionals utilize VSNs to stay informed about industry trends, job opportunities, and professional resources. Platforms like LinkedIn, Twitter, and Facebook serve as knowledge repositories, allowing users to access articles, webinars, and discussions relevant to their fields (Zhitomirsky-Geffet & Bratspiess, 2015). By facilitating knowledge acquisition and skill development, VSNs empower professionals to make informed career decisions and remain competitive in their industries.

By examining these motivations, UGT highlights how VSNs serve as dynamic tools for fulfilling professional and personal gratifications among early career professionals. The theory's emphasis on active media use aligns with the agency exhibited by individuals in selecting platforms and content that cater to their evolving professional needs. Thus, UGT is an appropriate framework for this research, as it elucidates how early career professionals strategically engage with VSNs to enhance their career trajectories, personal identity, and social networks.

Early career professionals increasingly utilize virtual social networks (VSNs) like LinkedIn to enhance their professional visibility and expand their networks (Korzynski, 2014). These platforms are vital tools for job searching, networking (Hayes et al., 2024), and professional development, enabling users to connect with industry peers, mentors, and potential employers (Zhitomirsky-Geffet & Bratspiess,2015; Korzynski, 2014). Research indicates that motivations for using these networks often include self-promotion, maintaining professional relationships, and seeking job opportunities. For instance, a study highlighted that a significant percentage of graduating college seniors actively used social networking technologies (SNTs) to research employers and discuss job openings (Nurhayati et al., 2022; Sharma, 2023).

Moreover, the effectiveness of VSNs in career advancement is underscored by the perception among users that employers actively search for online profiles during recruitment processes (Karayigit & Parlade, 2023).

Employers increasingly use social network profiles to screen job applicants, influencing how individuals present themselves online (Ocansey et al., 2018). This awareness drives professionals to curate their online presence meticulously, aligning their profiles with industry standards and personal branding strategies. The interplay between social networking and career development reflects a shift in how early career professionals approach job searching, emphasizing the importance of digital footprints in today's competitive job market.

Another significant motivation for early career professionals using VSNs is the pursuit of information and knowledge sharing (Rijn et al., 2013). Platforms like Twitter and Facebook are often leveraged to stay updated on industry trends, research developments, and best practices. Users frequently engage with content that enhances their understanding of their fields or provides insights into new methodologies. For instance, studies have shown that Twitter is particularly favored for information-seeking among professionals who wish to remain current in their areas of expertise (Salehan et al., 2017).

Additionally, VSNs facilitate sharing professional interests and achievements, allowing users to disseminate valuable information to their networks. VSNs enable professionals to create virtual communities that facilitate networking and the exchange of domain-specific knowledge. This is particularly valuable in healthcare, where professionals use social media to share clinically relevant information and make informed practice decisions (Rolls et al., 2016; King, 2011). This fosters a culture of collaboration (García-Martínez et al., 2020; Lin et al., 2016) and enhances individuals' visibility within their professional communities. By sharing articles, participating in discussions, and showcasing accomplishments, early career professionals can establish themselves as knowledgeable contributors to their fields.

The role of VSNs in fostering social interaction and community building (Dunsmore et al., 2022) cannot be overstated. Early career professionals often use these platforms to connect with peers with similar interests or challenges, creating supportive environments to exchange ideas and experiences (Soronen & Koivunen, 2022). This sense of belonging is crucial for individuals navigating the complexities of starting their careers. The ability to interact with others facing similar situations can provide emotional support and practical advice.

Furthermore, VSNs enable users to participate in virtual communities beyond geographical limitations. For instance, Twitter chats provide a platform for educators to engage in real-time discussions, enhancing their learning experiences by connecting with peers globally (Delello & Consalvo, 2019; Adjapong et al., 2018). It also provides a dynamic environment for educators to engage in professional conversations, share experiences, and learn from peers. This engagement is crucial for ongoing professional development, as it allows participants to stay updated with current trends and practices in their field (Seger et al., 2017). Virtual communities of practice (CoPs) and networked learning communities, for example, facilitate the sharing of resources, experiences, and methodologies, enhancing participants' knowledge and skills (Wilmott & Knox, 2014). These communities can be centered around specific professions, interests, or goals, allowing members to collaborate on projects or share resources. The resulting network enhances professional relationships and contributes to personal development through shared learning experiences.

Self-documentation is another key motivation driving early career professionals to engage with VSNs. Many users view these platforms as a means to document their professional journeys, showcasing milestones such as completed projects, certifications, or conference participation (Dunn, 2019). This practice serves as a personal record and functions as a tool for self-promotion within their networks. Online platforms like LinkedIn and Instagram are vital for promoting one's brand, allowing individuals to share knowledge, engage with audiences, and manage their digital reputation (Vartanov.& Khvorostyanaya (2023. The process of documenting their career journey on VSNs allows professionals to reflect on their achievements and challenges, contributing to a more cohesive career self-concept (Dunn, 2019)

Personal branding involves effectively managing perceptions, controlling how others perceive and think of you, and ensuring that your digital presence aligns with your professional goals (Kleppinger & Cain, 2015). The emphasis on personal branding has led many professionals to curate their online personas carefully. By strategically sharing content that reflects their expertise and interests, users can influence how they are perceived within their industries. This proactive approach to personal branding can significantly impact career opportunities, as potential employers often evaluate candidates based on their online presence.

As early career professionals increasingly rely on VSNs for networking and job searching, ethical considerations surrounding digital footprints become paramount. Users must navigate the complexities of maintaining professionalism while engaging in social interactions online. Integrating personal and professional identities on social media can undermine digital professionalism. Professionals often struggle to maintain distinct boundaries between these identities, which can affect their professional image (Melão & Reis, 2021). There is an ongoing discourse about the implications of employers accessing personal profiles during recruitment processes—many candidates are unaware of how their online activities may affect hiring decisions (Branislav, 2022; Synowiec, 2021).

Moreover, managing one's digital footprint involves being mindful of content shared on social platforms. Social media posts exist indefinitely, and even deleted content can impact one's reputation (Benson & Filippaios, 2010). Unprofessional online behavior can damage personal and institutional reputations. For instance, inappropriate content shared by healthcare professionals can lead to public scrutiny and professional consequences (Guraya et al., 2022). Thus, professionals need to strike a balance between showcasing personality and maintaining a professional image. Understanding the potential long-term consequences of online behavior is essential for early career professionals aiming to build sustainable careers while leveraging the benefits of VSNs.

Methodology

This study employed a qualitative research approach to explore the experiences and motivations of early-career professionals in utilizing virtual social networks (VSNs) for career development. Purposive sampling was used to select 10 early-career professionals (0–5 years of experience) from Bukidnon State University (BukSU), ensuring participants actively engaged in professional networking or using VSNs. This sample size was chosen to allow for in-depth exploration while maintaining feasibility in data analysis. Data saturation was reached, as no new themes emerged from the final interviews, indicating that the sample size was sufficient for meaningful analysis.

Data collection occurred between July and August 2024 through semi-structured virtual interviews to ensure accessibility and participant comfort. The interview guide focused on three key areas: (1) motivations for using VSNs, (2) perceived benefits and challenges, and (3) their impact on career trajectories. Each interview lasted between 60 minutes and 1.5 hours and was audio-recorded with participant consent and then transcribed for analysis. All responses were anonymized to ensure confidentiality and ethical approval was obtained from BukSU's research ethics board.

The data were analyzed using thematic analysis, following Braun and Clarke's (2013) six-step approach: (1) familiarization with the data, (2) initial coding, (3) theme identification, (4) theme review, (5) theme definition, and (6) report writing. Inductive coding was applied, allowing themes to emerge organically rather than being predefined. Two independent coders reviewed the transcripts to enhance reliability, and discrepancies were resolved through discussion.

Table 1. *Profile of In-depth Interview Participants*

Pseudonym	Sex	# of service in the institution
Participant A	Male	Less than a year
Participant B	Male	5
Participant C	Male	2.5
Participant D	Female	5
Participant E	Female	2.5
Participant F	Male	2
Participant G	Female	3.5
Participant H	Female	2
Participant I	Female	2.5
Participant J	Female	5

The table shows that participants' tenure varies from less than a year to 5 years, with the majority (8 out of 10) having between 2 and 5 years of experience.

Results and Discussion

Based on the qualitative interviews, the motivations for early career professionals to engage in virtual social networking sites (VSNSs) can be categorized into five main areas: entertainment, resource access, professional networking and growth, social support and community, and personal-professional balance. These five categories highlight the diverse and evolving role of virtual social networks (VSNs) in shaping the career trajectories of early-career professionals. Rather than functioning solely as job search tools, VSNs serve as dynamic career ecosystems, offering real-time industry insights, fostering professional connections, and providing peer support and knowledge exchange spaces. They also help professionals navigate work-life integration, balancing career advancement and personal well-being. Moreover, career strategists can gain deeper insights into how digital platforms influence modern workforce behaviors by understanding these motivations.

Entertainment emerged as a primary motivation for VSN engagement. While the use of social media for entertainment is well-documented (Salehan et al., 2017; Rijn et al., 2013), this study highlights its unique relevance to professional development. Participants frequently engaged with humorous videos and lighthearted content to alleviate stress and discomfort, reinforcing the role of VSNs as accessible coping mechanisms in demanding work environments. Stress relief, in turn, supports overall well-being and productivity, allowing early-career professionals to maintain focus and motivation in their careers.

Additionally, the influence of peer pressure on VSN engagement aligns with existing research on the social dimensions of digital platforms (Korzynski, 2014). However, in the context of professional growth, this social engagement extends beyond mere inclusion—it fosters career-relevant discussions, exposure to industry trends, and informal learning opportunities. Thus, while entertainment-driven engagement may seem unrelated to career development, this study underscores its indirect yet meaningful impact on professional resilience, networking, and long-term growth. Consider how Participant E shared how he is navigating VSNs:

> "It is for entertainment for me. I watched funny videos to lighten up my mood. Peer pressure also drives me to register on social media because if you don't have an account, it is as if you are left out."
>
> -Participant E, Male, 2.5 years in service

Work-life balance is crucial for employee well-being and productivity across various professions (Rao & Sharma, 2018). When used strategically, Virtual Social Networks (VSNs) enable early professionals to manage stress, establish clear boundaries, and cultivate meaningful connections—all of which contribute to sustained productivity and overall well-being. To support this, organizations can implement targeted strategies that promote sustainable careers and enhance workplace social support, fostering a more balanced work environment (Kossek et al., 2014). Social support initiatives, in particular, are vital in reducing workplace stress, increasing job satisfaction, and improving overall organizational outcomes (Akinrole & Ojo, 2020). By effectively integrating well-designed policies and leveraging VSNs, organizations can empower employees to achieve a healthier and more sustainable balance between their professional and personal lives.

Resource Access was another significant motivator. Participants reported using VSNs to access academic resources, professional tools, and materials shared within online communities. This mirrors findings that VSNs play a crucial role in knowledge-sharing, particularly in domains like education and healthcare, where professionals use networks to access relevant resources (Rolls et al., 2016; King, 2011). Participant F shared:

> "I can access journals, studies, and other materials through platforms like Google Scholar. Some resources require payment, but there are groups where members generously share materials."

This highlights the growing role of virtual social networks (VSNs) as knowledge-sharing hubs, particularly for early-career professionals seeking academic and professional resources. It implies that VSNs democratize knowledge access as professionals can now have greater access to scholarly and industry-specific materials, reducing traditional barriers such as institutional paywalls and geographical limitations. It also bridges the gap between academia and practice as early career professionals find it challenging to transition from academic environments, especially since not all have an education course background. Also, universities can leverage

VSNs to expand access to official learning materials, webinars, and digital libraries.

Another motivation for early career professionals is 'Professional Networking and Growth (PNG).' The ability to engage directly with industry leaders, join professional groups, and showcase expertise through posts and endorsements makes VSNs essential for career advancement. Among early career professionals, platforms like LinkedIn are not just job search tools but strategic career-building spaces where individuals expand their networks, gain industry visibility, and position themselves for professional opportunities. Results align with research underscoring the importance of self-promotion and personal branding in competitive job markets (Nurhayati et al., 2022; Sharma, 2023). VSNs offer an alternative to traditional recruitment methods, allowing them to market their skills proactively rather than relying solely on job postings. For instance, Participants A and B narrated:

> "As a newcomer to the institution, I am expected to quickly adapt and build relationships with colleagues, correspondents, and clients. Virtual social networking sites have significantly expanded my personal and professional network in a fraction of the time it would take through face-to-face interactions."
>
> -Participant A

> "As a contract of service employee, I use VSNs to showcase myself and my skills online. Personally, I am using LinkedIn to read opportunities that I can work with especially if it's feasible for me. You know, employers are also searching online for recruitment"
>
> -Participant B

The increasing awareness that employers screen social media profiles during recruitment (Karayigit & Parlade, 2023; Ocansey et al., 2018) has significant implications for digital professionalism and online identity management. Early-career professionals are more mindful of curating their digital footprints, ensuring that their online presence aligns with their career aspirations. As the job market evolves, leveraging VSNs strategically will become a critical skill, reinforcing their role as indispensable tools for professional networking and long-term career growth.

Social Support and Community (SSC) was another recurring theme among the participants. Participants turned to virtual platforms to seek emotional support and practical advice, particularly when navigating major milestones like licensure exams or job searches. The crucial role VSNs play in fostering support and professional camaraderie is becoming evident. Platforms such as LinkedIn, Facebook groups, and professional forums serve as digital communities of practice (CoPs) where individuals seek guidance, share experiences, and gain reassurance during critical transitions, such as licensure exams or job applications. This aligns with existing research emphasizing how VSNs provide psychosocial support and knowledge-sharing opportunities (Dunsmore et al., 2022; Soronen & Koivunen, 2022). Beyond offering career insights, these communities function as safe spaces where professionals can discuss challenges, celebrate achievements, and build resilience in competitive work environments.

Participant F excitedly shared:

> "Virtual Social Networking Sites did expand my network at a certain point, particularly when I was preparing for the LET and searching for a job. It gave me access to people who were able to help me."

Similarly, Participant J shared how community interactions motivated her to pursue personal and professional growth:

> "By seeing the achievements of my friends and their inspirational posts, I felt encouraged and motivated to try new things."

Unlike traditional mentorship models, which often rely on hierarchical structures, online professional communities create decentralized, reciprocal learning environments where individuals at different career stages contribute insights. It implies that VSN's engagement reinforces the need for peer-driven mentorship and collaborative learning. VSNs provide early career professionals with opportunities to connect globally, share experiences, and enhance self-efficacy, as evidenced by studies on Twitter chats and networked learning communities (Delello & Consalvo, 2019; Adjapong et al., 2018; Wilmott & Knox, 2014).

Finally, Personal and Professional Balance (PPB) also emerged as a critical theme in the study. Although virtual social networks encourage early-career professionals to engage virtually, most agree that it has drawbacks. As they navigate online, they always need digital boundary management. Maintaining a separate personal and professional identity is a must. The result aligns with other research stating that early-career professionals practice personal branding and online reputation management (Kleppinger & Cain, 2015; Vartanov & Khvorostyanaya, 2023). Given that unprofessional content can negatively impact career opportunities (Melão & Reis, 2021; Benson & Filippaios, 2010), professionals are increasingly aware of how their digital footprints influence their employability and industry credibility. Below is the highlight of the narrative of Participant F, Female, 2 years in service:

> "I have two Facebook accounts—one for school purposes and the other for personal use. I keep them separate to maintain a boundary between my professional and personal life."

Participant J also described the struggle of balancing content, stating:

> "The challenge is balancing personal and professional content, especially on Facebook."

The increasing integration of virtual social networks (VSNs) into professional life necessitates a more strategic approach to online engagement. Professionals must balance authenticity with professionalism to maintain a positive and credible digital presence. Since employers frequently assess candidates' social media profiles, conscious content curation, and personal branding have become essential career skills. These findings underscore the critical importance of digital footprint management, as unprofessional online behavior can have lasting repercussions on career trajectories (Guraya et al., 2022; Branislav, 2022).

Conclusion and Implications

This study fills a critical gap in understanding how early-career professionals in the southern Philippines utilize virtual social networking sites (VSNs) for career growth, offering practical implications for academia and industry without further preliminary studies. Unlike prior research that primarily examined VSNs as job search tools, this study highlights their broader role in professional development, emphasizing how entertainment, social support, and identity management indirectly contribute to career advancement. The findings illustrate that professionals engage with VSNs for networking and resource access, stress relief, emotional support, and strategic online identity management. These insights underscore the growing importance of digital professionalism and the need for structured guidance in optimizing VSN use.

This study contributes significantly to the literature on VSNs and career development by integrating non-traditional factors—such as entertainment and identity management—into the discourse on professional growth. It expands prior research by demonstrating how early-career professionals strategically curate their online presence, engage in peer-driven knowledge-sharing, and balance personal and professional identities in digital spaces. Additionally, the study highlights the growing importance of boundary management, where professionals adopt specific strategies—such as using multiple accounts or curating content—to navigate their online identities. These findings contribute to the broader discussion on digital professionalism, career self-management, and the psychosocial impact of virtual networks.

Given the study's findings, universities and organizations should offer digital literacy and integrate social media professionalism into onboarding and career development programs to develop VSN's career strategies.

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Assessment of Core Competency Development: Insight From the Educators in an Online Learning

Glenda P. De Vera

Abstract

Competency describes the ability to execute a task or action with the necessary knowledge. In nursing, safe and quality care can be best executed by a competent nurse. Nursing competency development is a process that has to be refined over time. Skills training is initiated at the academe where nursing students are exposed to several nursing procedures. The nationwide outbreak of COVID-19 forced academic institutions to strategize curriculum delivery. It is through online classes that learning takes place for the majority of nursing students. Online classes tend to exert positive effects on knowledge, skills, learning attitudes, and confidence in performance. This study describes the assessment of core competency development among nursing students. It reflects the insights from the educators during the conduct of online classes. The core competencies identified were safe and quality nursing care, collaboration and teamwork, and ethico-legal responsibilities.

Methods. It is conducted in one of the University. This university has turned out several registered nurses. The respondents are rated by the Clinical Instructors. It registers a total of 229 enrolled junior students. Based on Cochran's formula for the sample size, 182 students were taken as respondents in the study. The study utilized descriptive method. It employed a stratified random sample technique to ensure that participants from each class section are represented. The items utilized in a modified researcher made questionnaire was adapted on core competency based on the Core Competency Standards of Nursing Practice in the Philippines. Expert validators were asked to examine and provide feedback to the tool. Pilot study was done to determine its reliability index. Ethical review process had been applied and certificate was granted to pursue the study,

Results. The ratings of the Clinical Instructors on the overall core competency of the respondent is satisfactory. This means that the core competencies on safe and quality nursing care, teamwork and collaboration and ethical-legal responsibility were moderately attained by the respondents.

Clinical placement experiences are an integral aspect of practice development for undergraduate nursing students however, the delivery of an online class limits the development of this core competency.

Conclusion. The experience with the online approach to delivering a competency-based curriculum has been challenging but successful. Faculty and student experiences have been positive. People view the redesigned curriculum as responsive to the competency-oriented environment. The nursing program measures a competency approach that focuses on learner performance and achieves learner outcomes in the field. The use of online learning helps facilitate cognitive processing of the students learning; however, it may limit the skill acquisition of the learner.
Keywords: competency, online learning, curricular delivery

Introduction

Nursing competency describes the core abilities required for fulfilling one's role as a nurse. It is important to clearly define nursing competency to establish a foundation for the nursing education curriculum. Measurement of competence differs between expectation, satisfaction and actual delivery of output. The recent shift of curricular delivery in achieving a competency-based approach remains a challenge. In the practice in the clinical area, important key competencies were considered: safe and quality nursing care, collaboration and teamwork, and ethico-legal responsibility. As nurses portray several roles, it is expected that quality care must be demonstrated. A profession that cares for people across all ages and stages in life and is responsible for health promotion, disease prevention and rehabilitation. The reliance on traditional models of clinical education was disrupted during the COVID-19 pandemic. Nevertheless, the changes and innovations adopted by nursing programs create an opportunity to evaluate the shifts in clinical course pedagogy (Thirsk et al, 2022).

The academe plays a primary role in the transition of educating nurses. The institution has to respond to significant challenges accompanied by the increasing demands in global health care. The current curriculum seeks to develop professional nurses who can assume entry-level positions in either healthcare facilities or community settings. The preparation of future nurses remains a significant concern as nurse graduates must adequately be equipped with competencies to meet the demands of the workplace and profession (Tan et al. 2018). The curriculum plays a crucial role in determining the objectives, educational content, and values that prepare nurses for the workplace.

The outbreak of the COVID-19 pandemic significantly disrupted the curricular delivery in higher education by forcing the transition to online learning, which became a mandatory teaching process during the lockdowns. The delivery of synchronous and asynchronous classes projects both positive and negative effects on learning. Synchronous online patient safety education improves nursing students' knowledge, attitudes towards patient safety and skills in patient safety. Nursing students expressed various positive aspects of the online education method. Simulation is effective for the development of some clinical skills (Thirsk et al, 2022). Nursing students positively accepted the method of online education for patient safety. Online education is helpful for nursing students to familiarize themselves with the concepts of patient safety (Cho et al., 2022). Faculty and students alike have developed strategies to enhance learning and develop the necessary competencies required. However, the specific challenge lies in skill development. The transition encouraged the exploration of strategies of e-learning, distance learning and virtual learning of sorts which are intended to limit physical contact between the student and faculty. It specifies the requirements of a given field of study and addresses which online learning approach is the most suitable. Outcome-Based Education emphasizes students' demonstration of learning outcomes (CHED, 2017).

With the current development of the curriculum, there is a need to align educational processes and systems with the expected results that students should be able to proficiently exhibit at the end of it. The outcome should be an authentic demonstration of expected competencies of significant learning experiences rather than grades or simply curricular completion (Fukada, 2018). There are similarities between face-to-face (F2F) and online learning, however, some differences are identified in several ways. The following similarities are identified such as the prerequisites for students such as advanced reading and comprehension of the subject matter and completion of group projects. The identified difference between online learning and face-to-face learning is the fact that online learning is student-centered and necessitates active learning while face-to-face learning is teacher-centered and demands passive learning from the students (Akpen et al, 2024).

With the changes and development in curriculum implementation and the challenges of the new normal, the researcher deemed it necessary to assess the input and processes involved in implementing the curriculum. Assessing students' competence against clear professional standards is crucial for ensuring they provide safe nursing care. It is therefore imperative to examine how institutional processes help in shaping student nursesto become globally competent.

Research Objectives

The study seeks to describe the competency level of nursing students in online learning. More specifically, the study described the contribution of each of these variables in the development of nursing competency and the transition experienced from face-face classes to online learning.

Research Problem

1. What is the respondents' performance in terms of the following core competencies?

   1.1. Safe and Quality Care
   1.2. Teamwork and Collaboration
   1.3. Ethical-Legal Responsibility

Significance of the Study:

The study helped the College understand the impact of online learning on competency development and the importance of strategies in enhancing nursing skills.

It serves as a basis for faculty to assess how teaching methods support student competency in the current learning modality.

For students, it encourages active participation and a clearer understanding of the dynamics of online learning.

Methodology

This study utilized quantitative descriptive research design. This design has their main objective the accurate portrayal of the characteristics of persons, situations and the frequency with which certain phenomena. The respondents are nursing students in one of the Philippine universities. This university has turned out several registered nurses. The university has been named as one of the nation's Top Performing Nursing School. As the term started, it registers a total of 229 enrolled junior students. 182 students participated in the study as respondents, using Cochran's formula for sample size. The study employed a stratified random sample technique to ensure that participants from each class section are represented. The respondents' class section served as the basis for the stratum. The following respondents meet the inclusion criteria for this study: (1) regular students enrolled in Academic year 2020–2021 as third-year students; (2) those who have experienced clinical and community exposure during their sophomore year; and (3) those who have completed an online course in which, as a result of the pandemic, virtual RLE clinical and community rotation is simulated.

The exclusion criteria of the respondents are the following: (1) irregular students who missed one term or semester due to financial and personal reasons; (2) failed in NCM 112 subject which is one of the core subjects in Level three; (3) missed to participate in RLE virtual simulation in an online class; (4) those who failed to answer the research instrument on the specified date prescribed. A researcher-made questionnaire was used to gather the information needed for the study.

The Clinical Instructor uses it to rate the respondents whom they had been mentoring during their junior years. Since the College utilized a team-teaching approach and as the first batch of students for the current curriculum, the Clinical Instructors had the chance to supervise them. This study's core competencies include safe and quality nursing care, teamwork and collaboration and ethical-legal responsibility. The Clinical Instructor utilizes a separate research instrument to evaluate the student competency to address the competency of the nursing students. The items adapted on core competency were based on the Core Competency Standards of Nursing Practice in the Philippines. The Board of Nursing Resolution no.112 Series of 2005 adopted and promulgated the core competency. The process of revisiting the nursing core competencies includes work setting scenario analysis, benchmarking with nursing core competencies of other countries, validation studies of roles and responsibilities, integrative review of outputs from validation strategies, presentation of the validation analysis, and core competency consensual validation (prc.gov.ph). Out of the 11 core competencies that were adapted only three were used in this study.

Reliability and Validity

Content and construct validity were checked by the experts in the field of academic and nursing profession. They were regarded as both nurse academicians and nurse administrators. Their expertise in the field of nursing both in academics and practice has been considered to gain more insights on the enhancement of research instrument.

Pilot testing was done on the research instrument through google forms to determine its reliability. A total of twenty (20) respondents were asked to answer the research instrument. Experts prepared and validated the instruments on which they were required to answer. This group of 20 respondents is excluded from the final list of the respondents.

The result of the pilot study on the reliability index reveals the following:

Input Variables	Reliability Statistics (Cronbach' Alpha)
Core Competency	.889
Safe and Quality Care	.823
Teamwork and Collaboration	.646
Ethico-Moral Responsibility	.682
Documentation	.360

The pilot study's results necessitated the removal of one variable: the documentation. The rest of the variables were used in the study. The reliability index of the following core competency are as follows: Safe and Quality Nursing Care was 0.823; Teamwork and Collaboration was 0.646 and Ethico-Legal Responsibility at 0.682.

Statistical Treatment

To describe the characteristics of the respondents' core competency, descriptive statistics were used. It utilized the frequency, percentage, mean and standard deviation. Frequency and Percentage were used to describe the ratings of the respondents on the core competency. This information provides a comparison between different values described in the level of competency development. Mean and Standard Deviation were used to describe the overall level of the students' characteristics in developing the core competency among nursing students. The mean provides a central value of the data set, giving a simple summary of the data. It offers insight into the variability within the data. A low standard deviation means the values are close to the mean, while a high standard deviation indicates a wider spread.

Ethical Consideration

As this study involved the participation of human respondents, an informed consent was asked from them. Full disclosure and explanation of the study were explained considering the nature, purposes, methodology, risks and benefits of the study. They were made to volunteer and were not coerced to participate. The University Research Ethics Board approved and released an ethical clearance.

Results

Core Competency: Safe and Quality Nursing Care

Quality and safety, as core values of nursing practice, enhance quality and minimize the risk of harm to patients and healthcare professionals. Quality care is the extent to which care services improve desired health outcomes. Nurses play an important role in ensuring patient safety while providing care directly to patients. Safe and quality nursing care is a cornerstone of effective healthcare systems, contributing to better health outcomes, economic efficiency, and a stronger, more resilient global health landscape.

Table 1.1 describes the respondents' performance in the core competency of considering safe and quality nursing care. Majority (73.0%) of the respondents were rated as satisfactory by the clinical instructor. None of the clinical instructors rated them as poor or unsatisfactory. The clinical instructors believe that the nursing students have moderately attained the core competency of safe and quality nursing care. The mean ratings given by the clinical instructors show that their competency in safe and quality care is satisfactory. The respondents have moderately attained this core competency. The standard deviation of 0.24 shows that the clinical instructors' responses were almost the same. The ratings from the clinical instructors were rooted from the fact that the clinical exposure of the respondents is limited. This is brought about by the pandemic where restriction is imposed for their clinical exposure. Thus, actual handling and care of client was hampered and so with observance of the development of this core competency on safe and quality nursing care.

The clinical instructors were the ones who rated the performance of the respondents. They were the ones who supervised the respondents during their clinical experience. At the time the study was conducted, the respondents were exposed to different clinical areas, like the intensive care unit, medical-surgical areas, hemodialysis, operating room, and delivery room. The students were given the highest mean ratings on the indicators : "(1) conducts a comprehensive and systematic nursing assessment of clients within an interdisciplinary framework. (2) states nursing diagnosis/nursing problem. (3) sets priorities among a list of conditions or problems. The fourth step outlines the care objectives that aim to maximize the client's competencies. Based on these indicators, these are all part of the nursing process which is a systematic approach in client care. The respondents are expected to attain this competency before they can take care of their clients. The respondents are expected to learn to understand the assessment and statement of the nursing diagnosis, set priorities, and make specific objectives as early in their freshmen years. To facilitate students' attainment of a higher competency rating, the use of high-fidelity simulation is needed. Researchers have determined that simulation education effectively develops clinical reasoning in undergraduate nursing students.

Though simulation cannot entirely replace direct patient care practice experiences, it is considered as a complementary educational tool to support the clinical reasoning of students and help bridge the gap between theory and practice. Understanding this process will aid them in performing nursing interventions effectively and safely (Fan et.al, 2015). Nurses are expected to continuously refine their clinical reasoning skills to deliver competent nursing care. Safe and quality nursing care is essential in achieving global health objectives like reducing maternal and child mortality, managing chronic diseases, and controlling infectious diseases. It's integral to building resilient healthcare systems worldwide. In essence, safe and quality nursing care is a multifaceted and dynamic field that plays a pivotal role in the global healthcare system. It touches every aspect of patient care, from prevention and treatment to education and advocacy (Tajari et. Al, 2024). Overall, the core competency on safe and quality care is rated as satisfactory

Table 1.1*Frequency and Percentage Distribution of Clinical Instructors' Ratings on the Student-Nurses 'considering Core Competency on Safe and Quality Care*

Intervals	Frequency	Percentage	Description
3.25 - 4.00	37	26.81	Very Satisfactory
2.50 - 3.24	101	73.19	Satisfactory
TOTAL	138	100.00	

Mean: 3.13 Description: Satisfactory SD: 0.24

Indicators for Safe and Quality Nursing

INDICATORS	MEAN	DESCRIPTION
1. Conducts a comprehensive and systematic nursingassessment of clients within an interdisciplinary framework.	3.17	Satisfactory
2. Uses strategies to enhance the skills of the client to participate in developing the methods and tools for data gathering.	3.13	Satisfactory
3. Groups assessment data by condition using appropriate assessment framework by type of client.	3.09	Satisfactory
4. Interprets data gathered.	3.14	Satisfactory
5. Identifies the factors associated with the condition/s for the existence of the problem.	3.14	Satisfactory
6. States nursing diagnosis/nursing problem.	3.17	Satisfactory
Sets priorities among a list of conditions or problems.	3.17	Satisfactory
7. Specifies objectives of care maximizing client's	3.17	Satisfactory
8. Uses methods to maximize client/family participation in planning appropriate interventions.	3.13	Satisfactory

9. Utilizes therapeutic interventions appropriate to psychosocial phenomena and maladaptive behavior patterns identified.	3.07	Satisfactory
10. Collaborates with client support system in developing, implementing and evaluating the plan of care.	3.11	Satisfactory
11. Performs evidence-based nursing procedures safely and effectively.	3.13	Satisfactory
12. Utilizes participatory approach in evaluating outcomes of care.	3.07	Satisfactory
13. Describes client's progress to nursing and health interventions based on standard.	3.12	Satisfactory
Revises nursing care plan based on outcomes and standards considering optimization of available resource.	3.10	Satisfactory

Core Competency: Collaboration and Teamwork

Effective teamwork in health care delivery can have an immediate and positive impact on patient safety. Collaboration refers to joint efforts between various independent teams or groups. Nurses interact with a large number of health care professionals, both within their team and across departments. It is crucial then, to have an understanding of key roles within individual teams to achieve greater collaboration. If clear roles are not assigned, team members may duplicate efforts in some areas while leaving gaps in others (Emich, 2018).

Based on table 1.2. presented, it shows the respondents' core competency considering collaboration and teamwork. The clinical instructors rated the respondents' collaboration and teamwork competency as satisfactory, with a mean score of 3.24. This means that the clinical instructor consider that the respondents have moderately attained their core competency on collaboration and teamwork. A little over half (55.90) of the instructor rated them as satisfactory. This indicates that they have moderately achieved their core competencies in collaboration and teamwork. About 44 percent of the clinical instructors rated them as very satisfactory. The standard deviation of 0.43 shows that the responses are close to the mean. Thus, most of the clinical instructors had almost the same ratings on the students' core competency on collaboration and teamwork.

The indicator on "maintaining good interpersonal relationship" was rated highest with a very satisfactory remark. The students were conscious and aware how interaction with hospital staff would be shown. During their clinical practice, their clinical instructor expects them to interact with the hospital staff in a professional and courteous manner. They receive training on how to interact with them effectively. The most crucial part of their clinical exposure is to interact with members of the team, the patient and their significant others. In the care of the client, members of the health care team are important in heath management. In nursing, collaboration and teamwork are essential competencies that the students must achieve before becoming professionals. As early as in level two, the students are tasked to be working in groups. The goal is to develop their dealings and relationship with other team members. With this early development, it will be instilled in their minds and hearts maintaining healthy relationship with the team is an essential component of teamwork and collaboration.

As a core competency, clinicians should be able to "work in interdisciplinary teams." They are expected to cooperate, collaborate, communicate, and integrate care in the teams to ensure that care is continuous and reliable to the patient (Rosen et al., 2018). A fragmented health care delivery system is a common cause of medical errors. In this study, shared processes initiated in the classroom and clinical areas significantly promote student nurse-to-nurse collaboration that positively impact on the observer. However, the limitation of an actual encounter prevents communication exchanges among them. In this study, shared processes initiated in the classroom and clinical areas significantly promote student nurse-to-nurse collaboration that positively impacts the observer. However, the limitation of an actual encounter prevents communication exchanges among them. Collaborative clinical teams employ clear and direct interpersonal exchanges that can effectively enhance health outcomes. Efficient teamwork is important in healthcare institutions for patient safety, care quality, and clinical outcomes. This data suggests a potential safety-oriented culture, leading to decreased medical errors, improved patient outcomes, and overall healthcare quality. Effective communication and teamwork are vital ingredients while offering quality care in a healthcare setting (Hassan A.E.

et. Al, 2024). Overall, the core competency in teamwork and collaboration is rated as satisfactory

Table 1.2. *Frequency and Percentage Distribution of Respondents considering Core Competency on Teamwork and Collaboration*

Intervals	Frequency	Percentage	Description
3.25 - 4.00	61	44.20	Very Satisfactory
2.50 - 3.24	76	55.07	Satisfactory
1.75 - 2.29	1	0.72	Poor
TOTAL	138	100.00	

Mean: 3.24 Description: Satisfactory SD: 0.43

Indicators for Teamwork and Collaboration

INDICATORS	MEAN	DESCRIPTION
Maintains good interpersonal relationship intra-agency and interagency.	3.43	Very Satisfactory
Respects the role of the other members of the health.	3.38	Very Satisfactory
Acts as liaison/advocate of the client during decision making by the inter-professional team.	3.15	Satisfactory
Explores views of clients prior to decision making	3.13	Satisfactory
Uses approaches to enhance the capability of client to participate in decision- making.	3.10	Satisfactory
Supports the views of clients to care providers	3.26	Satisfactory

Core Competency: Ethico-Legal Responsibility

Nurses work with patients whose lives may be at stake. Oftentimes, nurses in the clinical settings encounter issues that may have ethical implications. The decisions may warrant discussion with the larger care team, or they may require swift action in a moment of crisis. Understanding ethics and the consequences of each action can help a nurse make the best decision when it is needed. Nurses draw upon ethical nursing principles to make patient care decisions (Aly et al, 2020).

The table shown reflects that the clinical instructors rated the student-nurses' as satisfactory in their core competency on ethical-legal responsibilities. This means that the instructors consider the respondents as having moderately attained this core competency on ethical-legal responsibility. More than half (67.39%) of the respondents were rated by the clinical instructors as satisfactory which explains that their core competency has been moderately attained. The rest of the instructors rated them as very satisfactory. The standard deviation of 0.32 shows that the responses are close to the mean.

It can be noted that the respondents were rated highest in the indicator, "articulating the vision, mission, and values of the institution where one belongs (3.29)" described as satisfactory. This indicator shows that it is moderately attained by the student-nurses. The vision- mission of the institution has always been emphasized especially at the start of each semester. How it is deepened and assimilated by the respondents depends on how it gives impact to them. Though the ratings were satisfactory, it has been noted that the knowledge had helped them in their care of their clients. What is most significant is that this indicator has been consistent with the core values imparted to them that comes the highest on "faith that does justice". The core values shown and developed by the campus ministry also reveals a very significant result. Integrating these core values in the care of client has become their "trademark" that they can apply in addressing ethical dilemma issues.

The clinical Instructors observed that this indicator has been dominant among the students' respondents. As a student, they are expected to learn and understand the core vision- mission, and values that the institution offers to them. This is the initial process in which the ethical-moral-legal responsibilities are integrated into their mind and hearts as they practice their profession. Nursing students are taught to emphasize the core values of competence, conscience, caring, and compassion when providing care to clients. If one can imbibe these core values in his system, then some ethical dilemmas in the clinical area can be quickly processed by the student nurses and carry them over where they become professionals. Fortunately, the institution as a Catholic University has been a collaborator in instilling these values in the respondents. The patient should always be the first and primary concern. The nurse must recognize the need for the patient to include their thought in care practices.

Ethical values are essential for any healthcare provider. Nurses should have an adequate understanding of basic legal concepts and issues relevant to the nursing profession to protect the rights of the clients and the nurses (Paudel Subedi et al., 2018). Nurses often find themselves in complex situations where they must balance patient care with legal and ethical obligations. The case scenarios and clinical care settings provided in the asynchronous classes provide students with the opportunity to think critically when addressing ethical dilemmas. Clarification of their response in an ethical dilemma situation in a synchronous setting assist full comprehension of clinical issues in healthcare. Understanding professional boundaries and how they relate to patient care outcomes is essential.

Table 1.3 *Frequency and Percentage Distribution of Respondents considering Core Competency on Ethical -Legal Responsibility*

Intervals	Frequency	Percentage	Description
3.25 - 4.00	43	31.16	Very Satisfactory
2.50 - 3.24	93	67.39	Satisfactory
1.75 - 2.29	2	1.45	Poor
TOTAL	138	100.00	

Mean:3.24 Description:Satisfactory SD:0.43

Indicators for Ethical-Legal Responsibility

INDICATORS	MEAN	DESCRIPTION
Specifies the ethical-legal bases for providing safe quality and professional nursing care	3.19	Satisfactory
Makes professional decisions within ethical and legal parameters.	3.11	Satisfactory
Executes the ethical reasoning process used in arriving at decisions to address situations of ethical dilemma.	3.04	Satisfactory
Decides on cases based on ethical reasoning.	3.12	Satisfactory
Articulate clearly the scope and standards of nursing practice.	3.01	Satisfactory
Shows evidence of legal requirements in the practice of nursing (i.e. current professional license)	3.12	Satisfactory
Articulates the vision, mission, and values of the institution where one belongs	3.29	Satisfactory

Clinical Instructors' Ratings on the Student-Nurses' Respondents considering the Overall Core Competency

Table 1.4 *Frequency and Percentage Distribution of Clinical Instructors' Ratings on the Student-Nurses' Respondents considering the Overall Core Competency*

Intervals	Frequency	Percentage	Description
3.25 - 4.00	50	36.23	Very Satisfactory
2.50 - 3.24	87	63.04	Satisfactory
1.75 - 2.29	1	0.72	Poor
TOTAL	138	100.00	

Mean: 3.17 Description: Satisfactory SD: 0.29

The overall core competency (table 4.1.4) of the respondents is rated as satisfactory. This means that the core competencies on safe and quality nursing care, teamwork and collaboration and ethical-legal responsibility were moderately attained by the respondents. More than half (63%) of the clinical instructors rated the respondents as satisfactory, that their core competency considering the following: safe and quality nursing care, teamwork and collaboration and ethical-legal responsibility are rated satisfactory which means that they have moderately attained the said competency. The standard deviation of 0.29 means that their responses are close to the mean.

These core competencies are the recommended core competencies for professional nurses to possess their line of care and service. These should be the inherent competency of professional nurses. Safe and quality nursing care is one core competency that highlights the nursing practice. Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes. It is based on evidence-based professional knowledge and is critical for universal health coverage (WHO, 2022). Teamwork and collaboration in nursing are essential to ensure better patient care and improved outcomes. A collaborative, cohesive nursing team provides the best patient care. As stated by American Nurses Association, ethical-legal competencies serve to guide nurses in their daily practice and set primary goals and values for the profession. Its function is to provide a succinct statement of the ethical obligations and duties of every individual who enters the nursing profession (Haddad & Geiger, 2021).

Clinical placement experiences are an integral aspect of practice development for undergraduate nursing students. The goal is for them to acquire competencies and abilities to learn independently, make decisions, and express ethical commitments. Development of nursing practice requires synchronicity of both knowledge application and clinical skills. Students must demonstrate the ability to integrate these professional requirements of the qualified nurse for which they are being prepare. The most effective way to ensure that students acquire competencies is to integrate the teaching of those skills in the course curricula in a holistic approach to teach disciplinary knowledge and generic skills. In health care settings, it is important to assess the competencies that are essential for the nursing students to prepare them for future professional duties. Nursing educators are fundamental in ensuring quality patient care by assisting students and nurses to achieve and maintain the standards expected by the profession and workplace. Overall, the core competency is rated as satisfactory.

Conclusion

The experience in the online approach in delivering a competency-based curriculum has been challenging but successful. Faculty and student experiences has been positive. Experts view the redesigned curriculum as responsive to the competency-oriented environment. The nursing program measures a competency approach that focuses on learner performance and achieves learner outcomes in the field. The use of online learning helps facilitate cognitive processing of the students learning however it may limit the skills acquisition of the learner. The use of high-fidelity simulation aids in simulating the clinical practice. However, there was some limitation in the acquisition of the high-fidelity simulation, thus a limited core competency was considered in the study.

The outcome-based education approach in nursing education affects nursing students' competencies. Nursing procedures simulated enhanced development of skills acquisition. It strengthens their higher-order thinking skills, thus achieving higher learner satisfaction. Further study is recommended for increasing the number of respondents and adding more competency assessment.

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A Case Study: Domains and Enabling Factors of Healing among Young Incest Survivors in CSWD–Ozamiz

Kimberly M Jacobe and Luel Mae P Contreras

Abstract

In understanding the healing journey of children who are survivors of incest, this study explored the healing of incest survivors using Draucker's Model of Healing from Child Sexual Abuse (CSA), focusing on the third stage—tackling the effects of CSA. The female participants, aged 11 to 17 and under the care of City Social Welfare and Development (CSWD) Ozamiz, were receiving treatment and making progress in their interpersonal lives. The study examined domains of functioning related to healing, such as life patterns, parenting experiences and CSA disclosure. Enabling factors, including ongoing support and personal resolve, were also explored. Data from eight participants were analyzed, and key themes emerged for each domain and enabling factor. Themes for life patterns included attaining freedom from abuse, regulating emotions, and having constant companions. The parenting domain involved receiving alternative care, support, security, and positive discipline. The disclosure themes included discussing experiences of abuse, interchanging of encouragement and expressing of goals for the future. The enabling factors included ongoing support from family, teachers, CSWD staff, and fellow survivors. Personal resolve was also crucial, involving courage, faith, and coping through writing and art. These findings provide a foundation for developing a data-informed interventions appropriate for every child who has experienced abuse, an efficient community reintegration program and pre-emptive measures for these fatal incidents.

Keywords: Child Sexual Abuse, Incest Survivors, Healing, Children, Tackling Stage, Domains of Functioning, Enabling Factors, Support

Introduction

Child sexual abuse (CSA) is a horrific violation that strips away a child's innocence, often leading to lifelong emotional and physical struggles, and potentially causing serious psychological issues if not addressed (Velayo, 2006; World Health Organization [WHO], 2022; Kluft, 2011). Incest, a particularly complex form of CSA, involves not only abuse but also a distorted bond between the victim and perpetrator, marked by manipulation, threats, and perverse expressions of care (Kluft, 2011). Many children subjected to incest are often left in the care of their fathers, stepfathers, or other male relatives, while mothers are unaware due to their focus on providing for the family. Though caregivers may long to undo the past, circumstances prevent them from doing so.

Despite the challenges, healing is important as it plays a critical role in the psychological recovery and reintegration of young incest survivors. Recovery from CSA is a multidimensional process that involves personal, familial, and societal factors (Banyard & Williams, 2007; Draucker, Martsolf, Roller, Knapik, Ross, & Stidham, 2011). While much research has centered on adult survivors, there is a growing need to explore how children cope and heal from such trauma (Walsh, Fortier, & DiLillo, 2010, as cited in Draucker et al., 2011). Many survivors report experiencing severe distress during the initial stages of healing and may resort to maladaptive coping strategies. However, inner strength, faith, and support give children hope for recovery. Primary support from family, friends, and secondary support from organizations like the Department of Social Welfare and Development (DSWD) are crucial in helping these children reintegrate into society (Draucker et al., 2011; DSWD, 2023).

In Ozamiz, the City Social Welfare and Development (CSWD) program for sexually abused children lacks psychologists or mental health professionals to provide proper psychosocial interventions. This gap in services prompted the current study, which aimed to assess the healing process of incest survivors under the care of CSWD–Ozamiz, despite the limitations of the Center.

Sexual abuse remains widespread despite laws like the Anti-Rape Law of 1997. Women (98%) and children (33%) are the primary victims, with 6,338 reported cases in 2021 alone (Cameleon Association, n.d.; Child Protection Network, 2020; 2021). Nevertheless, many cases remain unreported due to fears of family dishonor, disbelief in the victim's account, or fear of losing the family's breadwinner (De Guzman, 2022).

Although some research has explored adult survivors' resilience and recovery, there is a clear lack of focus on how children, particularly incest survivors, heal from CSA. This study addresses this gap in existing literature by focusing on healing processes specific to young incest survivors, a topic seldom explored in current research. It aimed to contribute to a better understanding of how these children heal, ultimately guiding the development of timely and appropriate interventions for those in need. This research employed Draucker's Model of Healing from Child Sexual Abuse (CSA), focusing on the tacking stage of the model of healing and on the various domains related to healing, such as life patterns, parenting experiences and disclosures of CSA. This further assessed the participants' motivators or enabling factors that led them to move from the two previous stages of healing to the tackling stage which is the third phase of healing.

Table 1 *Draucker's Model of Healing from CSA*

Stages			
Grappling with the meaning of CSA	Figuring out the meaning the CSA	Tackling the effects of CSA	Laying claim to one's life

Enabling Factors		
Affirming messages Personal agency	Ongoing support Personal resolve	Critical life event Commitment to transcend the CSA

Domains				
Life patterns	Living a troubled life	Living a troubled with some positive experiences	Living a life of troubles and successes	Living an empowered life
Parenting	Passing on the abuse	Wishing to stop the abuse cycle	Attempting to stop the abuse cycle	Stopping the abuse cycle
Disclosure of CSA	Keeping the CSA secret; Disclosing the CSA indirectly; Disclosing the CSA indiscriminately	Discussing the CSA to make sense of it	Discussing the CSA to strengthen a new understanding; discussing the abuse to pass on wisdom	Disclosing the abuse to help others
Spirituality	Having no meaningful or comforting spiritual connection	Having some spiritual connections	Experiencing a spiritual journey	Experiencing a spiritual transformation
Altruism	Being aware of the suffering of others	Thinking about helping others	Being compassionate; planning altruistic activities	Engaging in altruism

Table 1 presents a dynamic healing model for survivors of CSA, outlining a journey through four stages of recovery: grappling with, understanding, addressing, and ultimately transcending the abuse. Healing is framed across five key domains: life patterns, parenting, disclosure, spirituality, and altruism (Martsolf & Draucker, 2008; Draucker et al., 2011). Moreover, the five domains are exploratory measures of healing for survivors, while enabling factors are the ones that lead the survivors to progress towards the next stage of healing.

The four stages of healing are considered dynamic phases that may represent change over time, and driven by enabling factors that contribute to a dynamic trajectory and complex path of healing (Draucker et al., 2011). The model does not restrict the healing to a sequential progression through the stages, because healing may occur in a nonlinear manner. That is, one may bypass stages, revert back to prior stages, or experience several aspects of different stages at the same time (Draucker et al., 2011). Additionally, each domain reflects shifts from negative, often destructive behaviors in the early stages (e.g., living troubled lives, keeping the abuse secret, and passing on abuse patterns) to positive growth and transformation in the later stages (e.g., living an empowered life, breaking the abuse cycle, and helping others) (Martsolf & Draucker, 2008). Movement through these stages is facilitated by enabling factors like personal resolve, spiritual connections, affirming messages, and critical life events (Martsolf & Draucker, 2008).

This study emphasizes the experiences of the effects of CSA stage referred as tackling stage. In this stage participants are demonstrating remarkable progress in terms of their physical wellbeing, making positive changes in their interpersonal and sexual lives, and continuing their educational opportunities (Draucker et al., 2011). These experiences are explored through the lens of three domains of functioning – life patterns, parenting and disclosures of CSA.

To begin with, children in the tackling stage often lead lives characterized by both struggles and successes as they navigate the challenges of their past while also finding moments of growth (Martsolf & Draucker, 2008). In their view of parenting, many strive to break the cycle of abuse, consciously working to create a better environment for others than they experienced (Martsolf & Draucker, 2008). Many strive to break the cycle of abuse, consciously working to create a better environment for others than they experienced. They disclose their CSA experience to enhance their understanding and to share wisdom that can aid others in their healing journey.

The model highlights the interconnectedness of these domains: as survivors work on one area (e.g., disclosure or spirituality), their progress influences their growth in others (e.g., parenting or altruism) (Martsolf & Draucker, 2008). Healing is a cumulative and integrative process where each stage and domain builds upon the previous, ultimately leading to greater personal empowerment and a commitment to helping others.

The research aims to highlight positivity and the elements driving continuous healing through the participants' domains of functioning and enabling factors. Individual experiences of abuse, social status, and family background significantly influence the healing process. While some survivors adopt adaptive coping strategies such as seeking professional help and social support, others may resort to maladaptive coping mechanisms, such as denial and avoidance. Coping serves as a pathway to recovery from trauma (Stanica, 2020), making the healing process complex for each abuse victim (Draucker et al., 2011).

Understanding the dynamics of the tackling stage and the components of healing can help tailor interventions to support survivors with the assistance of relevant authorities and organizations.

Methods

This study employed a qualitative research design through case studies to explore the healing processes of survivors of CSA, specifically focusing on incest survivors. This method enabled an in-depth investigation of complex phenomena within their real-life contexts, making it ideal for understanding the survivors' individual experiences across various domains, such as life patterns, parenting, disclosure, and spirituality. The case study approach was chosen because it effectively captures the nuanced interactions between the context and the phenomenon, especially when these boundaries are not clearly defined (Yin, 2018). This methodology particularly suited the study of CSA healing, as it involved intricate personal, social, and contextual factors that evolve over time.

Conducted at the CSWD shelter in Ozamiz, this study involved eight female survivors under 18 who were protected under RA 7610 (Special

Protection of Children Against Abuse, Exploitation, and Discrimination Act). Participants were selected based on criteria such as residence in CSWD facility and continuing education. Perpetrators included stepfathers, biological fathers, guardians, and a half-brother.

We primarily conducted rapport-building activities, such as group games, before interviews to foster trust. The designated CSWD staff received a copy of the informed consent form before the interview and was fully briefed on the study's nature, participants' rights, potential risks and benefits, and their right to withdraw. The staff was also given time to seek clarifications. For informed assent, participants received a translated (Bisaya) form to ensure understanding. They were thoroughly informed about the study and their rights, with ample time for questions. The authorized social worker guided them in completing the assent form. Interviews were conducted in the shelter's counseling room, with ethical considerations prioritized.

A licensed psychologist reviewed and piloted a semi-structured interview guide before the study to ensure a structured and ethical approach. The interviews were audio-recorded with consent, conducted face-to-face in a private setting to encourage openness, and supported by social workers and psychologists to handle any emotional distress.

We used deductive thematic analysis to look at the data, following the seven steps that Faria-Schützer, Surita, Alves, Bastos, Campos, and Turato (2021) laid out in their model for qualitative treatment in health research. This process involved transcribing interviews, coding data, and identifying themes related to participants' healing. Deductive thematic analysis is a structured approach to analyzing qualitative data, where predefined theories, concepts, or frameworks guide the identification and interpretation of themes within textual or visual content. This method is particularly valuable in research settings that require systematic and objective analysis, as it ensures consistency and alignment with existing knowledge. Themes were validated by a psychologist to ensure research credibility. Overall, the analysis uncovered significant patterns, providing a nuanced understanding of CSA survivors' healing trajectories and factors affecting recovery.

***Table 2** Themes of Three Domains of Functioning during the Tackling Stage*

Domain of functioning	Themes
Life Patterns	1. Attaining Freedom from Sexual Abuse, Physical Abuse and Maltreatment from Parents and Guardians 2. Handling of Negative Thoughts 3. Regulating emotions 4. Recognizing Transformed Behaviors 5. Having Constant Companions
Parenting	1. Receiving Alternative Parental Care and Love 2. Acquiring other Forms of Support 3. Finding Security 4. Experiencing Positive discipline
Disclosure of CSA	1. Discussing past experiences of abuse 2. Interchanging of encouragement 3. Expressing goals

Results

In the tackling stage, the healing process represents a phase of active engagement, where survivors are no longer solely focused on understanding the abuse but are instead working to transform their behaviors, enhance their lives, and strengthen relationships. There is noticeable progress across various domains, driven by both external support and internal determination. This stage signals a positive shift as survivors increasingly take ownership of their lives and their healing journey.

The study identified several key themes across the three domains of functioning—life patterns, parenting and disclosure of CSA, while also identifying the intervening enabling factors that led to the establishment of the components of each domain. The results offer valuable insights into how therapeutic interventions can facilitate healing. Furthermore, the study serves as a reminder of the importance of gratitude in various aspects of life, reflected through the voices of the survivors navigating their journey towards healing from incest.

Life Patterns Domain of Functioning

Table 2 presents the themes of responses about the participants' life patterns encompassing functioning in daily life, relationships and experiences both positive and negative. In this domain, participants were asked about their current life in the Center, comparing it to their life before arriving. They shared the challenges and successes they have faced while at the CSWD–Ozamiz facility. Additionally, they talked about their relationships with fellow survivors and the staff, and how these relationships differ from those they had outside the Center.

Attaining Freedom from Sexual Abuse, Physical Abuse and Maltreatment from Parents and Guardians

While all of them have been survivors of incest, most of them have also experienced other forms of abuse such as physical abuse and some maltreatments from their caregivers. They have expressed that being in the Center is such a huge relief from being abused physically; they were fairly treated with care, understanding and love. They were further able to do what they want without being fearful of what will happen next. In particular, Kathy sincerely shared her gratefulness to be in the Center as she is able to eat properly and satisfactorily, and further pointed out her joy for the opportunity to continue her education which will never be possible if she was on the care of her grandparents. The excerpts from their narratives vividly expressed their common experience of achieving freedom from the unlikely treatments.

> My mother, when I failed to follow her demands immediately, hit me right away. And my aunt, when I feel sick, she gossiped about me, saying that I am just lazy and things like that. I have been genuinely sick since childhood. Then, when my mother gets frustrated, and has no money, she took her anger out on me... She says that I am a bad luck in our family... And then, when I accidentally broke a glass, she banged my head against the wall... She repeatedly knocked my head against the wall. She also made me go outside naked, which was humiliating and degrading. When she ran out of money, she would kick me out. When I came here, my mother kept calling me, always asking for money. She thought that I have a job here. When I told her that I am just studying, she playfully hit my back. (Fely)

> I am very happy that I arrived here, because now, my older brother [half-brother] could not bother me anymore. I did not expect my older brother to treat me that way. When my mother was working in Zamboanga, my older sister would sometimes feed me spoiled food, which made my stomach hurt a lot, and they did not help me at all. When we fought, she would always pull my hair and yanked it because, she would say that I was just an adopted child. Occasionally my sister would tell me to leave and go to Bukidnon, telling me to get out. She would say those things to me, but when our parents were around, she acted kindly to me. Occasionally she even punched me here (points to her upper lip). My brother also punched me there. There is still a bump here, Ma'am (pointing to the scar on her upper lip). (Cheer)

The participants endured severe trauma that deeply affected their emotional and psychological well-being. They faced frequent physical abuse from caregivers, including beatings, public humiliation, and neglect, such as being fed spoiled food, denied medical help, and blamed for family problems. Verbal abuse exacerbated their feelings of worthlessness and neglected their education, overshadowing any support for their academic progress. They lived in constant fear, always anticipating more abuse or neglect.

They, however, found security, love and understanding at the Center. Free from physical and sexual abuse, they are currently receiving proper care, including adequate food and support for their education. Despite their past, the children remain optimistic and hopeful for a brighter future, seeing the Center as a positive environment that can help them leave behind their unjust circumstances.

Handling negative thoughts

The participants struggled with flashbacks and nightmares. Their perpetrators haunted them, even imagining their presence through windows. Despite these fears, they would find ways to manage their negative thoughts through prayer, mindset control, and opening up to houseparents. Issa shared, "I gradually forgot about it and so I am not able to think about it often. I would control it, and pray to God that it will disappear, so I will not remember it." Similarly, Rona mentioned, "My thoughts are somehow quiet, because I do not have much to think about," reflecting how they aimed to stay composed despite the memories.

Fely added, "They always give me advice about my thoughts and concerns," describing the houseparents' role in helping the children cope. Sal, however, expressed uncertainty, "Sometimes, I could not think of anything, later on, something comes to mind," highlighting how controlling these memories is not easy, but they tried to find peace of mind.

Generally, the participants revealed their ongoing struggle with fear and trauma, manifesting in nightmares and troubling thoughts about their abusers. Previously, they had no support, worsening their emotional distress. They did, however, find solace at the Center. Through prayer, mental discipline, and opening up to houseparents and peers, they gradually learned to manage and reduce their negative thoughts. The consistent support they received at the Center helped them adjust. They have become more positive in their thinking.

Regulating Emotions

"I feared being here, because from what I heard, being here would mean being imprisoned". Before arriving at CSWD–Ozamiz, Dian harbored this unrefined fear. Leaving behind familiar, though abusive, environments required a difficult period of adjustment. Staying, however, in a place filled with trauma was a compelling reason to leave. After some time at the Center, Dian shared, "Eventually, one can deal with feeling homesick, because it is enjoyable to be in this place." All the children expressed joy and a sense of belonging as they adapted to life in the Center. Fely reiterated, "It is fine, we are happy here, and we are enjoying ourselves," showing how they came to embrace the new environment. Even Sal, who admitted, "I will miss my mother, I will also miss my siblings." Then she retracted her statement, "but, I am very happy." She found relief and happiness in living in a safer place.

The children's experiences of abuse led to overwhelming negative emotions, including intense fear, sadness, and anger. The constant abuse caused emotional instability, marked by frequent outbursts and feelings of hopelessness. However, once at the Center, they developed a sense of belonging and security. Positive interactions with their peers and houseparents helped them manage their emotions, bringing feelings of joy and contentment. Ultimately, the new environment is safer and better, allowing them to adapt and regulate their emotions more effectively.

Recognizing Transformed Behaviors

This theme focuses on the participants' personal growth and transformation during their stay at the CSWD–Ozamiz Center. The children shared small but meaningful changes in their behavior, which they considered significant victories. For instance, Rona said, "I was a bit changed, before, they could not ask me to do something, but now I already follow instructions." Though it may seem like a simple improvement, for Rona, it was a major step, as she became more responsible and trustworthy. These changes, while gradual, were transformative because the girls were able to act on these in their daily lives; and these changes influence their fellow residents to act similarly.

At the start of their stay, the participants often lacked responsibility and trust, having come from abusive environments where they were not provided the opportunity to develop these traits. They exhibited defensive behavior to protect themselves from further harm. Over time, however, they began to embrace responsibility and trustworthiness, taking on tasks within the Center. They avoided harmful activities and adopted a more structured, disciplined lifestyle, which they recognized as positive changes.

The daily routine at the Center played a vital role in fostering this transformation. With structured activities and assigned tasks, the children learned to take control of their environment. Houseparents provided guidance, safety, and support, helping the children develop a sense of responsibility while ensuring their behavioral growth and emotional well-being.

Having Constant Companions

One repeated narrative of the children is that they have someone whom they can always lean on. Some of the participants consider their fellow girls as their go-to person, while some also consider the houseparents as theirs. Either way it is very essential to hear that they had these persons whom they have built their trust with; somebody whom they can share sentiments with, somebody who can give them guidance, and somebody who can let them feel they are not alone.

Previously, they felt lonely and isolated, with no one to trust or confide in. They even lacked a support network, leading to feelings of abandonment and neglect. Now, they built trust with peers and houseparents, finding people they could rely on. They experienced consistent emotional support and companionship, which played a crucial role in their healing process. They developed a sense of community, considering their peers as siblings and houseparents as parental figures, which significantly enhanced their emotional well-being.

Parenting Domain of Functioning

A parent-child relationship functions as the primary foundation and robust influence of a person's life. On this second domain of functioning, participants were asked to reflect on the care, discipline and protection received from their caregivers relating to the treatment provided by CSWD–Ozamiz Staff. With the themes (see Table 2), valuable insights on their upbringing while being in the Center, were generated.

Receiving Alternative Parental Love and Care

Love and care are bedrock for a parent-child relationship, yet for these children, they yearn for these fundamentals. All of them find themselves as distanced from their mother; some work in Manila, one labors as a migrant worker, and some are simply away from their home for some causes. Hence, they fell prey to abuses at the hands of their caregivers, those who were supposedly meant to nurture them with affection and attention.

Kathy shared how the Center became her salvation, reflecting the sentiments of her peers who also felt the love and care from the CSWD–Ozamiz staff. Early in her stay, Kathy was diagnosed with hepatomegaly, a condition she developed after her stepfather forced her to drink fluid from boiled Mahogany leaves due to her missed menstruation. The Center ensured she received immediate treatment and follow-up care, for which Kathy was especially grateful to a staff member who accompanied her throughout.

The children collectively expressed gratitude for the care they received, both physical and emotional. They appreciated how the staff listened and offered constructive advice. As Cheer said, "I felt their love," capturing their deep connection with the staff and houseparents.

Acquiring other Forms of Support

This theme comprises of support other than love and care. In a broad sense, support is generally described by the children as being backed-up by their decision to file case against their perpetrators, being able to continue their education and support in tangible forms such as food, toiletries and school supplies.

Such gratitude to the government was expressed by Kathy when she said, "I thanked the government who helped me in filing my case because it would have been very expensive if done outside with paid lawyers." For Kathy, aside from freedom from sexual abuse, physical abuse and maltreatment from parents and guardians, she was glad to be in the Center as she is able to continue her education. Sal and Yula also said that a parent should let her child finish school. While Cheer and Issa both felt neglected by their parents before entering the Center. Cheer expressed, "They are very kind", referring to the staff who are very hands-on in providing care for them, making sure that they would not feel hungry. Further, material kind of support was described by Yula as she opened, "I believe they are my mother... As they go to work, they brought us food. They let us eat and they also let us watch television," and Cheer added, "And give us school papers, like that... toothbrush and toothpaste." Seeing parental figures through the Center staff can certainly be a manifestation of positive sign that the girls have been well supported by the Center. As a result, the next substantial component or theme of the parenting domain is *finding security*.

Finding Security

The participants enumerated instances when they felt secured and protected against any danger, including the possibility of being invaded by their perpetrators. Yula said, "They checked on us whether we are asleep or not. The housesparens do not sleep until we sleep first to ensure that we will not be harmed by our perpetrators." Kathy also stated, "I also felt that they really take care of me, even though they have fever, they still watched over us. They sacrifice their well-being to perform their duties and ensure we are checked on regularly." Rona further reported that the houseparents are always checking on them so they will feel more secure any time. All of the children were very appreciative to the efforts that the CSWD–Ozamiz Staff dedicated to them. They even acknowledged the sacrifices they had witnessed beyond their daily office duties and responsibilities.

Experiencing Positive discipline

There are many ways a parent may discipline their child, but one which the Center practiced is the positive way of discipline. CSWD–Ozamiz shelters children from diverse backgrounds and upbringings, resulting in a mix of personalities and traits. Despite this diversity, houseparents and staff handle misbehaviors such as minor conflicts stemming from gossips, by calling-out the children's attention, and allowing them to express themselves before guiding or teaching them for a better course of action.

Dian recalled, "They do not get angry easily, they first asked us to talk about what happened, and what the tension is about." This highlights a departure from her past experiences where discipline often involved physical punishment. In the same way with Rona, she opened, "It is not like they will hit or treat you like an animal…but more of making aware of what is right and what is not", reflecting on her mother's tendency to resort to physical force for discipline. Fely and Sal also endured physical punishment as a form of correction. Fely's mother frequently resorted to hitting her against the wall, while Sal's mother hit her using belt, rubber or hanger every time she went home late without primarily knowing the reason why. The children showed how they were positively disciplined inside the Center as manifested on their behavior and their similar responses.

Disclosure of CSA Domain of Functioning

Experiences of abuse requires significant courage, and it is particularly challenging for children who have been survivors of these devastating events. In this third domain of functioning, which involves disclosure of the abuse, the focus is on the children's ability to express themselves following their experiences. Themes are enumerated at Table 2. Notably, the children reported being able to discuss their CSA experiences while residing in the facility. Furthermore, they highlighted that their experiences of abuse allowed them to offer encouragement to fellow survivors, demonstrating empathy. As a result, this domain includes more than just CSA disclosure; it also includes other aspects of their disclosures and common experiences.

Discussing past experiences with abuse

Most of the children can now openly discuss their past experiences of abuse, though one participant is still gaining the courage to express her emotions. While they support one another in sharing their stories, they often grapple with puzzling questions about their abusers' actions. Cheer expressed this confusion, "I keep thinking why my brother did that; it's really unlikely for siblings to be like that." Many reflected on their experiences, with Dian saying, "He abused my life. He abused my being." Issa shared a vivid nightmare about her abuser, noting, "Everything he did in my dream seemed so real."

Rona, however, chose to focus on moving forward rather than recalling her abuse. Yula described how thoughts of her abuser can lead to difficulty breathing: "I get scared when I see police because I feel like my father is there." Some children are showing symptoms of post-traumatic stress disorder, such as Yula's breathing issues and Issa's nightmares. Despite these challenges, the children have built a supportive network in the Center, allowing them to express their feelings and begin their healing journey as they navigate the complexities of their past.

Interchanging of encouragement

In this theme, the children not only express their experiences but also actively exchange uplifting words to comfort each other. They frequently converse with their peers, and when staff from CSWD–Ozamiz inquire about their experiences, the children openly share and receive insightful advice.

Kathy, showing maturity, encourages her peers to focus on their education: "When you will be discharged, you have to do good in school so that you can help your child have a brighter future." Cheer noted the kindness of the staff: "They really give us guidance, and they also listen to our problems," which makes her feel at ease.

Many children also have trusted friends, like Sal, who shares her story with her Ate Dian, while Cheer discusses her challenges: "I talk about my brother and their families… my problems and their problems too." They engage in open forums to express their heartaches, with Kathy explaining, "Sometimes, each night we open up to express our sadness." The children view each other as siblings, sharing similar struggles and providing comfort through simple words of encouragement.

Expressing Goals

The children express hopefulness and excitement about their future plans as they prepare to reintegrate into the community, demonstrating that they still have significant opportunities ahead. Sal reflected this optimism, stating, "We want to build our own business." Kathy echoed this sentiment, emphasizing the importance of education: "I need to finish school so that I can help my family... Even if you are a rape victim, as long as you finish school, people will not say, 'Oh, she was raped, but she did not finish school.'"

Their houseparents consistently encourage them to pursue their education and ambitions, fostering this positive mindset. The children are determined to finish school, find jobs, or build businesses to support their families. They also share a strong desire for justice, as all plan to file cases against their perpetrators, relying on their prayers and the support of CSWD–Ozamiz and other authorities.

Enabling Factors in the Life Patterns Domain

The identified enabling factors helped the participants improve their life patterns during their tackling stage (see Table 3). The shift from their previous abusive environments to the supportive and nurturing setting of the Center has transformed the children's lives. They have moved from a state of constant fear, neglect, and abuse to a place of safety, care, and opportunity.

Table 3. *Enabling Factors by Domain of Functioning during the Tackling Stage*

Enabling Factors	Domain of functioning		
	Life Patterns	Parenting	Disclosure of CSA
Ongoing support	Facilitates healing, growth, and development of positive life patterns that were previously unattainable	Develops ability to receive alternative parental figures	Encourages opening up about the past
Affirming messages	Reinforce the sense of self-worth and self-efficacy	Validate feelings about past and present experiences	Develop feeling that others can listen
Personal agency	Encourages taking control of own healing journey	Develops ability to choose how to respond to discipline and support	Develops control of narrative
Personal resolve			Develops willingness to confront trauma for healing

This transition has allowed them to heal, grow, and develop positive life patterns that were previously unattainable. This factor about *ongoing support* is facilitated by houseparents, fellow survivors, and CSWD staff. This factor creates a stable, nurturing environment that enables the participants to overcome their trauma and find emotional regulation. Secondly, praise and encouragement from caregivers as *affirming messages*, help participants believe in their ability to change their behaviors and handle negative thoughts, reinforcing their sense of worth and self- efficacy. Finally, survivors take control of their own healing journey. This factor about *personal agency* indicates the participants' active engagement in activities that help them regulate their emotions and handle negative thoughts. Their recognition of transformed behaviors reflects their agency in making positive changes in their lives.

Enabling Factors of the Parenting Domain

Additionally, reflection on their parenting domain experiences would not be easy without the intervening enabling factors (see Table 3). To begin with, the factor on ongoing support is from alternative parental figures like houseparents and CSWD staff provides the children with the emotional and physical security they lacked in their abusive homes. Second, affirming messages from caregivers validate their experiences and assure them that they are deserving of love and care. These are unlike the messages communicated by those who abused them. Impact of this factor contrasts with the abuse they endured and helps rebuild their trust in adult figures. Finally, personal agency is cultivated as the children learn they can choose how they respond to discipline and support, allowing them to develop healthier ways of understanding parental care and love.

Enabling Factors of the Disclosure of CSA Domain

The strength to speak up and content of the participants' disclosures signify important progress in their healing journey. These may stem from four factors (see Table 3). *Ongoing support* and *affirming messages* from houseparents and fellow survivors play a critical role, creating a safe environment where children feel encouraged to open up about their past, knowing they will be supported and believed. *Personal agency* allows the participants to take control of their narrative, choosing the pace and depth of their disclosures, which is essential in their healing process. Finally, *personal resolve* is key factor in deciding to share their experiences of abuse, showing their willingness to confront trauma for healing. The participants demonstrated ability to choose when and how to disclose.

Discussion

The findings of the study assessed the young incest victims' healing from CSA in accordance with Draucker's Model of Healing from CSA, with a focus on the third stage of healing, which is the tackling effects of CSA stage. In a general sense, the tackling phase encompassed the survivors' assertion in making significant improvements regarding their physical health, social relationships, and psychological health by seeking treatment and pursuing educational opportunities (Draucker et al., 2011). Through careful examination and analysis of the data, it was found out that there are a lot of similarities in how people heal from CSA as children and as adults. The results show that the participants made small but steady progress in many areas, despite what seemed like problems, which also shows the non-linear nature of healing that is emphasized in this healing model (Draucker et al., 2011).

While the specific techniques and developmental needs may differ between children and adults due to age differences, the fundamental elements of healing from CSA—processing trauma, rebuilding trust, managing emotions, addressing shame, and fostering resilience—are shared across the lifespan. Healing in both cases involves empowering the survivor to regain a sense of control, safety, and well-being.

This study's results, along with those from other studies, show that healing from CSA involves a number of things, such as ongoing support (Arias & Johnson, 2013; Draucker et al., 2009; Draucker et al., 2011; Yaman, 2020), personal resolve or stronger internal characteristics (Arias & Johnson, 2013; Draucker et al., 2011), disclosures (Draucker et al., 2011; Romeo et al., 2018), helping others (Arias & Johnson, 2013; Draucker et al., 2011), and positive parenting (Draucker et al., 2011; Yaman, 2020). Support has always been emphasized in most related studies and has been regarded as the prominent ally for vulnerable individuals, especially those who are survivors of abuse (Arias & Johnson, 2013). Supportive relationships helped survivors alleviate the feeling of loneliness, low self-esteem, acknowledge alternative forms of parental care and love, gain helpful advice and encouragement, while personal resolve plays its role by drawing strength from within, solidifying their behavioral, cognitive, emotional, and social improvements. Similarly, other factors influencing healing among these children are equally significant to continuous support and personal resolve.

The life patterns domain of functioning is vital to healing for CSA survivors and includes having companions, managing negative thoughts, regulating emotions, recognizing transformed behaviors, and gaining freedom from abuse (Arias & Johnson, 2013). Interconnected factors contribute to recovery. Maltreatment, including sexual abuse, often stems from caregivers' lack of education on child and sexual development (Yaman, 2000). Many participants faced additional abuse from their caregivers, worsening their suffering. They made positive adjustments after CSWD–Ozamiz rescued them, with staff support helping them manage their trauma and build relationships (Arias & Johnson, 2013).

Basically, the life patterns among the participants are remarkably improving. The way they perceived their experience of abuse, how they formed interpersonal connections, their willingness to receive psychological treatments and learn new things such as cooking, and how they took care of their health are generally improving (Draucker et al., 2011). Hence, being in the Center has a positive impact on every child. It is also noteworthy that support as the primary drive towards improvement of their life patterns, support is emphasized (Arias & Johnson, 2013; Draucker et al., 2009; Draucker et al., 2011; Yaman, 2020), especially those individuals with whom the participants formed healthy relationships, as it is also one of the enabling factors in the tackling stage (Draucker et al., 2011).

In the second domain of functioning, parenting for these young incest survivors is provided by the CSWD–Ozamiz Staff, given that these children are within their custody. Parenting, in this context, entails support to the participants, which includes showing love and care, employing positive discipline and ensuring other forms of support such as education (Yaman, 2020; Draucker et al., 2011). These are the common aspects mentioned by the participants when describing how the staff parented them. Essentially, parenting based on the narratives of the participants, is described as the support they received from the CSWD Staff whom they considered as their parental figures. Still, support has emerged as a broader concept within the parenting domain.

Participants expressed feeling genuine love and care from the staff, noticing their sacrifices beyond daily duties—something they had previously lacked. They felt protected from their perpetrators, with houseparents staying with them until they fell asleep. The participants also appreciated the positive discipline at the Center, contrasting with the physical punishment they experienced before. Unlike physical punishment, which may cause lasting negative effects like aggression and low self-esteem, positive discipline encouraged growth without harm (American Academy of Child and Adolescent Psychiatry, 2018; Cherry, 2023).

The composition of parenting domain also aligned with some of the previous studies. It posits that family variables, such as emotional factors and needed support, must be carefully measured, as both are contributing factors in assessing the healing and progress of functioning (Brand & Alexander, 2003; Yaman, 2020; Ramos, 2015; Draucker et al., 2011). Parenting experiences of the participants also relate to Maslow's Hierarchy of Needs, by which, basic needs like food, shelter, and health care are met (physiological needs); the children feel protected and secure from their abusers (safety needs); the children receive affection and form meaningful relationships with the staff and houseparents making them feel loved and accepted (love and belongingness needs); support for their education and positive discipline help build their self-esteem and confidence (esteem needs); and encouragement for self-expression and personal growth enables them to realize their potential (self-actualization) (Cherry, 2022).

As participants processed their abuse in the third domain—disclosure of CSA— they expressed a willingness to share but preferred not to do so repeatedly, focusing on the content of their disclosures. Factors such as gender, relationship with the perpetrator, and age play a role in disclosures (Brand & Alexander, 2003; Ramos, 2015; Romeo et al., 2018). Most participants felt comfortable sharing their experiences with trusted companions, often fellow girls, likely due to similarities in gender and age (Paine & Hansen, 2002, as cited in Ramos, 2015; Brand & Alexander, 2003). Older children (13-17) tend to be more open, as they understand their circumstances better and feel a sense of responsibility (Romeo et al., 2018). Females are generally more expressive, especially with emotions like sadness, compared to males (Chaplin, 2015; Romeo et al., 2018), which was reflected in participants' emotional experiences, including dreams of their perpetrators and signs of anxiety or PTSD, such as shortness of breath and sleep difficulties.

Furthermore, most *participants prefer not to relive their negative abuse experiences, not only to avoid discomfort but also because they know the abuse* *was not their fault.* They do have times when they converse about their experiences, but it is more of a constructive discussion focused on moving forward, reaching their dreams, and sharing advice and encouragement toward each other (Draucker et al., 2011).

Having the capacity to share disclosures of CSA is considered a significant determinant of healing (Brand & Alexander, 2003; Ramos, 2015; Romeo et al., 2018; Arias & Johnson, 2013). While this factor is valuable, it can also be a struggle for some, as they experience occasional flashbacks and *recollection* of adverse memories (Yaman, 2020; Ramos, 2015). Indeed, this was the case for one of the participants. Despite the challenge, the child is still making significant adjustments to further connect with her fellow survivors.

In addition to their abuse stories, participants discussed their future goals. All of them expressed a strong desire to finish their studies and become successful in their careers. They all passionately shared their desire to help themselves and their families, especially their mothers. In addition, the participants' narratives suggested that, apart from their willingness to disclose, how the CSWD–Ozamiz staff interacted with them facilitated their openness, encouraging them to communicate how and what they felt emotionally and physically toward them (the staff) and even toward their fellow girls when they were ready. *In an informal manner, they demonstrated talk therapy, a crucially effective form of therapy for situations like theirs (Yaman, 2020; Draucker et al., 2009; Draucker et al., 2011; Arias & Johnson, 2013).*

Recommendations

The CSWD–Ozamiz shelter houses female children under 18 who have experienced incest, and the study aimed to understand their healing process in this context. Using Draucker's healing model from CSA, it examined the third stage of healing, utilizing qualitative case studies from eight participants. The findings provided insights into the factors motivating healing but were limited by a small sample size, a focus on institutionalized survivors, and the reliance on self-reports. The study suggests that future research should broaden its scope by examining more diverse populations and contexts, including comparing healing in different living environments and exploring gender-specific factors in the healing process.

For instance, larger sample sizes from various socioeconomic and cultural backgrounds could improve the generalizability of results. Comparative studies of institutionalized and non-institutionalized survivors would offer a more comprehensive understanding of healing. Gender-specific research, particularly on male survivors, and exploring spirituality across diverse religious and cultural contexts would provide more tailored insights.

To foster a more supportive environment for CSA survivors, awareness and education initiatives should be redesigned to include community-based support groups and peer networks, encouraging open communication and resilience-building. Families should be more involved in the healing process through educational programs that teach effective communication, empathy, and positive discipline. Incorporating holistic therapeutic interventions—like trauma-focused therapy, mindfulness, and spiritual support—can address survivors' emotional, psychological, and spiritual needs. Additionally, caregivers and CSWD staff should receive ongoing training to provide a nurturing and safe environment. Educational campaigns in schools and communities could also raise awareness about CSA, teaching children and adults how to recognize, prevent, and respond to abuse. These strategies can create a more informed, supportive society for survivors.

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The Mental Health of Pastors' Kids: Navigating Religious Expectations and Support Systems

Sofia Ivah C. Malabago

Abstract

This literature review delves into the mental health of pastors' kids (PKs), focusing on the religious expectations and support systems that influence identity formation and well-being. Findings show that PKs face pressures that are unique to their situation. These pressures affect their mental health and sense of self-worth, but being in a supportive environment can help lessen the effects. It is further explored that the religious expectations often imposed on PKs often lead to anxiety, depression, and identity problems, while an effective community-based support system helps enhance their resilience and well-being. The findings of this research provide insight into the lives of PKs, which would contribute to the field in informing mental health professionals, church leaders, and families about the effective interventions that would help them develop their resilience and identity.

Keywords: Pastors' Kids (PKs), Mental Health, Religious Expectations, Identity Formation, Resilience

Introduction:

Pastors' kids (PKs) are often in a position within the faith communities where families and congregations constantly struggle with high expectations. People often view PKs as role models, expected to embody the ideals of faithfulness and morality that their parents, as spiritual leaders, represent (Kanco-Ackep, 2024; Ndlovu-Bhebhe et al., 2024). Aside from faith and morals, PKs are also expected to excel in academics, be highly motivated and talented, and show a sense of duty to serve the people (DeLozier, 2013).

This phenomenon is historically grounded as religious communities have long upheld strict moral standards on both their pastors and their families (Behere et al., 2013). Though as times changed, these expectations have evolved, but the psychological impact remains the same (Ndlovu-Bhebhe et al., 2024). The fact that society expects these families to maintain perfect morality and spirituality can create an environment for PKs where they feel they must constantly perform or conform to a specific image (Samau & Schoeffel, 2015). Due to this, researchers have found that approximately one-third of pastors in the United States claimed that their children no longer involve themselves with the church actively (Barna Group, 2013).

As previously implied, public scrutiny complicates the lives of PKs. Studies have mentioned that the public scrutinizes pastors as much as they do celebrities, and this is usually inherited by the pastors' children (Oliver, 2017). PKs also find themselves categorized into two stereotypes—the 'saint' or the 'rebel.' The positive stereotypes are seen as the good role models, while the negative stereotypes are seen as those who go against their faith and engage in sinful behaviors (Benjamin et al., 2023). Most would think that those categorized as the 'rebels' will be the only ones to have negative psychological manifestations, such as creating a self-fulfilling prophecy where they internalize these narratives (Ndlovu-Bhebhe et al., 2024). However, studies have shown that labeling someone as the 'saint' may have negative consequences, as this indicates that they are silently suffering, feeling overpowered by the intricacies of being a PK (Benjamin et al., 2023). Overall, public scrutiny and expectations can lead PKs to feel alone due to the lack of safe spaces where they can express their frustrations and doubts (Samau & Schoeffel, 2015). Living with these expectations while struggling with their personal beliefs can lead PKs to have mental health and well-being difficulties.

In light of these challenges, it is important to know what works best for the mental health and well-being of PKs. Thus, this review examined the mental health of pastors' kids and analyzed the importance of community-based support systems and hybrid models, which are now a rising trend in the field of psychology (American Psychiatric Association, 2021). The strengths and limitations of these systems are assessed through the Ecological Systems, Stress and Coping, and Self-Determination frameworks

Following on the objective, the scope of this review is focused on the psychological impact of religious expectations and public scrutiny dealt with by PKs. It also extended to the conventional community-based support systems and hybrid models 4, which PKs utilize or not.

This analysis emphasized the vital role of supportive environments in the mental health outcomes of PKs, who are struggling between their family's and congregation's expectations and their personal identity.

Given that there is limited research exploring the lived experiences of pastors' kids, this literature review is significant in that it has the potential to inform mental health professionals, church leaders, and pastoral families about the various challenges they face. Additionally, the effects of community-based support systems and hybrid models on these children remain underexplored. Since these support systems are now gaining importance in the field of psychology, being aware of their influence on mental well-being is essential, for it would foster emotional resilience, identity development, and healthier environments not only for the PKs but also for other young people who may be having the same experiences.

Methodology

Selection Criteria

In selecting resource materials, a total of 42 peer-reviewed studies, research papers, literature reviews, and archival magazines that specifically focused on the experiences and religious expectations surrounding PKs were prioritized. Similar materials were also utilized for examining the effects of community-based support systems and hybrid models on the mental well-being of not just PKs but also young people in general. This is to guarantee that there is an objective view on the impact of these 5 systems. Furthermore, since the field is constantly advancing, it was ensured as much as possible that the sources selected were published between 2010 and 2024. However, due to the limitation that most of the studies relating to this topic are mostly outdated, some of the sources do not meet this criteria.

Search Strategy.

A comprehensive search across several academic databases was also done, and this includes PubMed, PsycINFO, JSTOR, Springer Nature Link, ResearchGate, Wiley Online Library, Semantic Scholar, and Google Scholar. The use of multiple academic databases was to ensure the diverse disciplinary perspectives. Various keywords and subject headings were utilized to ensure a thorough exploration of the literature. Key terms such as "pastors' kids," "religious expectations," "public scrutiny," "mental health," "community-based support," "Ecological Systems Theory," "Stress and Coping Theory," "Self-Determination Theory," and "hybrid support models" were chosen to capture relevant studies effectively. Additionally, these search terms were refined along the way to capture studies that may have used different terminology for similar concepts.

Selection Process: An inclusion and exclusion criteria was followed in selecting the literature used in this review. Studies that tackle the experiences of pastors' kids, their coping strategies, identity development, and the effectiveness of support systems were included. Literature on hybrid models and their effect on psychological difficulties was also included to add to the robustness of this review. On the other hand, studies that are not related to 6 religious expectations, public scrutiny, and the different support systems were excluded. Those studies that did not apply the specified theories in the framework were also excluded. A limitation worth noting in the selection process is the lack of local studies in the Philippines since the majority of the literature included in this review is from Western settings.

Literature Review

Religious Expectations and Public Scrutiny

Impact on Mental Health

As the child of a public figure, pastors' kids (PKs) have always borne the burden of people expecting them to be the realizations of their parents' faithfulness and sacrifice for serving God (Kanco-Ackep, 2024; Ndlovu-Bhebhe et al., 2024; Samau & Schoeffel, 2015). Bronfenbrenner's Ecological Systems Theory provides a comprehensive framework for understanding how these expectations shape PK's mental health. This theory states that human development is influenced by multiple environmental layers that interact and put pressure on an individual (Bronfenbrenner, 1979).

Family and close relationships comprise the microsystem, and individuals are influenced by it immediately and directly. PKs are often expected to embody religious ideals by the people within this system, which leads to significant psychological strain. The mesosystem can amplify these pressures as it consists of interactions between the microsystems, such as how the responsibilities in the ministry can affect the parents' dynamics with their children. The exosystem, which comprises the external influences of church policies and expectations, further builds up these burdens, even when PKs have little direct control over them. Further, the macrosystem, which includes societal norms and religious doctrines, dictates the overall beliefs about PKs' behavior, contributing to their struggles with identity and self-worth (Bronfenbrenner & Morris, 2006).

For PKs, every expectation from their families, church, and peers comes with different impressions on their mental health. Various studies have shown that PKs experience increased levels of anxiety, depression, and feelings of isolation due to the assumption that they must conform to ideal standards of behavior. A study found that 56% of PKs reported experiencing anxiety and depression due to the emotional toll of living under intense judgment and expectations from their families and congregation (Ndlovu-Bhebhe et al., 2024). Samau & Schoeffel (2105) reported that as much as PKs were expected to behave in a certain way, some were not allowed to mingle with the other kids of the church, which led to feelings of isolation. This isolation, rooted in the microsystem and reinforced through interactions with the mesosystem, limits their ability to form normal peer relationships. Similarly, according to other studies, PKs were expected to maintain the same lifestyle as their parents, further constraining their autonomy and personal growth (Benjamin et al., 2023; Kanco-Ackep, 2024). Additionally, the constant effort of PKs to be morally upright and exemplary in conduct creates a sense of inadequacy when they fail to meet the high expectations placed on them (Barna Group, 2013; Ndlovu-Bhebhe et al., 2024). This sense of inadequacy is a direct consequence of macrosystemic values imposed on PKs, shaping their self-perception and emotional well-being. This is brought about by the notion that their behavior will always reflect on their parents' ministry (Samau & Schoeffel, 2015; Drumm et al., 2020; Benjamin et al., 2023). 8.

Aside from expectations, the lives of PKs have always been under public scrutiny from the congregation and even their peers, which further aggravates their mental health (Samau & Schoeffel, 2015; Barna Group, 2013; Drumm et al., 2020). According to Samau & Schoeffel (2015), many PKs have felt the need to hide their personal struggles, resulting in a lack of emotional support. This is influenced by their microsystem (family expectations), mesosystem (interactions with church members), and exosystem (church governance and policies that dictate social roles). Additionally, Ndlovu-Bhebhe et al. (2024) stated in their study that PKs often feel like they are "public property" when they are always subject to judgment and observations by the church community. This perception of living in a "fishbowl" demonstrates the profound impact of the exosystem and macrosystem in shaping their experiences. Over time, this scrutiny can lead to resentment toward the church, often turning into rebellion against these expectations (Ndlovu- Bhebhe et al., 2024; Oliver, 2017; Wynja, 2022).

The emotional challenges that PKs faced are not something to neglect, as several studies have documented it. For instance, Drumm et al. al. (2020) found that 60% of pastors' kids in their sample, when asked about emotional challenges they had, reported concerns about anxiety/depression. A study by McBride et al. al. (2013) also found that 25% of PKs reported having experiences of emotional abuse due to the behavioral expectations from their church community, and this correlated with higher rates of depression. In the context of Ecological Systems Theory, this illustrates how the macrosystem (religious expectations) and exosystem (church regulations and social norms) shape individual experiences within the microsystem, leading to lasting mental health effects. Similarly, other studies conducted in Nigeria and Kenya have shown that 9 PKs go through serious emotional burden due to the position they occupy in church, which led to higher levels of risk of mental health issues like anxiety, depression, and, in extreme cases, suicidal ideation (Kanco-Ackep, 2024; Markham et al., 2014). The families of PKs themselves often aggravate these circumstances. As pastors struggle to create a balance in their often demanding roles, this may leave their children to feel neglected or unsupported (Wynja, 2022; Pamba, 2019). The lack of emotional availability from parents within the microsystem directly affects PKs' mental well-being, further intensifying their distress. Oliver (2017) found that the stress pastors experience in their work—including public scrutiny and high expectations from the church—trickles down to their children, impacting their mental health through intergenerational stress transmission. Studies have shown that chronic exposure to these stressors can lead to long-term mental health consequences, including substance abuse and other maladaptive coping mechanisms (Kanco-Ackep, 2024; Benjamin et al., 2023; Abegg, 2023; Behere et al., 2013). This further highlights the interplay between the different ecological layers, showing how pressures from the macrosystem (cultural and religious expectations) and exosystem (church policies and congregational judgment) cascade into the microsystem, shaping PKs' mental health trajectories.

Impact on Identity Formation and Self-Worth

The Self-Determination Theory, developed by Deci and Ryan (2000), highlights the critical roles of autonomy, competence, and relatedness in fostering healthy identity development. However, the rigid expectations imposed on PKs by their church communities often undermine these psychological needs, leading to potential distress and identity struggles. When PKs experience external pressures to conform to idealized religious identities, their sense of autonomy is suppressed, which compels them to adhere to predefined roles rather than exploring their identities freely. This lack of self-directed identity development can lead to feelings of internal conflict, self-doubt, and emotional distress.

As PKs struggle to distinguish between their personal beliefs and those imposed by the congregation, they may experience psychological reactance, where autonomy deprivation leads to resentment and confusion toward the church (Samau & Schoeffel, 2015). Wilson and Darling (2016) found that compared to their peers, PKs reported lower subjective well-being and heightened stress, reinforcing SDT's assertion that competence is essential for psychological resilience. When PKs feel incapable of meeting community expectations, they may internalize a sense of inadequacy, fearing that their perceived failures reflect not only on themselves but also on their families

(Delany & Winters, 2014). This lack of competence can damage self-esteem and increase stress levels further.

Moreover, SDT highlights the importance of relatedness, which refers to feeling emotionally supported and valued in relationships. When PKs are labeled as "goody-two-shoes" or "holy terror," this complicates their sense of belonging, causing identity confusion and emotional isolation (Samau & Schoeffel, 2015; Ndlovu-Bhebhe et al., 2024). Furthermore, adequate parental support is imperative for meeting the need for relatedness, as its absence during critical developmental periods (i.e., adolescence) worsens identity struggles (Oliver, 2017). When parents fail to provide proper guidance, 11 adolescents may seek validation elsewhere, increasing their vulnerability to risky behaviors (Barna Group, 2013; Abegg, 2023; Delaney & Winters, 2014).

To alleviate these concerns about their identity formation and self-worth, Benjamin et al. al. (2023) suggested that narrative therapy can help PKs to separate their identities from the expectations of their families, church, and peers, which would allow for a healthier self- exploration. Oliver (2017) similarly proposed that pastor parents should foster a warm and affectionate authority over their children and, at the same time, encourage peer support so that PKs would feel validated and that they are not alone in their journey.

Community-Based Support Systems

In light of these challenges faced by pastors' kids (PKs), community-based support systems—such as those provided by churches through pastoral care, counseling, and church groups—can act as agents in fulfilling the core psychological needs outlined by Self- Determination Theory (SDT): autonomy, competence, and relatedness (Deci & Ryan, 2000). These systems have the potential to counteract the restrictive expectations placed on PKs by fostering environments that encourage autonomy, competence, and relatedness. PKs can have the chance to enhance their sense of competence by involving them in church activities and leadership roles (Kanco-Ackep, 2024; Oliver, 2017; Samau & Schoeffel, 2015). This participation also strengthens their sense of relatedness, allowing them to feel more connected to their faith communities in a way that is supportive rather than restrictive.

An example of an initiative aligned with SDT principles is the Team PK program by the Seventh-Day Adventist Church. This global initiative tailors their resources and support specifically for PKs, therefore addressing the unique needs of these children (Seventh-Day Adventist Church, n.d.). Initiatives such as this would not only guide PKs with their spirituality, but they would also cultivate community connections within themselves, which would greatly help them feel valued and understood within their churches. Additionally, these initiatives cultivate community connections that help PKs feel valued and understood within their churches, reinforcing their need for relatedness (Markham et al., 2014; Hayfron, 2022).

As aforementioned, encouraging peer support among PKs can help alleviate their feelings of isolation. They also reported that PKs benefit greatly just from being able to share their struggles and experiences with those who understand them, as it provides them with a sense of belonging and validation (Oliver, 2017; Barna Group, 2013). This aligns with Bronfenbrenner's theory, which highlights that it is imperative to have supportive relationships within the various ecological systems (Bronfenbrenner & Morris, 2006) to allow PKs to grow emotionally and spiritually. By fostering these relationships within church communities, PKs' autonomy is strengthened, as they are given safe spaces to express their thoughts and struggles without the fear of judgment.

To further mitigate concerns about their identity formation and self-worth, Benjamin et al. (2023) suggested that narrative therapy can help PKs reframe their self-perceptions and separate their personal identities from expectations of their families, church, and peers, thereby promoting autonomous self-exploration. This therapeutic approach empowers PKs to develop self-awareness and personal agency, 13 which is critical in preventing the internalization of unrealistic religious standards. Similarly, Oliver (2017) proposed that pastor parents should foster a warm and affectionate authority over their children and at the same time encourage peer support, which directly aligns with SDT's emphasis on relatedness as a protective factor against emotional distress. When PKs feel both emotionally supported and encouraged to explore their identities, they are more likely to develop a stable sense of self, ultimately improving their overall psychological well-being.

Moreover, several studies have found that community-based support systems tailored to the needs of PKs do not only help in fostering relatedness, autonomy, and competence but also resilience. For instance, Ndlovu-Bhebhe et al. (2024) found that faith-based support systems, including prayer and social networks, help PKs cope with emotional struggles by reinforcing their sense of relatedness and providing spiritual reassurance. They also emphasized that a strong relationship with God and a supportive environment can help foster resilience in PKs, allowing them to navigate their challenges more effectively. Kilian (2020) also outlined a resilience model for clergy families, which states that support systems with self-care and family practices are needed. He also emphasized that in order for pastoral families to be more effective, they have to receive proper training and encouragement to maintain healthy practices, which in turn is beneficial for addressing the challenges of PKs. This model aligns with SDT's competence principle, as it enables pastoral families—including PKs—to develop the skills and coping strategies necessary to manage their unique stressors.

Furthermore, Crosby et al. al. (2021) laid out certain conditions that are necessary to make church-based support systems effective, particularly emphasizing children's 14 ministries. These ministries, if designed to be inclusive and supportive from an early age, will allow PKs to develop a secure sense of identity and self-worth, ultimately fulfilling their needs for relatedness and competence. Exposing PKs to affirming and encouraging environments early on will more likely enable them to internalize a positive self-concept and develop resilience against external pressures.

In order for these practices and interventions to actually be effective, pastoral leadership must actively engage in promoting mental health within church communities. Smith (2024) argued that a pastor's involvement in promoting mental health initiatives that integrate both psychological and spiritual support within their communities is vital. This involvement includes the establishment of support groups and the integration of mental health programs into church activities. These kinds of mental health interventions, wherein they are based on spiritual doctrines, will address the spiritual and emotional needs of not only the church members but most especially the pastors' kids, providing them safe spaces to have these needs acknowledged. Similar to this stand, an organization called Faith Action for

Children on the Move (2022) created a learning brief for migrant children and their families emphasizing the importance of faith actors, who provide social support, and spiritual practices in enhancing resilience among those migrant children. This learning brief curated a collection of interventions that emphasized the importance of faith actors in providing social support and enhancing resilience through spiritual practices. This provides additional evidence to the fact that integrated mental health and faith-based approaches within church communities are effective in developing resilience during crises. 15.

Overall, these studies highlight the critical role of community-based support systems in fulfilling PKs' psychological needs as outlined in SDT. When autonomy, competence, and relatedness are nurtured through faith-based initiatives, peer support, and pastoral involvement, PKs are better equipped to navigate their identities, manage expectations, and develop resilience. By creating church environments that empower rather than restrict, faith communities can ensure that PKs thrive both emotionally and spiritually despite the pressures they face.

Hybrid Support Models

As much as community-based support systems provide PKs their much-needed support, they can be strengthened further by mental health care tools such as the hybrid support models of this age. When the COVID-19 pandemic restricted people's access to various mental health care facilities, these models, which blend digital and in-person resources, rose to prominence. A survey conducted by the APA among their members reported that at the peak of the pandemic, the majority of the psychiatrists used telepsychiatry with 90% of their patients. When restrictions were lifted over time, the use of digital technologies in psychiatry was then gradually incorporated into traditional in-person sessions (American Psychiatric Association, 2021). The purpose of hybrid models centers around their accessibility and increased engagement and efficacy (Chen et al., 2024). Zbukvic et al. (2023) found that during the COVID-19 pandemic, telehealth services have proven to be vital for many youths who were hesitant to seek help due to stigma, cost, and location. Considering how PKs have always lived in public scrutiny and are expected to be in perfect condition, interventions that would cater to their 16 situations would be greatly beneficial for them, since they might hesitate in seeking help (Drumm et al., 2020; Benjamin et al., 2023; Adams et al., 2018). For instance, the United Church of Christ launched an initiative called "Youth Mental Health Peer Advocates for the Digital World." This is a toolkit that is aimed at strengthening the peer support networks among youth by creating welcoming and inclusive digital spaces (Jackson, 2024). This model is particularly effective because not only will it use a platform that is familiar to the youth, but it also utilizes shared experiences, which encourages a sense of community among PKs who may be feeling isolated by their unique circumstances.

As much advantage as digital resources can provide with their flexibility and anonymity, there are still limitations that must be addressed. Several studies have found that issues of privacy, access to technology, and security, among others, can be a hindrance to the efficacy of these hybrid models (Chen et al., 2024; Lyzwinski et al., 2024; Balcombe & De Leo, 2021).

Additionally, studies reported that reliance on purely digital platforms without incorporating in- person support may worsen feelings of loneliness and isolation among PKs rather than alleviate it (Balcombe & De Leo, 2021; Lyzwinski et al., 2024). Therefore, it is important to first evaluate these hybrid models, whether they are effective or more of a hindrance to PKs, by assessing the specific contexts and experiences.

Moreover, upon seeing the effectiveness and potential of hybrid models in present-day mental health care, integrating them into the traditional support systems of the church would advance their potential impact on the mental health and identity formation of PKs. This can be better understood with Lazarus and Folkman's Stress and Coping Theory, which states that stress is experienced based on an individual's cognitive appraisal of their circumstances, and coping mechanisms are selected accordingly (Biggs et al., 2017).

For PKs, stress appraisal is shaped by both internal and external pressures—internal in the form of personal beliefs about their role and faith, and external through public expectations and scrutiny. According to the theory, stress can be perceived as a threat, harm, or challenge, and this perception influences how PKs respond to mental health struggles (Biggs et al., 2017).

Hybrid support models provide an avenue for PKs to reappraise stressors more effectively, as they offer both proactive coping strategies (e.g., problem-focused coping through structured mental health resources) and adaptive emotional responses (e.g., emotion-focused coping through peer support and digital communities) (Biggs et al., 2017). For instance, several studies have shown that integrating faith-based interventions and digital platforms in mental health care allows an increase in openness to work with mental health professionals while aligning with the spiritual values of the individual (Neves, 2024; Winiger & Goodwin, 2023).

Additionally, with the stigma surrounding mental health in churches, adopting hybrid models can create an inclusive environment where PKs can express their struggles without fearing being judged (Adams et al., 2018; Berkley-Patton et al., 2021; Neves, 2024). This aligns with Stress and Coping Theory, as it acknowledges that when PKs perceive available resources as supportive and congruent with their identity, they are more likely to engage in effective coping strategies rather than avoidance or maladaptive behaviors (Biggs et al., 2017; Neves, 2024). 18. Furthermore, coping resources are not static; they evolve based on accessibility and environmental influences. Stress and Coping Theory emphasizes that an individual's coping ability is heavily influenced by the resources available in their environment (Biggs et al., 2017), meaning that the integration of hybrid support models within church and faith-based settings has the potential to modify PKs' coping mechanisms positively. The accessibility of hybrid models strengthens their role within faith-based mentall health interventions, creating a comprehensive approach that addresses the spiritual, psychological, and social dimensions of well-being. This aligns with the spiritual-bio-psycho-social (SBPS) model proposed by Scott Harrower (2024), which emphasizes the integration of mental health care and spiritual needs in pastoral settings.

Given the complexity of PKs' experiences within religious environments, an approach that accommodates both digital and in-person interventions allows churches to better address their mental health needs while nurturing a culture of open dialogue and support.

Discussion

The overall objective of this review was to explore how religious expectations, public scrutiny, community-based support systems, and hybrid support models interact and impact the mental health of pastors' kids (PKs). For PKs, religious expectations and public scrutiny usually mean the pressure to embody the ideals and standards set by their pastoral parents. These expectations lead to different psychological challenges, including anxiety, depression, and, at times, substance abuse, as they often feel that they must step into the mold that their families and congregations have set for them (19) (Kanco-Ackep, 2024; Ndlovu-Bhebhe et al., 2024; McBride et al., 2013; Barna Group, 2013; Benjamin et al., 2023; Delaney & Winters, 2014; Drumm et al., 2020; Pamba, 2019; Samau & Schoeffel, 2015; Wynja, 2022; Abegg, 2023). To counteract these pressures, community-based support systems allow PKs to create meaningful relationships and engage in activities that reinforce by developing environments that nurture affection and understanding with their struggles (Oliver, 2017; Hayfron, 2022; Markham et al., 2014; Barna Group, 2013; Behere et al., 2013). Within these support systems, PKs can also find mentors and peers who are experiencing the same difficulties as them, which would foster acceptance and mitigate the burdens they carry (Seventh-Day Adventist Church, n.d.; DeLozier, 2013; Drumm et al., 2020). Additionally, with the difficulties incurred by the COVID-19 pandemic and the advancement of technology, hybrid support models of mental health have also surged. This blend of in-person and digital support has opened new avenues for connection.

Complementary to the traditional sources of support, these online platforms allow PKs to seek help and share their struggles within a comfortable and accessible environment (Balcombe & De Leo, 2021; Berkley-Patton et al., 2021; Chen et al., 2024; Iheanacho et al., 2021; Lyzwinski et al., 2024; Neves, 2024). Altogether, these themes constitute a better understanding of how they contribute to the mental health of PKs and how it helps them to develop resilience over time.

They emphasize the importance of creating support systems that would uniquely cater to the needs and experiences of PKs to let them thrive as individuals outside the influence of their pastoral families.

Although the insights gathered in this review are substantial, there is still a gap in the literature surrounding the overlap between hybrid support models and traditional community- based support. As the world advances more into the use of digital technologies and platforms for community support, PKs may also be leaning towards this direction. Thus, it is important to understand how these online alternatives complement or conflict with the traditional support systems. Furthermore, there is also a lack of research that deals with the experiences of PKs who grew up in different cultures. For example, PKs of the Western settings may not have the same lived experiences as those PKs from other countries like the Philippines. In order to have a more extensive perspective of the factors that affect a PK's mental health, this gap must be addressed.

In relation to these gaps, future research should take into consideration those studies that examine the holistic impact of support systems on the PK's mental health. This should include how hybrid support models should be used to aid community-based support systems.

Additionally, exploring more about the effective coping strategies used by PKs in response to their challenges will help mental health professionals and church leaders in curating interventions that would address the specific needs of a PK. Longitudinal studies would also be beneficial in tracking a PK's progress with different support systems over time. Overall, in order to wholly support and address the mental health challenges of pastors' kids, it is important to consider a multidimensional approach that would use both individual and community factors in developing resilience and well-being.

Conclusion

This literature review tackles the mental health of pastors' kids (PKs) and the unique psychological challenges that they face, which are mostly due to the high religious expectations and public scrutiny. As these pressures lead to anxiety, depression, and feelings of isolation, it complicates their identity formation and self-worth. Community-based support systems are essential for emotional and social support because they create environments where PKs can be free to express themselves and develop a sense of belonging. Furthermore, this review reiterates the need for mental health interventions to be tailored in consideration of the unique experiences of PKs. When hybrid models that use both in-person and digital sources are integrated to complement traditional support systems, it enhances the accessibility and efficacy for those PKs who want to seek help. The Ecological Systems Theory, Self-Determination Theory, and Stress and Coping Theory were utilized to guide the whole analysis, emphasizing the interactions between the individual and community influences.

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About the Author

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Understanding Employee Informal Deviance

Angelo S. Nolon

Abstract

Understanding Employee Informal Deviance and Its Impact on Workplace Culture and Productivity Nolon, Angelo S. Abstract: Employee informal deviance has a substantial influence on workplace dynamics, performance, and organizational structure. It is defined by behavior that goes against workplace norms but has no legal consequences. Even while it may not seem like much in comparison to official violations, employee informal deviance has a big impact, especially on employee confidence and motivation inside the organization. Notably, research shows that socioeconomic status and the power gap have a big effect on the amount of informal deviance. This shows how complexly societal and cultural factors interact to affect how employees act. Employee informal deviance has far-reaching effects, which result in strained relationships with coworkers, a decline in productivity, and a disturbance of harmony in the workplace. This illustrates how crucial it is to deal with informal deviance to create a supportive and effective work environment. While the studies emphasize the importance of social norms, they neglect to investigate how informal leaders and power structures influence employees' participation in informal deviance.

Keywords: employee informal deviance, workplace deviance, workplace productivity, organizational deviance, job performance.

Introduction

In a work setting, it is to be expected that everyone conforms with the rules established by the organization they work in. Rules are made to keep the company running smoothly and employees performing as expected. In addition to these published rules, the company›s established organizational culture shapes certain norms within the workplace. These refer to actions that are normally done without having to be instructed to do so. Deviation from these norms is called employee informal deviance.

Informal deviance, which lacks formal punishment, may harm an organization's coherence. While this phenomenon is evident in numerous organizations, the current study provides little insight into the factors and motivations driving it. While causes such as perceived unfair treatment, lack of recognition, and social comparison have been proposed, there has been little research into how specific organizational contexts, industries, or cultural factors impact the motivations for informal deviance. Moreover, these behaviors indicate a lack of understanding of psychological processes. This includes rationalization, social contrast, and the dynamics toward their identity.

Theories such as social exchange theory and equity theory provide a structure for understanding workplace deviance by recognizing how individuals assess the risks and rewards of their relationships with them. Employees who experience inequalities, for instance, imbalances in their routines or social justice, may take part in deviant behavior to bring balance to their perceived inequalities. Moreover, group social norms, something that can be formed using informal interactions with others, have the ability to encourage or discourage informal deviance. These norms can encourage informal deviance, making it likely to persist and highlighting the importance of social exchange dynamics in predicting workplace behavior.

Informal workplace norms and their ability to promote or impede deviant behavior is another unexplored area. For example, research has yet to fully address how informal leaders or unofficially established norms influence an employee›s decision to engage in informal deviance. While informal deviance is assumed to disrupt cohesiveness, limited empirical studies document specific ways this impact unfolds across organizational structures. The existing research also lacks information on the efficacy of organizational interventions preventing informal deviance. Interventions such as improving employee engagement, open communication, and promoting a healthy workplace culture are perceived to be beneficial. However, there is little empirical data to back up their effectiveness or lead their development to account for both cultural and psychological dimensions.

The existence of employee informal deviance indicates a gap between workplace policies and employee behavior, and understanding these gaps will lead to a more profound understanding of informal deviance and its impact on organizations. Future studies should focus on how certain workplace rules, regulations, and norms can affect workplace behavior, as well as the psychological factors of deviant behavior. Also, psychological theories can help researchers come up with new ways to find and stop patterns of informal deviance. This could lead to plans that improve the health and safety of workers and create a respectable and responsible work environment. A comprehensive approach to understanding employee informal deviance may increase the likelihood of fostering a workplace that has an overall healthy environment through the use of existing literature.

Methodology

Several procedures were followed to ensure a high-quality review of the literature on employee informal deviance, on how it is defined, what causes it, and what its repercussions are for the organization and one's personal performance. We implemented a standardized procedure during the selection process to ensure the reliability and validity of the literature review. The development of comprehensible and consistent selection criteria, search strategy, and inclusion and exclusion criteria was required in accordance with the research objectives.

Selection Criteria

To verify its relevance to the status quo of organizational dynamics, this study chose peer-reviewed publications, which included both qualitative and quantitative research, along with English-language industrial and organizational psychology literature that were published within the last ten years. Studies published before this timeframe were excluded to focus on the most recent studies, as workplace norms and organizational applications have changed significantly in the last decade. Research that explored employee informal deviance, which included the internal and external factors that have an effect on this behavior, was worthy of interest.

Search Strategy

We used databases like Google Scholar and JSTOR to gather relevant literature. Keywords such as employee informal deviance, workplace deviance, causes of workplace deviance, effects of employee informal deviance, and effects of workplace deviance were included in the search. These keywords intend to recognize literature that attends to various facets of employee informal deviance in the workplace.

Selection Process

The selection process employed specific inclusion and exclusion criteria. This focused on literature that focused on employee informal deviance, explored its possible causes, and considered its impact on companies. These were the main emphasis of the inclusion criteria. Meanwhile, studies that centered on workplace behavior that was irrelevant to deviant behavior were removed according to the exclusion criteria.

Literature Review

The following are studies and related literature on employee informal deviance, its underlying causes, and its implications on the organization.

Employee Informal Deviance

Employees are generally expected to behave in a certain way that contributes to the systematic operation of a workplace, which helps produce results. However, this does not imply that all employees adhere to the established norms within the organization. This type of deviant behavior can be classified as employee informal deviance.

Defining Employee Informal Deviance. Employee informal deviance may be defined as deviant activities in the workplace that go against workplace norms but are not necessarily punishable by law (Zheng et al., 2020). This type of behavior could be either interpersonal, such as bullying or gossiping, or organizational, such as stealing company supplies or taking unwarranted long breaks. While informal deviance does not have the same legal consequences as formal deviance, it can have a significant influence on the workplace, such as lower employee morale, work productivity, and trust.

A study by Irshad et al. (2022) illustrated that employee informal deviance can encompass a wide range of behavior. It found that there are two types of workplace deviance, namely interpersonal deviance and organizational deviance. While interpersonal deviance targets the individuals within the organization, organizational deviance attacks the norms or rules of the organization itself and can harm its productivity and structure. This problem is an issue faced by almost all organizations, especially those countries that have lower rates in literacy and, at the same time, higher in poverty level, suggesting that there might be a possible relationship between socioeconomic status and the frequency of employee informal deviance.

In another study conducted by Etodike et al. (2020), employee informal deviance can be a form of retaliatory behavior. The study highlights the breach of the psychological contract, or the unwritten expectations between employees and employers, as a potential trigger for deviant conduct. The evidence shows that, even in cases of informal deviance, individuals may be acting out due to the sense of unfairness or abuse from their company. Employees may be more inclined to engage in informal deviance in high power distance cultures as a means of conveying dissatisfaction or questioning authority figures without directly addressing formal rules.

Employee informal deviance is also a form of coping mechanism (Tiwari & Jha, 2022). Negative emotions, which are a result of the breach of trust, can make the workplace difficult and unsatisfying for the employee. To cope with the said emotions and assert control over their circumstances, they may resort to informal deviation in such situations. Informal deviance can help employees feel in charge with their emotions, specifically when they are feeling under pressure, angry, or mistreated. Even though the act is insignificant and sometimes harmful, it will most likely provide short-term relief.

Zhu et al. (2019) have found that informal deviance among employees can be used as a means of releasing their frustrations and also a way to provoke authority. Personal grievances and a desire for retaliation against authority figures frequently drive this behavior. Abusive supervision is also considered a source of frustration and stress for employees. This is characterized by people in positions of authority engaging in hostile behavior, which could either be verbal or nonverbal, without the use of physical aggression. This factor can lead to the development of feelings such as anger and resentment towards authority figures and the organization as a whole.

We used both qualitative and quantitative approaches to explore employee informal deviance. In quantitative studies, surveys and statistical analysis are used to assess informal deviance's frequency, factors, and effects on employees and organizations. For example, survey-based studies can help in collecting large data, which can likely provide a deeper understanding of patterns and relationships across different contexts and demographics (Zhu et al., 2019; Adrian et al., 2021). Having said that, quantitative methods also have their limitations, such as their lack of ability to fully grasp subjective experiences and the motivations behind engaging in deviant behavior, which often relates to unique biological, psychological, and socio-cultural aspects. Moreover, the complexity of exploring deviant behavior may be oversimplified by the quantitative approach, which may lead to a failure in addressing the underlying reasons for it.

Meanwhile, qualitative methods such as case studies and interviews enable the researcher to dive deeper into the personal and contextual aspects of why they engage in deviant behavior in a deeper manner (Braje et al., 2020; Etodike et al., 2020). The results can offer relevant insights into their lived experiences, which could shed light on how leadership styles, interpersonal dynamics, and organizational culture can contribute to deviant behavior. In contrast, just like other methods, qualitative research faces limitations, like small sample sizes, which can introduce personal biases and issues in determining the generalizability of the study. These limitations are important to consider, as topics that are considered "sensitive" or "taboo" can produce useful insights, which could impact the reliability and validity of the results.

External Factors and Employee Informal Deviance. Employee informal deviance is an issue with multiple facets influenced by different factors. Leadership styles, organizational dynamics, organizational norms, and violations of psychological well-being significantly influence employee deviant behavior and its occurrence. For instance, an organization that tolerates inappropriate behavior can develop a higher chance of deviant behavior among employees (Braje et al., 2020).

A study by Adrian et al. (2020) discovered that temporary employment, often noted as unfair treatment in organizations and companies, can limit the employee's ability to express their frustrations and stress, which could produce situations that encourage workplace deviance. Employees who are in a temporary work setting have the tendency to develop feelings of uncertainty and face negative working conditions, something that can be the catalyst for resentment and mistreatment, especially when they don't have the outlets for expressing their concerns about their situation. Another aspect to consider is workplace cohesion. These variables can determine how employees can perform according to the organization's standards. For instance, when the group's cohesion is high but their cohesiveness toward their task is low, the likelihood of the employees engaging in rule-breaking activities and deviant behavior is high.

Employees with narcissism or psychopathy, along with other specific personality traits, are more susceptible to deviant behavior due to their lack of empathy and feelings of superiority. This could result in employees breaking organizational rules and participating in risky activities, such as engaging in deviant behaviors. Furthermore, a toxic working environment, often associated with negativity, hostility, and the lack of 10 mutual respect, can promote deviant behavior. Situations such as undervaluation and mistreatment of employees can lead to negative behavior in the workplace (De Bruijn, 2021).

According to Social Exchange Theory, people must assess relationships using a cost-benefit analysis, which will lead them to repeat rewarded activities while avoiding those with negative repercussions. Employees assess the fairness of treatment based on their involvement in relation to the compensation they receive. Researchers have utilized Social Exchange Theory (SET) to explore Leader-Member Interactions (LMX), organizational support, and their perspectives on organizational politics. When employees experience unfairness, they participate in workplace deviance, which includes Counterproductive Work Behaviors (CWBs), in response to the unfairness they experience. Factors such as disemployment and the pressure employees experience to do compulsory Organizational Citizenship Behaviors (OCBs) can develop feelings of inequalities, which may lead to workplace deviance (Chernyak-Hai & Rabenu, 2018).

According to Öztürk & Poyraz (2021), factors such as perceived injustice and the drive to retaliate can trigger informal deviance among employees. They may resort to this behavior as a way of showing their frustrations and imposing fairness when they experience unfair treatment in areas like distributive, interactional, and procedural justice. This scenario can be associated with equity theory and social exchange theory, wherein an individual is motivated to maintain a balance between the perceived rewards, their contribution, and social interaction. Furthermore, social norms in the workplace can have an impact on deviant behavior. This influence can either increase or decrease the likelihood of the behavior occurring.

Lee and Duffy (2020) discovered in their study that the relevance of perceived status importance and jealousy in the workplace can have a significant part in motivating employees to do informal deviance. Employee ranks in the organization›s hierarchical structure are emphasized when indicating status importance. In a workplace where ranks and positions are highly exaggerated, employees may develop feelings of envy and jealousy, which could lead to deviant behavior, especially toward those people they perceive as a threat. Moreover, social comparison between employees plays a crucial role in the employee's perception of the importance of ranks and positions in the workplace and the negative effects that it may cause.

Bullying in the workplace can cause interpersonal and organizational deviant behavior. Jahanzeb et al. (2020) stated in their study that bullying promotes hostility among the employees, which can trigger deviant behavior. This behavioral response is likely caused by high levels of neuroticism, which is defined as a personality trait that decreases the likelihood of an individual to experience negative emotions, for instance, anger, anxiety, and sadness. Employees who have higher levels of neuroticism are prone to react negatively to stressors in the workplace, such as bullying, which could destroy the working environment and employee morale.

Negative leadership plays a significant role in workplace deviance among employees. Nadeem et al. (2020) defined negative leadership as the harmful involvement of negative behavior, which affects the employees and the organization in general. Their study discovered that there is a relationship between dysfunctional leadership and workplace deviance, which is known as emotional exhaustion. There is a decrease in motivation caused by stress in the workplace. This finding finding suggests that dysfunctional leadership combined with an emotionally draining workplace can increase the likelihood of emotional fatigue in employees, which could lead to deviant behavior.

In connection to negative leadership styles, workplace dynamics, and dysfunctional workplace environments, gossiping is also considered to be one of the major contributing factors to workplace deviance. Gossips about favoritism, unfairness, and the lack of validation can lead to a loss of autonomy over their emotions and feelings of resentment towards their co-workers and the organization. Frequent exposure to this kind of behavior, especially when it comes to the authority figures of the organization, can potentially result in workplace deviance as an act of regaining control with their emotions (Zhu, Q., Martinescu, et al., 2022).

Ellen et al. (2021) stated that personality traits are especially associated with the Big Five Personality Traits and the Dark Triad. The Big Five includes traits like Openness, Conscientiousness, Extraversion, Agreeableness, and Extraversion. The Dark Triad encompasses traits such as narcissism, Machiavellianism, and psychopathy. These traits can significantly influence workplace deviance. Agreeableness, Machiavellianism, and psychopathy are considered predictors of deviant behavior. Researchers discovered that the aforementioned traits play a significant role in explaining workplace deviance. These attributes can help in determining their dynamics and relationships inside the workplace. Associating personality traits with workplace deviance reveals the complex relationship between an employee's personality and informal deviance

Internal Factors and Employee Informal Deviance. According to Koopman (2019), when employees experience pressure when assisting their colleagues at work, they are susceptible to unintentional negative effects. Although the act of assisting in the workplace may be perceived as something beneficial, the behavior also increases the likelihood of an employee experiencing negative emotions like anxiety, frustration, and stress, which could lead to workplace deviance. The stress is evident when an employee is not asked to help, as this can also be emotionally draining on their end.

The study of Jahanzeb et al. (2023) explored how exhaustion from the workplace contributes to an employee's capacity to regulate their emotions, which could possibly lead to deviant behavior. The study drew inspiration from the self-regulation theory, which discovered that employees who are likely to experience the workplace are susceptible to being deviant. Deviant behavior can also manifest in behaviors such as procrastination, which can also be considered a way to cope with physical, psychological, and workplace exhaustion caused by ostracism, which is defined as the exclusion or rejection of a group. Furthermore, procrastination is a sign that there is a loss of self-control in the employee. Interventions like psychological flexibility may help lessen the effects of the aforementioned types of exhaustion and also prevent them from happening. The study focused on the negative effects of ostracism in the workplace on the employee's behavior, something that can promote informal deviance.

A study of Höly, K., & Starystach, S. (2021) explored the employee's behavior of being silent in the organization and is seen through the lens of institutional theory and rational choice theory. These theories can explain the factors that make workplace deviance a prevalent issue. Using the lens of rational choice theory, employees may choose silence due to self-interest. When an employee perceives a breach of the organization's rules, they may choose not to address the issue. Organizations with a hierarchical structure often deviate from addressing issues, leading to a culture of mutual silence in the workplace. Conversely, institutional theory also provides an explanation for employee silence. This theory explains how, even in urgent situations, silence becomes a norm in the institution or in the workplace. To put it into perspective, the Catholic Church silences issues like abuse to maintain its sacred image. Silence occurs when there is a fear of punishment, organizational norms, and hierarchy, which is influenced by the institution's environment.

Another factor that is considered when identifying workplace deviance is organizational cynicism. According to the study of Evans et al. (2021), organizational cynicism happens when employees experience a lack of support from their workplace, unfairness, and being part of a dysfunctional organization. Furthermore, the said factor is also believed to come from a workplace that lacks honor and principles, which could cause employees to feel negative about themselves and about the organization. To balance the negativity in the workplace, employees engage in informal deviance in the hopes of the organization validating their feelings and showing the organization's flaws. Interpersonal deviance is a product of organizational cynicism because the tendency to show the employee's frustration toward the organization is likely high.

In another study by Irshad, M., Hussain, M., & Qureshi, M. A. (2021), employees engaged in workplace deviance to cope with the emotional pain caused by their disdain towards the organization. This behavior can harm their well-being in the workplace as well as reduce employee morale. In addition, by being deviant, they feel a sense of control over their emotions. For them, workplace deviance is a way of showing what is not working that harms not only the organization but also the people who are a part of it. Furthermore, if employees› disruptive behavior towards their colleagues remains unaddressed, it can lead to organizational deviance. Being mediocre in their responsibilities, intentionally damaging organizational property, and portraying the organization or the employee in a negative light are some of the examples of organizational deviance. Overall, mixed methods are a valuable approach combining the unique aspects of qualitative and quantitative research. This can give depth and rigor to the study. However, to use this method to its fullest extent, consistent funding and time are required (Koopman et al., 2019).

Workplace Atmosphere, Performance, Organizational Dynamics, and Impact on Employee Informal Deviance

Employee informal deviance, defined as voluntary behavior that disobeys organizational norms but is not punishable by law, can have a major impact on workplace performance and productivity. Although there is existing literature regarding this phenomenon and the causes and effects of it, its influence on the employee's behavior and emotions and organizational shame has been explored 16 by contemporary research. Deviant behavior at work has a direct negative impact on performance, including actions like coming late, departing early, squandering corporate resources, or being undesirable to coworkers. However, the relationship between employee informal deviance and work performance is difficult, with corporate guilt serving as a mediator. This deviant behavior may elicit feelings of organizational shame, which occurs when activities break expected organizational norms and identity standards, which leads to social stigma (Tian, X., & Guo, Y., 2023). Moreover, it was explored how leader-member interchange (the quality of a leader's relationship with their team) and pleasure at work affected deviant workplace behavior in an Indonesian telecom business. The study found that strong leader-member exchange significantly decreased deviant behavior, which includes conduct that violates the rules of the organization (Al Hakim, M. L., & Soetjipto, B.

W. 2020). The study of Zahid, A., & Nauman, S. Zahid, A., & Nauman, S. (2024) identified hostility at work as a major cause of negative results. Although not explicitly called "informal deviance," incivility included low-level, disrespectful behavior that went against workplace norms, implying that informal deviance—which is frequently typified by minor acts of disrespect or rule-breaking—may develop into more serious misconduct. The study also revealed that interpersonal conflict influences the relationship between unfitting workplace behavior and decorum. Conflict causes tension and frustration among coworkers, raising the tendency for deviant behavior to manifest, which is disadvantageous to the company and its employees. Workplace environment, then, is a crucial mediating element. According to Yadav, P. & Rai, A. (2020), employee informal deviance was found to decrease employee motivation and efficacy, as well as cultivate a hostile working environment. This ultimately leads to a 17% decrease in productivity and retention, as well as an increase in absenteeism. Another study also emphasizes the impact of bad work experiences on one's personal life, especially in their conduct toward their family. An individual's family and work life may interact to produce various effects. For instance, conflict within the workplace may influence a person's emotional state and behavior at home and vice versa. In this light, it is evident that employee informal deviance may also have consequences outside of the work environment. (Li, A., Liao, C., Shao, P., & Huang, J. 2022).

Understanding the Complexities of Employee Informal Deviance

According to the existing literature, employee informal deviance is a complex phenomenon with important implications for workplace dynamics. Furthermore, this refers to voluntary behavior that challenges organizational norms that are not punishable by law. Illegal conduct could be a form of negative behavior in the workplace, including disputes in the workplace, bullying, gossiping, theft, and taking long breaks during work. Informal deviance has its consequences even when it is not punishable by law, such as destroying the confidence of themselves or their colleagues, reducing employee morale, and overall work productivity. Moreover, several factors contribute to employee informal deviance, which could come in the form of abusive leadership, such as harsh supervision, a dysfunctional working environment, and unfair treatment. Temporary employment, defined as the lack of job stability and having less power in the organization, especially when it comes to addressing organizational concerns, could make them feel frustrated, which then could lead to deviant behavior. The organization's social norms can either tolerate or discourage informal deviance.

Informal deviance can be an employee's way of coping with the negative effects of the workplace caused by various factors, such as anger, anxiety, stress, and a dysfunctional working environment. Unfair working conditions also increase the likelihood of employees experiencing feelings of obligation or pressure to help their colleagues, as well as facing ostracism and exposure to toxic employee behavior. With this in mind, individual personality traits can play a crucial role in determining the likelihood of an employee participating in workplace deviance.

Organizational deviance occurs when there is organizational cynicism. The root cause of this can be traced to an employee's impression that the organization lacks integrity. This cynicism frequently results in feelings of wrath and resentment, encouraging employees to participate in acts that undermine or hurt the business. The authors continuously emphasize the importance of recognizing both external forces and internal psychological issues to successfully manage informal deviance and build a healthier, more productive workplace.

While acknowledging the importance of social norms, the studies do not provide a thorough study of how informal leaders and informally established standards influence employees' decisions to engage in informal deviance. Understanding the dynamics of informal power structures and networks in the workplace is critical for tackling the persistence of aberrant conduct. The studies also lack actual data demonstrating how informal deviance affects organizational structures. To determine how an employee's aptitude, behavioral and communication patterns, and workplace dynamics can have an impact on informal deviance, there is still a need for extensive research in this area. Although there is various existing literature and interventions that are being brought to light, such as fostering a workplace that has little-to-no employee informal deviance because of a healthy working environment, further research still needs to look into its extensive effectuality within the workplace.

Discussion

Employee informal deviance is a phenomenon that occurs in various workplaces and organizations. It is generally understood that employees should behave in ways that meet the standards established by the organization to ensure that proper objectives are met and everyone is functioning efficiently in the workplace. These deviant actions, although not punishable by law, go against the norms habitually practiced within the organization and could result in various repercussions for both the employees and employers. While official violations pose a danger to maintaining order within the work setting, informal deviance may also affect employee trust and performance inside the organization, manifesting in behavior such as interpersonal conflicts or organizational misconduct.

External factors play a role in fostering informal deviance among employees. Poor leadership that may come in the form of harsh supervision is one of the main factors in cultivating an environment for employee informal deviance. In that sense, if the workplace is perceived to be a hostile environment, either due to the leadership style implemented by the superiors within the organization or by other co-workers, it could also lead to further deviant behavior. Employees may perceive specific injustices within the workplace, leading them to engage in deviant behavior as a form of retaliation. The way coworkers react to informal deviance in relation to workplace norms can encourage or discourage it. Aside from the aforementioned external factors, there are also internal factors that play a role in encouraging employee informal deviance within the workplace. These internal factors may pertain to individual personality traits and emotional states. Research found that employees who are more inclined to exhibit deviant behavior were found to manifest certain personality traits such as neuroticism and narcissism, which depict how these traits greatly influence employee informal deviance. These traits make employees more susceptible to stress and emotional instability, increasing their likelihood of acting contrary to workplace standards.

Aside from those personality traits, employees may also perpetrate deviant behavior to cope with emotional challenges. These challenges might cause significant psychological discomfort, such as feelings of loneliness, excessive workplace pressure, or interpersonal conflicts that the individual is experiencing. In this regard, negative emotions are instrumental in causing employees to engage in deviant behavior, as it was found to help them cope with the stress and frustrations that they face. Especially for employees who were unable to receive necessary support from their supervisors or coworkers, these negative emotions further manifested into behavior that contradicts behavioral standards expected of them within the organization. In point of fact, research found deviant behavior to be strongly correlated with stress-related characteristics and organizational distrust. When 21 employees believe that their company is lacking in integrity, staff members may resort to deviant behavior as a way to retaliate and damage the general organizational process. Employee informal deviance may result in pervasive consequences that would affect individual performance, workplace culture, and the dynamics established within the organization. Definitely damaging to the organization and employees would be the interpersonal stress and reduced productivity that deviant behavior may cause.

The findings reveal a need to understand this type of behavior within various workplaces to develop solutions that would combat this phenomenon. Further research could look into the significance of how various leadership styles affect the existence of employee informal deviance. In terms of lowering stress and deviant behavior, studies may also explore the potential impact of emotional intelligence and other factors that may affect how an employee perceives and trusts the organization they belong to. Aside from that, further studies could also explore the different coping mechanisms that employees engage in when responding to psychological discomfort and how these may manifest in the form of deviant behavior. Organizations may also examine the various external and internal factors that contribute to employee informal deviance and implement interventions designed to intercept deviant behavior and encourage positive interactions within the workplace. Organizations may then be able to look into ways to promote positive coping mechanisms instead of negative ones, and other means may be employed to help prevent employee informal deviance. They may also opt to improve the performance of the managers, supervisors, and other leaders by making sure that they establish an effective leadership style.

Moreover, organizations could integrate within their process a system of assessing their workplace environment to discover if employee informal deviance is present within their work setting and what factors could possibly contribute to such. We can implement proactive interventions, such as workplace training programs, employee counseling services, or clear codes of conduct, to mitigate deviant behavior. These interventions will aim to develop a healthier work environment that would promote positive behavior instead of deviant ones.

Conclusion

The literature review on employee informal deviance called attention to the internal and external factors that impact its manifestation and how the phenomenon affects the employees psychologically and the overall dynamics of the organization. What emerged from the evaluation of the literature is that external stressors, such as poor leadership styles and hostile work environments, contribute to the existence of deviant behavior. Moreover, internal causes, such as negative psychological reactions manifesting as unhealthy coping mechanisms to deal with frustration with the organization, are also instrumental in its occurrence.

The findings of the reviewed literature are relevant for the discipline of organizational and industrial psychology. The prevalence of employee informal deviance and its relationship with human behavior in the workplace bring light to the need to investigate the root cause of such behavior. We found that employee informal deviance poses a pressing issue, potentially jeopardizing productivity and organizational cohesion if not promptly addressed. Deviant behavior can hinder the members of the 23 organizations from achieving their necessary goals and development as a community. Identifying the factors that contribute to informal deviance will be advantageous in developing management techniques and interventions that would address such causes and encourage a healthier work environment. Using psychological theories to better understand workplace dynamics and employee behavior can diminish employee informal deviance, leading to improved overall employee well-being and organizational productivity.

The literature agrees that it is necessary to recognize and manage employee informal deviance to foster a thriving work environment. Further research could be conducted with a more holistic approach, considering how individual factors, such as personality traits and stress levels, and external aspects, such as company culture, relate to each other when it comes to the prevalence of deviant behavior in the workplace. This perspective aims to benefit not only the employee but the organization as a whole.

Organizations must prioritize identifying, understanding, and mitigating workplace dissatisfaction and informal deviance. Cultivating an environment rooted in fairness, accountability, and open communication is one way to prevent deviant behavior. Further investigation in this area may help organizations take the necessary actions to promote a more positive work environment by implementing positive mechanisms within the organization. This leads to a step toward managing and ultimately abolishing employee informal deviance within the workplace

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The Stress of the Hustle: A Review of Job Insecurity, Mental Health, and Adaptive Strategies in Filipino Gig Workers

Gabrielle Marie G. Pon

Abstract

With a focus on the impact of coping strategies, this literature review examines the relationship between chronic stress and job insecurity. As one of the primary causes of psychological distress, job insecurity frequently results in elevated and sustained stress levels. The impact of job insecurity on chronic stress can be mitigated or exacerbated by a variety of coping mechanisms, including problem-focused and emotion-focused approaches. This review summarizes previous research, highlighting important gaps in the field and emphasizing the psychological implications of job insecurity. The insights gathered are intended to direct future studies and expand on the ways in which coping mechanisms might be applied to improve mental health outcomes associated with job insecurity.

Keywords: Job Insecurity, Chronic Stress, Coping Mechanisms, Psychological Distress, Mental Health

Introduction

In the current unstable employment landscape, job insecurity, defined as the concern of losing one>s job or experiencing undesirable shifts in working conditions, has become a topic of major concern. This ongoing uncertainty, which is a result of organizational practices like downsizing and outsourcing, has been closely associated with chronic stress and correlated with profound problems in both mental and physical well-being. The psychological implications of job insecurity highlight the need for a deeper understanding of its causes and effects.

The moderating effect of coping strategies is highlighted in this review, which looks into the connection between chronic stress and job insecurity. It incorporates studies from psychology, occupational health, and organizational behavior to investigate 2 how problem- and emotion-focused coping mechanisms affect the stress levels among individuals who deal with job insecurity. This review attempts to determine how coping mechanisms may decrease or intensify the harmful effects of job insecurity on one's mental health by emphasizing gaps in the literature and examining a variety of job settings and populations.

The review emphasizes the significance of directed strategies and support networks to improve resilience and well-being, with a particular focus on Filipino gig workers. As job insecurity becomes a growing reality for many, an important question emerges: How can workers navigate these uncertainties without compromising their mental health and overall well-being? Overall, it attempts to offer perspectives that guide further study and valuable programs, enabling employees to productively approach the difficulties brought about by chronic stress and job insecurity.

Methodology

This review of the literature included theoretical works, empirical research, and meta-analyses that attempt to look at how coping strategies, chronic stress, and job insecurity interact. The selection criteria were centered on making sure that only relevant literature was included; in particular, research must explicitly examine coping mechanisms, chronic stress, and job insecurity. Additionally, only publications that were available in English and that were published within the last decade will be included since they represent current research and pertinent concerns. However, out of necessity, certain articles from the last 20 years were taken into account. The review prioritized participant diversity by including studies with adult participants from diverse occupational backgrounds. backgrounds, and it took into account both qualitative and quantitative research approaches, including surveys, experiments, case studies, and longitudinal studies.

Given their fundamental contributions to the field, this study contains fundamental works on chronic stress and job insecurity that are over a decade old. Important theoretical frameworks and empirical conclusions that still influence current research have been established by these studies. Earlier studies continue to be significant for offering historical context, following the development of the idea of job insecurity, and bolstering comparisons between labor market situations in the past and today, regardless of whether more current literature is also presented.

To locate relevant literature, a systematic search was performed across several academic databases, including Science Direct, PsycINFO, PubMed, Scopus, Web of Science, and Google Scholar. The search utilized a combination of keywords and phrases like "job insecurity," "chronic stress," "coping mechanisms," "emotional coping," "problem-focused coping," and "psychological effects of job loss," employing Boolean operators (AND, OR) to refine results and ensuring a comprehensive exploration of the topic.

The selection process for this literature review prioritized studies that specifically investigated the connections between job insecurity, chronic stress, and coping mechanisms. Articles that explored how job insecurity impacts chronic stress and the function of coping strategies in this context were included. Studies that examined these variables separately or did not assess their interactions were excluded, ensuring a thorough understanding of how these elements affect mental health and well-being. By 4 Implementing these criteria, the review sought to emphasize relevant research that encapsulated the intricate relationships among job insecurity, chronic stress, and coping.

Furthermore, the majority of the research in this review utilizes cross-sectional designs, which restricts the capacity to comprehend how stress, coping, and job insecurity change over time. Moreover, plenty of studies concentrate on traditional workers, which makes extending results to gig workers challenging, particularly in the Philippine context. A significant dependence on self-reported data and inconsistent definitions of important terminology, such as "coping mechanisms," cast doubt on the validity of some findings. These limitations imply that although the results are beneficial, they should be evaluated with caution, particularly when expanding them to other demographics or job settings.

A couple of limitations are acknowledged in this study. The results were interpreted as associations rather than causal correlations, considering that the majority of literature currently in publication applied cross-sectional designs, emphasizing the necessity of further longitudinal studies. Furthermore, this review makes a contribution by exploring job insecurity among Filipino gig workers, while previous research has mostly focused on traditional workers. Priority was given to studies with well-defined methodology and validated measures in order to mitigate potential biases from self-reported data. By choosing studies that were in line with recognized psychological frameworks, inconsistencies in the definition of important terminology were minimized. Lastly, because of their foundational contributions, which offer theoretical underpinnings and historical background for comprehending job insecurity and coping mechanisms, seminal studies that were over a decade old were ultimately chosen.

Literature Review

Job Insecurity and Its Psychological Impact

Individuals who experience job insecurity worry about whether their current position will be maintained (Jung et al., 2020). Important facets of a person's life, including sufficient finances, social relationships, opportunity for personal development, and the structure that comes with employment, are all at risk when a job feels unstable (Kekesi & Agyemang, 2014). One of the primary causes of stress nowadays is thought to be job insecurity (Shoss, 2017). Globally, the workforce is feeling more insecure as a result of the growth in job losses, which has raised concerns about employment (Sarfraz, 2023).

As a consequence of the shifts in the labor market and workplace arrangements, job insecurity has drawn a lot of attention from scholars in the last few years (De Angelis et al., 2021). When employees believe that their working conditions pose a threat to their wellness, job insecurity is a significant source of stress (Aguiar-Quintana et al., 2021). Individuals get anxious when they are unsure about what they do because they begin to think they do not have sufficient resources to handle the demands of their profession (An et al., 2023). It is often established that job insecurity has a detrimental impact on one's physical and mental health, much like unemployment does (Green, 2015). Utilizing the Job Demands-Resources (JD-R) theory, Ilac et al. (2022) found that increased job demands and reduced resources during the pandemic contributed to job insecurity and negatively impacted the mental health of Filipino workers.

Ervin et al. (2024) found that as opposed to stable job security, exposure to any degree of job insecurity over time (whether it improves, gets worse, or stays insecure) is 6. associated with poorer mental health in the future for both men and women. Concerns about official contracts, discussions with coworkers on possible layoffs, loneliness at work, or neglect by a supervisor are some of the reasons why employees frequently stress and overthink their future financial and professional life (Berset et al., 2011). Employees may experience severe psychological issues, sleep disturbances, and mental and emotional consequences as a result of this extreme stress (Högnäs et al., 2022). Being employable is beneficial, but it still does not completely shield employees from the negative consequences of job insecurity, whether it stems from more tangible considerations like having short-term contracts or more sentimental ones like anxiety of losing one's job (Canzio, 2024).

Majumder et al. (2022) found that job insecurity not only causes mental stress on its own, but it also fuels worry and terror. Chadi (2023) demonstrates that employees who experience job insecurity are prone to experience stress before bed, which results in lesser and poorer quality of sleep. According to Högnäs et al. (2022), work uncertainty raises the likelihood of major depression by dramatically increasing sleep issues. The Stressor-Strain Model (Lazarus & Folkman, 1984, as cited in Griep et al., 2021), Jahoda's (1982, as cited in Griep et al., 2021) work on the benefits of work, Self-Determination Theory (Ryan & Deci, 2000), and Psychological Contract Theory (Rousseau, 1989) are some of the theories that Griep et al. (2021) utilized to support these findings. According to these theories, job insecurity is a significant stressor at work that negatively impacts mental health by endangering: (1) important aspects of work that are necessary for well-being, such as revenue, social standing, and sense of self (i.e., the benefits of work); (2) fundamental psychological requirements, such as autonomy, relationships, and 7 competence (i.e., the frustration of fundamental psychological needs); and (3) the equilibrium and value of the relationship between the boss and the worker (i.e., breach of psychological contract).

According to Sultana et al. (2022), job insecurity increased the likelihood of mental health issues such as stress, anxiety, and depression in humanitarian workers. These workers' mental health deteriorated during the COVID-19 pandemic as a result of lesser development and humanitarian programs brought on by a significant cut in financing, which also resulted in unemployment and increased job insecurity. This study demonstrated that job insecurity is a substantial stressor, which supports multiple studies that showed how detrimental it is to one's physical and mental health (De Witte et al., 2016; Schnall et al., 2016; Kim et al., 2017; Llosa et al., 2018, as cited in Menéndez-Espina, 2019). Magnusson, Hanson et al. (2020) confirmed the large amount of research that relates job insecurity to psychological problems (De Witte et al., 2016). Longitudinal research by Llena-Nozal et al. (2009) on the effects of work transitions on mental health was carried out in four countries: Australia, Canada, Switzerland, and the UK. Regardless of whether the employment was full-time with a permanent contract or a less conventional one, moving from a secure to an insecure job significantly increased psychological distress in all four nations.

Kirves et al. (2011, as cited in De Witte et al., 2016) suggest that job insecurity has varying effects on employees depending on their employment contract, with permanent employees suffering a greater loss in well-being than temporary employees. In their study of coping mechanisms and anxiety levels among contract employees of the Philippine government, Victa et al. (2024) identified job insecurity as a major stressor that 8 contributes to psychological distress and lower job satisfaction. A generic scale that incorporates a variety of psychological symptoms has been used in 21 studies over the last 30 years to assess mental well-being. These studies all concluded that job insecurity holds a detrimental impact over time (Burchel, 2011; Dekker & Schaufeli, 1995; Ferrie et al., 2001; Ferrie et al., 1998; Ferrie et al., 2005; Hellgren & Sverke, 2003; Hellgren et al., 1999; Ibrahim et al., 2009; Iversen & Sabroe, 1998; Kalil et al., 2010; Kirves et al., 2011; Loretto et al., 2010; Mäkikangas & Kinnunen, 2003; Marchand & Blanc, 2011; Marchand et al., 2005; Marchand et al., 2006; Näswall et al., 2005; Selenco & Batinic, 2013; Swaen et al., 2004; Vander Elst et al., 2015; Virtanen et al., 2011, as cited in De Witte et al., 2016). The effects of job insecurity can have substantial consequences, increasing the risk of psychological distress by 30–31% (Marchand et al., 2005, as cited in De Witte et al., 2016). Along with the detrimental effects of acute insecurity, De Witte et al. (2016) characterize job insecurity as a chronic stressor, which can have lasting impacts on health and well-being if the issue remains.

The Rise of Job Insecurity in Modern Economies and its Psychological implications, including Emotional Instability and Chronic Anxiety.

Technological developments (Rifkin, 1995, as cited in Manning & Mazeine, 2024) and globalization (Kalleberg, 2009, as cited in Manning & Mazeine, 2024) are two potential causes of the recent fall in job security. In addition to a rise in "non-standard employment" including temporary or part-time work, freelance jobs, zero-hour contracts, outsourced labor, and other flexible work arrangements, these factors have contributed to a decline in factory employment and union affiliation (Manning & Mazeine, 2024). Organizational changes and heightened job insecurity are perceived as consequences of 9. new technologies, such as STARA (Smart Technology, Artificial Intelligence, Robotics, and Algorithms), which pose a danger to employment stability (Lingmont & Alexiou, 2020). Workers who experience high levels of job insecurity and threat are more likely to be emotionally consumed and behave less proactively on environmental concerns (Karatepe et al., 2023). However, there was no discernible adverse effect of artificial intelligence on job insecurity, as discovered by Lui and Zhan (2020). Meanwhile, Hötte et al. (2023) point out that several studies back up the notion that technical advancements might lead to the creation of additional employment, which would hence raise the demand for labor. On the other hand, employees' job insecurity is unavoidably impacted by the algorithmic control present in online labor markets (Keith et al., 2020), which can lead to feelings of stress and discontent (Umair et al., 2023).

Building on previous studies on how technology affects employment prospects (Autor, 2010), Yam et al. (2023) used a variety of methodologies and cultural contexts to demonstrate how the use of robots may make workers in both low-skilled and cognitively demanding occupations feel more insecure about their jobs. Indirect evidence, however, indicates that although robots' capabilities are rapidly expanding, they also generate new employment opportunities. Overall, even if being among robots might make employees feel anxious and insecure about their jobs, these emotions can be more a result of personal perceptions than potential job loss (Yam et al., 2023).

Chronic Stress as a Consequence of Job Insecurity

Uncertainty-induced stress is a major psychological component of job insecurity, as excessive or ongoing stress can negatively impact one's physical and mental well- being (Green, 2015). Luthans (2002, as cited in Chukwuemeka et al., 2023) states that stress is an adaptive reaction that is impacted by psychological processes and individual characteristics. Any external (environmental) action, circumstance, or incident that puts an individual under undue psychological or physical strain causes this reaction. Epel et al. (2018), as cited in Crielaard et al. (2021), define chronic stress as the recurrent triggering of the stress response, which encompasses biological, emotional, and cognitive processes brought on by a stressor. Furthermore, employees could experience several job-related stressors concurrently, such as shift work, inadequate organizational structure, a lack of continuous professional growth, and understaffing, all of which contribute to varying degrees of stress (Szerencsi et al., 2013). Over time, physical symptoms like elevated blood pressure might result from stress. Additionally, it could lead to social effects and behavioral changes, such as social disengagement (Hurrelmann, 2010, as cited in Schoger, 2023). It is well known that significant unpleasant life experiences frequently precede the onset of depressive episodes (Paykel, 2001). Furthermore, studies indicate that depressive symptoms may be brought on by stressful life situations (Hammen, 2005; Kendler et al., 1999). Poorer mental health outcomes were linked to more employment uncertainty, according to a study by Sultana et al. (2022). In particular, there was a higher likelihood of poor mental health conditions such as stress, anxiety, and depression among humanitarian workers who were facing job insecurity. These results support the fundamental idea in stress research, which holds that psychological discomfort may be induced by anticipating a stressful event in a manner comparable to that of actually experiencing it (Lazarus & Folkman, 1984, as cited in Rocha et al., 2006). Previous 11 Studies have demonstrated that different elements of stress may operate in a manner leading to them being more detrimental together; as an example, occupational stress can be exacerbated when time pressure is coupled with perceived dangers (Stanton et al., 2001) or when demanding circumstances are coupled with low control (Karasek & Theorell, 1990, as cited in Schneiderman et al., 2005).

The demand-control-support (DCS) paradigm, according to Chen et al. (2022), sees stress as a person's response to demanding job duties (Houtman et al., 2007), which causes changes in the worker's mental, emotional, physical, and cognitive states. Moodiness, anxiety, aggression, disengagement, sleep difficulties, and memory problems are common mental health challenges brought on by work-related stress (Mayerl et al., 2016; Neupane and Nygard, 2017, as cited in Chen et al., 2022). The quality of work may suffer if stress at work is not managed with qualified guidance (Ajayi, 2018). De Castro et al. (2008) discovered that among Filipino immigrants in the United States, job-related stress, particularly worries about job security, is positively correlated with medical conditions, underscoring the wider effects of job insecurity on chronic health illnesses.

The Long-term Health and Psychological Consequences of Chronic stress in the Workplace

It seems that stressors' impact on chronic stress worsens with time, driven by the continuous accumulation of stressors and the dwindling number of problem-solving choices. Crielaard et al. (2021) claim that individuals who experience stressors regularly and have limited access to coping mechanisms (often as a result of prior exposure to uncontrolled stressors) may come to perceive subsequent stressors as uncontrollable. 12 This viewpoint can lead to feelings of powerlessness toward present stresses, which in turn can increase chronic stress, especially when combined with the notion that past stressors cannot be overcome. Cognitive function is compromised as a result of this ongoing stress, which may make it more difficult to deal with stress and worsen chronic stress (Crielaard et al., 2021).

Perez et al. (2021) found that participants specifically reported that since beginning their current jobs, they had developed unhealthy eating habits that have resulted in an increase in weight and obesity-related conditions, including diabetes and hypertension. It is often acknowledged that psychological stress is an alarming problem that might raise the risk of cardiovascular illnesses (Zafar et al., 2021). It has been demonstrated that chronic stress has broad immunosuppressive effects on the distribution of immune cells (Segerstrom & Miller, 2004). Stress affects a number of brain pathways and mental structures that are crucial for memory (Zafar et al., 2021), and prolonged stress may impede long-term memory (Ganguly et al., 2017). Although chronic stress has a substantial influence on the stress-immune system, these effects are amplified in the context of acute stress, since previous research did not reveal variations in cell populations among groups prior to stress arising)

Generally speaking, alterations in one part of the brain can impact other functionally related areas, which may result in behavioral, emotional, and cognitive impairments frequently linked to long-term stress and raise the risk of developing mental illnesses (Mariotti, 2015). Chronic stress can cause the neuroimmune axis to become overstimulated and malfunction, leading to immunological and neuroendocrine abnormalities that produce a persistent low-grade inflammatory state that can be a 13 prelude to a number of diseases (Gu et al., 2022). Cardiovascular illnesses, diabetes, cancer, autoimmune disorders, and mental health problems, including anxiety and depression, have all been connected to stress and inflammation (Mariotti, 2015).

Ota et al. (2014) claim that a molecular process that causes neuronal shrinkage in particular brain regions when persistent stress is present is frequently observed in individuals with depression. Persistent cytokine signaling in the brain prevents the elimination of ill behavior, which can lead to depression in situations of chronic inflammation brought on by extended stress (Mariotti, 2015). Physical activity has been shown to improve brain health by controlling the synthesis of neurotrophic factors, neurotransmitters, and inflammatory chemicals. This can result in a reduction in depressive symptoms, a decreased likelihood of neurodegenerative disorders, and a general enhancement in cognitive functions (Cotman et al., 2007).

Coping Mechanisms as Moderators

Coping mechanisms fall into two groups: positive and negative. While negative or maladaptive coping strategies, like escape, social disengagement, and rumination, may provide only short-term stress relief while not tackling the underlying problems, positive coping strategies, such as relaxation techniques and positive self-affirmation, successfully mitigate stress (Tandler et al., 2020). Khawli et al. (2022) define job insecurity as a stressor that might worsen as a result of common external factors like the COVID-19 pandemic, but its effects can differ from person to person depending on important psychological aspects, especially their personal coping mechanisms. Additionally, there are two categories of coping: proactive coping, which aims to avoid 14 stress in the future, and reactive coping, which happens in reaction to stressors (Algorani & Gupta, 2024). Because they are better organized and less prone to stress, proactive people typically do well in stable settings, whereas reactive people could perform better in more dynamic settings (Coppens et al., 2010). Previous studies have found that coping is a significant psychological component that has been demonstrated to lessen the effect of job insecurity on stress responses (Cheng et al., 2014; Menéndez-Espina et al., 2019; Probst & Jiang, 2016; Richter et al., 2013, as cited in Khawli et al., 2022).

The importance of positive methods of coping in the workplace for preserving psychological health has been highlighted by previous research (Tandler et al., 2024). Coping strategies, including emotional support and positive reframing, were associated with reduced levels of all burnout aspects, including psychological fatigue, skepticism, and ineffectiveness, as demonstrated by a study conducted with teachers. Utilizing the Conservation of Resources (COR) theory, Victa et al. (2024) emphasize the importance of social support as a coping strategy that may mitigate anxiety related to job insecurity within contractual employees in the Philippine government.

Conversely, negative coping mechanisms, including self-distraction and denial, showed no correlations (Tandler & Petersen, 2021). Comparably, in a variety of career fields, maladaptive coping strategies (negative coping) have been tied to decreased job satisfaction and increased work-related stress, while adaptive coping strategies (depreciation, aversion, and control) had a positive correlation with multiple facets of job satisfaction (Tandler et al., 2020). Additionally, compared to less active people, playful people reported reduced stress levels and utilized more positive, stress-focused coping. 15 techniques (including jokes, positive reframing, and both instrumental and emotional help) (Tandler et al., 2024).

In contrast to patients who use sufficient coping methods, individuals who depend on maladaptive coping mechanisms are more likely to participate in dangerous health behaviors. These people frequently use substances like smoking or drinking and are more likely to not follow their treatment plans (Sánchez et al., 2010). Further difficulties can be avoided by including coping strategies into psychotherapy or educational initiatives for patients (Rydlewska et al., 2013; Cattelaens et al., 2019). Maladaptive coping strategies have been linked to a number of problems; avoidance-related coping methods have been linked to somatic symptoms and mental illnesses such as major depressive disorder, anxiety, and PTSD (Santarnecchi et al., 2018). This is particularly true for conditions like heart disease and hypertension, where patients who use unhealthy coping mechanisms typically display worse symptoms (Casagrande et al., 2019).

Examining culturally based coping mechanisms is crucial to comprehending how Filipinos manage chronic stress and job insecurity. The Filipino Coping Strategies Scale, designed by Rilveria (2018), identifies important mechanisms that demonstrate the country's resilience in the face of hardship and collectivist beliefs. Social support seeking, spirituality and faith, cognitive reappraisal, problem-solving, disengagement, endurance, and perseverance are frequent coping mechanisms that were emphasized in the study, which further developed a coping scale specifically designed for the Filipino setting. These culturally based techniques, which have their roots in Filipino values like 16 Pakikisama (social harmony), bayanihan (community support), and pananalig (faith in God) may decrease the negative effects of job insecurity on stress levels.

Different types of Coping Mechanisms (problem-focused vs. emotion-focused) and their Effectiveness in Reducing or Exacerbating stress.

Problem-focused techniques are typically utilized when a person believes that the stressor is something that can be managed or altered. Emotion-focused techniques, on the other hand, focus on controlling emotional responses to the stressor instead of trying to alter the circumstances. When a person believes that the issue is outside their control or cannot be changed, they are more inclined to employ such approaches (Menéndez-Espina et al., 2019). Meaning-focused coping is a third, higher-order coping method that has emerged in recent times. When previous coping tactics have failed, this type of coping entails leveraging one's own beliefs, values, and existential aspirations to keep oneself motivated to maintain coping measures (Schoenmakers et al., 2015; Folkman, 2007). Furthermore, studies have demonstrated that using a mix of coping mechanisms, such as combining problem-focused and emotion-focused techniques, can result in more fulfilling and favorable coping experiences for people (Srivastava et al., 2023).

By first addressing the issue, modifying one's goals, formulating a strategy, taking tangible steps, and asking for help, problem-focused coping entails concentrating entirely on the current situation. By using problem-focused coping techniques, organizations may become more resilient in the face of unforeseen difficulties and perhaps become high-reliability entities (Williams et al., 2017). Emotion-focused coping, 17 On the other hand, it involves rephrasing the scenario, practicing emotional detachment, shifting emphasis, seeking out social support, such as empathy and comfort, and adopting positive interpretations of bad events (Carver et al., 1989). Problem-focused coping is thought to be a more successful strategy, buffering the stressor-strain relationship, whereas emotion-focused coping may occasionally be regarded as less effective since it might intensify the link connecting stressors and strain (Lazarus & Folkman, 1984, as cited in Van den Brande et al., 2016).

Passive or avoidant coping mechanisms might result from maladaptive emotion-focused coping. Instead of confronting and resolving the root of the issue, people frequently resort to avoidant coping when they are under stress in order to reduce their emotional pain (Carver et al., 1989). When people feel they have little control over what is going on, they are more likely to resort to avoidant coping strategies (Folkman & Lazarus, 1980, as cited in Ding et al., 2021). Perceived stress, which in turn led to an increase in psychological discomfort, was positively predicted by maladaptive emotion-focused coping. This is consistent with results from a study by Compas et al. (2001), which showed that higher psychological discomfort and more signs of depression are linked to avoidant coping, a type of maladaptive emotion-focused coping. Conversely, adaptive emotion-focused coping reduces psychological suffering indirectly by inversely predicting experienced stress. This implies that cognitive reappraisal and seeking positive meaning in ordinary situations are examples of positive emotion-focused coping techniques that could assist in guarding against acute stress (Folkman & Moskowitz, 2000) and depressed moods (Davis et al., 1998). Furthermore, breathing exercises, an emotion-focused approach, boosted alveolar ventilation and facilitated gas exchange. 18 hindered pulmonary atelectasis, increased cough efficiency, decreased physical and mental stress, and subsequently decreased pain severity and anxiety, as discovered by Gatie and Al-Hadrawi (2024) in a study conducted on cardiac patients.

Men and women tend to respond to stress in various ways, as established by previous studies, and coping strategies can differ by gender in addition to their focus. Rilveria (2018) demonstrated that Filipino women are more prone to seek out social support and adopt emotion-focused coping in the Philippine environment, especially in the areas of emotional release and tolerance. Filipino males, on the other hand, are more likely to utilize problem-based or cognitively focused coping strategies, like problem-solving and cognitive reappraisal.

While Gurvich et al. (2021) showed that positive cognitive restructuring was connected with better mental health, Shin et al. (2014) found through a meta-analysis study that implementing more problem-focused coping techniques was correlated to fewer burnout symptoms. In a comparable manner, Purnawati et al. (2021) showed that students' psychological discomfort significantly decreased when they took part in a problem-focused coping stress management program. Furthermore, in a study of U.S. soldiers, Reddy et al. (2024) discovered that soldiers who thought that situations were mostly beyond their control benefited more from using problem-focused coping techniques. They reported a nearly 10-point decrease in posttraumatic stress symptoms (PTSS) when weighed against soldiers who had a similar external locus of control but relied less on problem-focused coping. Moreover, the problem-focused stress management program's ability to lower arousal and the stress reaction is associated with 19 improved cognitive performance, as seen by increased self-efficacy (Purnawati et al., 2021).

Interaction of Job Insecurity, Stress, and Coping Mechanisms

Employees in permanent positions frequently lack job security in relation to their duties or advantageous work attributes, and organizational changes have led to an increase in temporary and contract-based employment (Langerak et al., 2022). In this regard, job insecurity is a chronic stressor in contemporary jobs rather than just a short-term concern. This pattern is concerning because, as demonstrated, job insecurity has a detrimental effect on well-being (De Witte, 1999) and is associated with a myriad of issues and negative effects. (Cheng & Chan, 2008; Ng & Feldman, 2014; Sverke et al., 2002; Sverke et al., 2019).

While stress is recognized as a major risk factor, not all people who encounter stress will develop mental health concerns. Chronic stress from everyday life is a better indicator of mental health and general well-being, according to previous research (Newnham, Pearson, Stein, & Betancourt, 2014). Individual characteristics and coping mechanisms influence the extent to which stress and mental health are related (Leiva-Bianchi et al., 2012). Schoger (2023) revealed that despite other factors like educational background, the possibility of professional progression and pay raises can successfully reduce stress, but a higher chance of job loss or shifts in the workplace appears to enhance stress levels. Initial assumptions are supported by this finding.

Moreover, it is widely acknowledged that problem-focused coping strategies have proven successful in reducing the link between stressors and strain, while emotion-20 Focused coping strategies are frequently seen as less effective and may even worsen it (Lazarus & Folkman, 1984, as cited in Van den Brande et al., 2016). Although problem-focused and emotion-focused coping are technically distinct, previous research has shown that people usually combine the two approaches to deal with different stressful situations (Folkman & Lazarus, 1980, as cited in Baqutayan, 2015).

Stranks (2015) listed the following organizational interventions as ways to manage workplace stress: job redesign, organizational culture evolution, participative management encouragement, work-life balance regulations, flexible working arrangements, organizational rebuilding, and enhanced organizational communications. According to the results of a qualitative study by Bhui et al. (2016), management practices, particularly management traits like open communication, support, approachability, and appreciation, are a significant workplace intervention. These attributes were ranked the greatest as regards to perceived productivity. Meanwhile, Lebares et al. (2021) reported that the combined approach decreased negative emotions and increased job satisfaction. This was done by implementing a mixed-intervention strategy that included the utilization of mindfulness in conjunction with organizational activities. On the other hand, when it comes to organizational-level methods alone, Catapano et al. (2023) found insufficient proof to support its efficacy in decreasing burnout levels.

Self-reported questionnaires were utilized in several research studies to gather data (e.g., Aguiar-Quintana et al., 2021; Karatepe et al., 2023; Sultana et al., 2022). Because it represents people's specific experiences and views of job insecurity, this approach is beneficial. Self-reports, however, are subject to bias, which may compromise the validity. 21 of the findings. On the other hand, several studies evaluated stress and its consequences using objective metrics (e.g., Zafar et al., 2021; Gu et al., 2022; Ota et al., 2014), such as mental structures and neural pathways. Although these techniques are more dependable, they can be costly and challenging to apply in large-scale research. Additionally, most studies use a cross-sectional design, which may restrict results since it is unable to demonstrate how the relationship between variables changes over time. Although longitudinal studies (e.g., Ervin et al., 2024; De Witte et al., 2016; Griep et al., 2021) are better at demonstrating causation, issues like participant attrition may compromise the validity of the results. Knowing these advantages and disadvantages makes it easier to recognize why certain study findings seem more robust or more limiting than others.

The conceptual framework outlined in this review posits that job insecurity is a significant precursor to elevated stress levels, with a prolonged presence potentially culminating in chronic stress. The role of coping mechanisms, whether problem-focused or emotion-focused, may either mitigate or exacerbate the relationship between job insecurity and chronic stress. This framework underscores the pivotal influence of demands and resources in shaping mental health outcomes and overall well-being. The findings' applicability is limited, nevertheless, by the fact that the research findings that made up this evaluation are quite diverse in regard to their subject populations, assessment instruments, and intervention methods.

Discussion

The hypothesis that job insecurity aggravates mental health issues and emphasizes the moderating function of coping mechanisms is supported by the 22 association between job insecurity and chronic stress in gig workers. Ervin et al. (2024) demonstrated that extended exposure to job insecurity, regardless of whether it is stable or fluctuates, is associated with adverse mental health effects. This supports the first research question by highlighting how, in contrast with standard employment, the gig economy's unpredictable nature escalates stress. Similar findings by Sultana et al. (2022) and Perez et al. (2021) reinforce the link between increased job insecurity and negative consequences like anxiety, depression, and stress at work. This suggests that the unpredictable hours and income that are associated with gig work (research question two) could contribute to worsening these mental health risks.

Tandler et al. (2020) and Khawli et al. (2022) discussed the influence of coping strategies and emphasized how adaptive coping mechanisms, including relaxation techniques, can effectively reduce the effects of stress. On the other hand, maladaptive tactics like avoidance only provide short-term comfort and generally make stress more intense over time. These results illustrate the variation in coping efficiency and the impact of individual characteristics, like proactive personality qualities, which also lend support to the third research question (Baqutayan, 2015).

Beyond theoretical implications, this study provides practical recommendations for Filipino gig workers and policymakers to mitigate job insecurity's impact on mental health. Proactive financial planning can help gig workers lower financial insecurity by diversifying their sources of income and establishing emergency funds. Stress and anxiety can also be reduced through the application of mental health resources, such as peer support groups, mindfulness exercises, and online counseling. To encourage job security and well-being in the gig economy, policymakers can, nevertheless, enact worker 23 protection measures, including portable benefits, mental health support initiatives, and straightforward contractual agreements.

Notwithstanding these realizations, there are still a number of gaps in the literature. The field is dominated by cross-sectional designs, which restrict our understanding of the shift in stress, job insecurity, and coping mechanisms over time. Because different operationalizations of stress and coping produce inconsistent results, standardized definitions are necessary to guarantee consistency across analyses. Additionally, cultural factors affecting coping strategies and also demographic information, including age, gender, and socioeconomic status, are still not well understood. The generalizability of the findings to other gig worker demographics is restricted by these gaps.

Conclusion

This literature review concludes by highlighting the important connection between chronic stress and job insecurity, as well as the possible moderating effect of coping strategies. Although changes in technology, such as artificial intelligence, might not always make job insecurity worse (Lui & Zhan, 2020), algorithmic control in digital work environments nevertheless leads to stress and job discontent (Keith et al., 2020; Umair et al., 2023). Furthermore, while recent studies may indicate that technology can open new avenues for employment and ease concerns regarding job displacement (Hötte et al., 2023), little is still known about the unique difficulties that gig workers, especially those in the Philippines, experience.

The findings of this review highlight the necessity of focused initiatives by organizations and policymakers to reduce the negative impacts of job insecurity on the mental health of gig workers. Filipino gig workers may experience less chronic stress and anxiety if organized safety nets like flexible employment policies, access to mental health programs, and income stabilization initiatives are put in place. To improve employees' resilience in unstable work environments, organizations may also establish proactive coping strategies like peer support groups and financial literacy initiatives.

The intent of the proposed study is to fill the knowledge gap on the specific effects of job insecurity on chronic stress and coping strategies among gig workers in the Philippines. The results could present important new information to establish specialized therapies and workforce-specific mental health services. This study could impact labor market tactics, educate organizational policies, and add to a comprehensive framework for enhancing the psychological well-being of gig workers by investigating these interactions. As the gig economy continues to evolve, a crucial question arises: Are current coping strategies and workplace policies truly enough to protect workers' mental well-being, or is a more systemic change needed to ensure long-term resilience? The study's findings may also encourage increased research into the ways in which cultural and demographic variables influence coping strategies, opening the door to more flexible and diverse approaches in the changing gig economy.

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A Literature Review on the Impact of Political Leadership Changes on Job Satisfaction, Job Security, and Psychological Well-Being of Job Order and Casual Workers in the Local Government Unit

Mia Angelica B. Tulang

Abstract

This review explores the impact of political leadership changes on the job satisfaction, job security, and psychological well-being of job order and casual workers in the Local Government Unit (LGU). The three main goals of this literature review are to look into how changes in political leadership affect the job satisfaction of temporary and contract workers, which leadership policies and practices have the biggest effect on their job security and mental health, and how changes in political leadership affect their job security and stability. This paper applies the Job Demand-Resources (JD-R) model, demonstrating how leadership changes, considered job demands, influence these outcomes. This review offers insights for policymakers and LGU leaders on the importance of supportive leadership practices in fostering a safe and stable work environment, ensuring that job security and psychological well-being are prioritized during periods of political leadership changes.

Keywords: Political Leadership Changes, Job Satisfaction, Job Security, Psychological Well-Being, Local Government, Leadership Policies, Job-Order Employee, Casual Employee, Philippines.

Introduction

The Philippines' decentralized governance structure, which includes periodic elections and a multi-party system, determines its own political environment (Bueva, 2000). Local Government Units (LGUs) serve as critical access points for citizens to participate in governance, aligning with the provisions of the Local Government Code of 1991. This structure allows the local political leaders, such as governors, mayors, and barangay captains, to be elected cyclically. Hence, this significantly influences political leadership transitions to occur frequently, which impacts the job satisfaction, job security, and psychological well-being of the government employees, specifically the contractual workers, wherein local administrations are often the primary link between the public and the government, which makes this structure especially crucial.

Job satisfaction, job security, and psychological well-being are essential components of employee performance and the quality of public service delivery (Kahn, 1990). Contented employees exhibit higher motivation and commitment levels, which improves the quality of services they provide. However, there are several issues that job-order (JO) and casual employees in the public sector frequently deal with, such as job insecurity, temporary work arrangements, and susceptibility to political changes (Briones, 2015). For local governance to be effective, supportive leadership and policies that improve job security and satisfaction are essential.

This is further compounded by the job order (JO) and casual worker's vulnerability to a political transition, as changes in political leadership may result in abrupt changes to the policies, reallocations of funds, or restructuring that could endanger their job status (Naylor, Pritchard, & Ilgen, 2020; Gonzales, 2016). Job-Order (JO) and casual workers are more vulnerable to the vagaries of the political dynamics and leadership changes because they usually lack tenure and full benefits, dissimilar to the regular employees (O'Brien, 2019). In addition to having an effect on their financial security, these circumstances also increase stress and uncertainty, which compromises their general psychological health and sense of fulfillment at work (Norrie & Kinninmont, 2016). Hence, policies that consider the particular vulnerabilities of this workforce are required to guarantee fair treatment and enhanced protection against the negative consequences of the administrative and political changes as these systemic issues demonstrate (Naylor, Pritchard, & Ilgen, 2020).

Within the framework of the Job Demand-Resources (JD-R) Model, political leadership changes are viewed as job demands that influence the worker's outcomes. Based on this model, job resources like policies and leadership that are stable and supportive focus on increasing an employee's satisfaction level and resilience, while job demands, if left unresolved, are able to create an adverse situation like stress and a decline in psychological well-being, which threatens an employee's welfare. (Bakker & Demerouti, 2007; Gonzales, 2016). Hence, this indicates how job demands and resources affect job satisfaction, job security, and psychological well-being by relating this theoretical framework to the experiences of the LGU employees, particularly the job-order (JO) and casual workers (Norrie & Kinninmont, 2016; O'Brien, 2019). In this context, this gives a perspective on recognizing how the demands of political leadership change, such as heavy workloads, unstable policies, or job instability, which might jeopardize an employee's well-being and contentment.

On the other hand, job resources such as clear communication, supportive leadership, and opportunities to acquire new skills can reduce the impact of these demands and at the same time foster a sense of satisfaction and security (Bakker & Demerouti, 2007; Norrie & Kinninmont, 2016). For LGU employees, the balance of needs and resources is even more important, particularly for the Job Order (JO) and casual workers who are recognized as temporary employees (Gonzales, 2016). This framework illustrates how organizational policies and leadership practices are able to increase resources and lower the demands to promote a more stable and supportive environment in the workplace that will assist the employees to become more resilient and maintain their well-being during the restructuring of administration or political changes (O'Brien, 2019; Naylor, Pritchard, & Ilgen, 2020).

Additionally, with the aim to examine the challenges that the frequently overlooked sector of workers, specifically the job-order (JO) and casual employees, encounter when political changes occur, whereas due to the cyclical nature of political changes and the resulting leadership policy shifts. The instability and changes that follow in the workers' policies and restructuring, which are always related to job insecurity, decrease worker stability and morale. (Naylor, Pritchard, & Ilgen, 2020). Utilizing the JD-R Model can help provide a structured perspective to which researchers can examine how these employees manage their job demands and resources within the context of the LGU framework (Bakker & Demerouti, 2007).

This review has three major objectives: first, to examine how changes in political leadership affect the job satisfaction of job order and casual workers; second, to identify leadership policies and practices that significantly influence their job security and psychological well-being; and third, to investigate the effects of political transitions on the stability of their employment. The findingsaim to inform politicians as well as the local authorities on the importance of developing a supportive work environment to boost employee productivity or performance and well-being during times of leadership changes. This review examines two independent variables: political leadership changes and local leadership policies, as well as three dependent variables: job satisfaction, job security, and psychological well-being. This paper will demonstrate how changes in governance and policy affect the experiences of these employees in the public sector by including the Job Demand-Resources (JD-R) Model in their analysis of the relationship between the two.

Methodology

Literature Search Strategy

A number of scholarly databases, including E-journals of the Philippines, JSTOR, Google Scholar, and Scopus, will be used in the literature search. The research will also use phrases like "political leadership changes," "job satisfaction," "job security," "psychological well-being," and "job-order workers (JO) and casual workers" in the local government unit while searching for research that concerns them. However, other phrases such as "political leadership changes AND job satisfaction in local government" can be helpful in focusing on the results in order to find relevant research. Boolean operators "AND," "OR," and "NOT" can adequately be employed to enhance precision and relevance in searches. In order to capture the variety of pertinent research, Arshad et al. (2020) emphasize the use of broad terms as well as specific terms in the solutions.

Selection Criteria

The selection criteria for this literature review will guarantee that only high-quality and contextually appropriate studies are considered. The selection will prioritize studies that explore the effects of political leadership changes on job-related outcomes in the public sector, with particular emphasis on the Philippine context. Additionally, there will be a particular focus on studies published between 2000 and 2024 in order to ensure relevance, accuracy, and recency.

With the aim to reflect a broad spectrum, this will include studies or research written in Filipino vernacular as well. In contrast, studies focused solely on private-sector employees or other occupational groups who do not fit in the parameters defined by Tran et al. (2020) will be excluded. Wong & Nadarajah (2021) further propose that the emphasis on empirical and context-specific research strengthens the validity and dependability of the review's findings; thus, publications or papers such as commentaries or opinion articles that do not provide empirical evidence or are non-peer-reviewed work will not be accepted.

Data Analysis

A thematic analysis approach will be used to synthesize the collected literature with the aim of identifying key themes and patterns pertaining to how political leadership changes affect job satisfaction levels, job security, and psychological well-being. The independent and dependent variables of the studies will determine their categorization within the conceptual framework. In line with the recommendations of Kline (2015) and Lipsey & Wilson (2001), this classification makes comparative analysis easier and identifies emerging trends in the field.

Quality and Relevance Framework

A quality assessment framework will be used to guarantee the validity of the studies included in this review that contains a number of criteria. A major emphasis will be on methodological rigor, which will assess each study's planning and implementation, taking into account elements like sample size and data collection techniques (Boulmetis & Dutilly, 2011). The study's applicability to the research goals will also be evaluated in order to ascertain how well the results support the review's objectives (Norrie

& Kinninmont, 2016). Also, each study's contributions to more general conversations on governance, public policy, and organizational psychology will also be evaluated critically. The final step will be to evaluate each study's contribution to the field, paying particular attention to how it affects public policy and local governance. By ensuring that only high-quality research is incorporated into the analysis, this thorough framework will contribute to a more thorough comprehension of the topic.

Limitations

Despite these measures, the selected studies may present limitations that affect the conclusions of this review. Relevance is increased by the geographic and contextual specificity that concentrates on the Philippine Local Government Unit context. On one hand, it may limit generalization to areas with different political systems. Lipsey & Wilson (2001) assert that publication bias can lead to an underexposing of null or negative results, which could lead to an over-representation of studies with positive findings. In addition, as noted by Boulmetis & Dutilly (2011), small or non-representative sample sizes in certain studies are likely to bias their results, especially when projected to a larger population.

Another limitation is the temporal gaps, which are the absence of longitudinal studies that may suggest that the reviewed studies do not sufficiently address how political leadership changes affect employee outcomes over the long run. Also, cultural factors that are unique to the Philippines might influence the findings, thereby making them less applicable in other contexts with different cultural norms and values.

Addressing the Limitations

In this review, cross-referencing will be used to validate results from several studies emphasizing those with strong methodologies and larger representative samples to be able to address these limitations (Bakker & Demerouti, 2007; Gonzales, 2016). The research objectives will serve the purpose of critically contextualizing studies that may have some biases or methodological defects (Norrie & Kinninmont, 2016). Thematic analysis will also be employed to address the issues of the area of ambiguity or uncertainty and to integrate diverse findings into strong conclusions (O'Brien, 2019). Therefore, an objective and comprehensive understanding of the relationship between the political leadership changes and the well-being of the Job Order (JO) and casual employees in the public sector is guaranteed by this methodical approach.

Body of the Review

Political Leadership Changes

Political leadership changes are defined as shifts or transitions in the governmental authority or power wherein these changes can be brought about by elections, appointments, or other political processes (O'Brien, 2019). Regime transitions, party leadership changes, and political crisis-related leadership turnover are some examples of political leadership changes. It is crucial to comprehend the historical background of these changes, especially in the Philippine Local Government Units, where they may result in major changes to governance and policy (Gonzales, 2016). Research indicates that these changes can have a significant effect on employee satisfaction and morale for the reason that they frequently result in organizational culture shifts, management style changes, and restructuring, all of which have an immediate impact on workers' experiences (Blunt & Jones, 2018).

Job Satisfaction

Job satisfaction refers to an overall evaluation of an employee's job as defined by Locke (1976), which indicates how fulfilled, motivated, and contented an individual is with their job roles, responsibilities, and workplace environment. It is also a critical aspect of organizational behavior, which is influenced by factors such as management style, work-life balance, compensation, and job security (Naylor et al., 2020). Grounded in the JD-R Model, job satisfaction is seen as a product of job resources mitigating the adverse effects of job demands (Bakker & Demerouti, 2017). Empirical studies indicate that successful leadership transitions, characterized by clear communication and participatory decision-making, improve job satisfaction levels, whereas poorly managed changes often lead to dissatisfaction, confusion, and diminished autonomy (Parker & Wall, 2018). Methodologically, quantitative surveys provide statistical correlations on job satisfaction but often lack depth in exploring emotional and psychological complexities. On the other hand, qualitative studies provide richer insights into individual experiences but are limited by small sample sizes and context-specific findings (Parker & Wall, 2018; Naylor et al., 2020).

Job Security

Job security, as defined by De Witte (1999), relates to employees' perceived stability in employment, including continuity of contracts and benefits. It is frequently affected by changes in leadership, which can either strengthen it through policies that support it or weaken it through budget cuts and reorganization initiatives (Kinninmont, 2016). During leadership changes, job security for vulnerable employees becomes especially precarious, and non-renewal of work contracts is a common worry. Research has demonstrated that policies that support employment stability, like tenure regularization programs, improve the perception of job security (Vandebroek, 2020). However, quantitative research is excellent at spotting patterns through policy impact analyses, which frequently miss the complex viewpoints and coping strategies of the individual employees. Although qualitative research offers these insights, it is not scalable, which makes it challenging to generalize results (Kinninmont 2016; Vandebroek 2020).

Psychological Well-Being

Psychological well-being in the workplace encompasses mental health, job satisfaction, and overall happiness (Ryan & Deci, 2001). Changes in leadership have a significant impact on employees' mental health. Research indicates that successful leadership transitions are linked to higher levels of well-being due to the improved support networks and communication (Bakker et al., 2014). Supportive policies such as employee assistance plans and mental health programs are essential for fostering psychological well-being in employees, especially during times of transition (Cameron et al., 2019). It shows that psychological well-being, job security, and job satisfaction are interdependent and that gains in one area frequently have a positive impact on the others. However, existing research on psychological well-being mostly uses self-reported measures, which can be skewed by social desirability biases. Additionally, there is a lack of longitudinal studies, which limits the comprehension of the long-term impacts of leadership changes (Bakker et al., 2014; Warr, 2002).

Gaps and Inconsistencies

There are remaining significant gaps in the literature despite the fact that it offers insightful information about the connection between worker outcomes and changes in political leadership. The majority of studies focus on political environments that are stable, which neglects the unique challenges posed by environments that are characterized by political unrest or instability (Rosenberg & Donaldson, 2019; Wong & Nadarajah, 2021). Also, when it comes to the impacts of changes in leadership across different types of governance systems, the generalizability of findings is insufficient due to limited comparative research.

There is also a lack in the literature of the in-depth examinations about the unique effects that identify leadership philosophies, such as transformational or transactional leadership, whether it affects job security, psychological well-being, and job satisfaction (Arshad et al., 2020). Moreover, most of the studies only examine the short-term results, with very few seeking to explore how leadership transition impacts the changes in a long-term manner (Lipsey & Wilson, 2001). Given the aim, which is to inform or support policies that enhance the well-being of workers and stability in the organization, these gaps highlight the need to conduct more detailed studies of the nature of leadership transitions, specifically in politically dynamic countries like the Philippines.

The Philippine context provides a different view on the relationship between governance and culture and its impact on the public employees; therefore, the need for culturally appropriate policies and procedures is imperative (Boulmetis & Dutilly, 2011). In order to promote policies that can help improve leadership effectiveness, specifically in the local government units and employees' well-being, future researchers can fill in the gaps and further contribute to addressing the opportunities, challenges, and limitations of the changes in political leadership as well as identify the key strategies in dealing with it (Norrie & Kinninmont, 2016).

This review emphasizes the complex dynamics of job satisfaction, job security, and psychological well-being by adopting a holistic perspective that highlights their interdependence during political leadership changes. The interplay between these variables is important, as taking into consideration that high levels of job satisfaction would mean high job security and improved well-being in general (Warr, 2002). Shortly afterwards, these aspects may be modified as a result of the transition in leadership, where unfavorable transitions may result in anxiety and insecurity about job security and reduce job satisfaction, which then impacts the state of mental health (Kline, 2015).

Given that the intention is to maintain employee morale and productivity, it also highlights the need for supportive policies and mental health assistance programs. Evidence in the literature strengthens these relationships, which indicate that a holistic approach to employees in terms of management during political changes is necessary in supporting the morale and productivity of the local government employees (Lipsey & Wilson, 2001).

Discussion

The major interpretations drawn from this literature review are of great significance to local governance and policy-making, especially within the context of the Philippines' Local Government Units. The job satisfaction, job security, and psychological well-being of the Job-Order (JO) and Casual employees are, or can be, greatly influenced by the transition in political leadership in the Local Government Units (LGUs). It is the responsibility of the policymakers to promote supportive leadership strategies that can enable staff participation, stability, and participation during these changes. The implementation of policies that address job security and mental health support during leadership changes can help minimize the adverse effects of political shifts (Kinninmont, 2016; Parker & Wall, 2018).

In a government that undergoes cyclical transitions, it is useful to provide training to political leaders on effective change management to ensure maintaining the employee morale during a shift in leadership (Bakker et al., 2014). However, the importance of training programs rests on the legislation to require the support of the local government for this to be successful. To be able to help political leaders foster a stable work environment and handle the changes that affect employee morale, legislation plays a huge role through institutionalizing the aforementioned leadership programs that help equip them with change management skills

(Van Wart, 2013). Due to the reasons presented in this literature, it is highly recommended that political decision-makers expedite the effort towards implementing policies that enhance job security and mental health support. Moreover, improving work conditions and providing employee guarantees and support programs can aid workers from the uncertainty caused by political changes (Kinninmont, 2016; Parker & Wall, 2018).

Political leadership changes are quite parallel to changes in employee job satisfaction, especially for those at the lower end of the working spectrum, such as job order (JO) and casual workers. Job satisfaction is affected by leadership philosophies and certain decisions about policies and management techniques, whereas evidence through studies shows that job satisfaction increases under transformational leadership that prioritizes the presence of supportive relationships with employees, such as open communication and employee involvement (Arshad et al., 2020). Research on public administration entails that effective policy implementation when a new leader is elected prevents major changes in policies, while poor implementation causes discontent among employees (Wong & Nadarajah 2021).

Additionally, as noted by Rosenberg & Donaldson (2019), when there are major changes in leadership, uncertainty occurs, which results in dissatisfaction among workers due to the change in direction with regards to policies and adjustment in structures that threatens the overall security of the employees. In particular, workers with temporary contracts such as job-order (JO) and casual employees are especially sensitive to a major political leadership transition. Hence, the need for a detailed analysis of their job satisfaction is important.

There are numerous ways to increase job security and psychological well-being among Job-Order (JO) and Casual workers while at the same time achieving employment equity outcomes, such as placing heavy importance on fair performance evaluations, open communication, and equal distribution of resources. Also, allowing employees to be included in the decision-making process under participative leadership policies helps them develop a sense of inclusion and job security (Lipsey & Wilson, 2001). However, it should also be noted that the capability of the leadership to address workplace stressors, such as providing mental health assistance and assuring a safe working environment, greatly influences the psychological well-being of the employees (Boulmetis & Dutilly, 2011). Establishing policies about effective supervision and standardized recruitment and employment practices can help lower the anxiety, which is the fear of unemployment or job insecurity that is common with the Philippine public sector. Additionally, policies that reduce favoritism and assure employees' job security, such as giving consistent support despite having different political affiliations, also affect their psychological well-being (Norrie & Kinninmont 2016).

The job security and stability of the job-order (JO) and casual workers are vulnerable to political leadership transitions due to their temporary employment status and being subject to administrative policies. When newly elected leaders favor loyalists or implement new policies, contracts are often terminated or not renewed (Tran et al. 2020). The lack of formal protections during political realignments causes more vulnerability of these employees to layoffs (Arshad et al. 2020). Also, the stability of the positions poses another area of concern that is caused by the political instability, which results in ending contract renewals or delays in budgetary allotment (Rosenberg & Donaldson, 2019). While these impacts affect many nations across the world, they are particularly evident in the Philippines, wherein political leadership transitions could affect the local government priorities and allocation of resources (Wong & Nadarajah, 2021). Taking this dimension to explore helps develop interventions that can stabilize and strengthen the resilience of these susceptible employees.

In addition, this review points out notable gaps in this literature review, especially with regards to the Local Government Units (LGUs) distinct socio-political and cultural dynamics in the Philippines. Since several current studies or research have a broad perspective of this topic, this may not fully explain the specific challenges experienced by the Filipino public employees, particularly the Job Order (JO) and Casual Workers, during the changes in leadership. As noted by Gonzales (2016), the interplay between the local patronage systems, resource constraints, and community-driven governance practices is repeatedly overlooked. In order to address these disparities, exploring the political leadership changes influence on the job satisfaction, job security, and psychological well-being of the workers requires empirical research that delves deeper into the specific experiences or difficulties of the employees. In order to fully understand the impact of political leadership transition in the workplace and capture the long-term effects of this change on these variables, longitudinal studies are recommended (Naylor et al. 2020).

The implications of this literature review can be applicable to other countries with the same political systems. By understanding the impact of political leadership changes among the employees, newly-elected government leaders can create policies that support a stable, secure, and effective work environment, such as encouraging open communication, letting the employees participate in the decision-making, and establishing employment guarantees that can then lead to an increase in the employees' job satisfaction, job security, and psychological well-being (Blunt & Jones, 2018). Nations having local government units that also have a cyclical nature in political leadership changes may then benefit from the implemented policies that will help their workers increase their job satisfaction, job security, and psychological well-being. Also, the findings within the emphasis on the value of supportive leadership in promoting the work effectivity and resilience of the public-sector employees regardless of a specific socio-political context are broadly applicable (Warr, 2002; Ryan & Deci, 2001).

Conclusion

Overall, this review highlights why the changes in the political leadership system are relevant factors for understanding Job Order (JO) and casual workers' job satisfaction, job security, and their psychological well-being within local government units. Employees' experiences and the sense of stability are shaped to a large extent by changes in management systems, workplace dynamics, and policies associated with a specific leader's term. This review places heavy importance on considering the need for policies that promote resilience and aim to protect the welfare of the public sector employees in the context of a shifting political environment in addition to highlighting the difficulties of managing political transitions by examining these impacts. This understanding lays a foundation for subsequent or further studies or research that will seek to improve leadership techniques, hence creating a stable and encouraging work environment for every employee, especially the government temporary workers who perform a lot of work in the public sector, such as job-order (JO) and casual employees.

Furthermore, this review also emphasizes the challenges of political leadership changes and their consequences. A stable and encouraging work environment can be promoted by further research into innovative leadership techniques, which are made possible by acknowledging these challenges. Such studies are required to direct policy modifications that not only meet the worker's immediate needs but also support the long-term enhancement of management techniques in the public sector. All workers, regardless of their employment status, can prosper in a dynamic organizational and political environment if efforts are directed toward meeting the special needs of temporary workers.

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Impetus to the Antimicrobial Stewardship Among Private Hospitals: Examining Gaps, Challenges, and Opportunities vis-à-vis Accreditation Standards

Mary Irene G. Villanueva

Abstract

This study viewed the current status of the microbiology laboratory among private hospitals to determine its readiness for the Research Institute for Tropical Medicine. Antimicrobial Resistance Surveillance Program (RITM-ARSP) accreditation. Specifically, it looked into the current status, non-conformities, gaps, and challenges. hindering passing the certification and the positive contribution RITM-ARSP accreditation will bring to the microbiology laboratory. This study utilized a mixed quantitative and qualitative method using the sequential explanatory design. An adapted DOH-RLED, RITM-ARSP, and WHO-based assessment tools were used as a measuring tool, coupled with in-depth interviews and observation. Descriptive statistics was used. Results revealed that only one laboratory is ready to pass the accreditation. All the findings from the other laboratories indicate a weak quality. management system that encompasses all aspects of laboratory operation and capacity-building issues. This weakness has implications for the quality of services. provided by the microbiology laboratory and for strengthening the Antimicrobial Stewardship program in the hospital through effective surveillance and control of AMR. Thus, each microbiology laboratory needs to work on its capacity building and quality management system to provide high-quality services and processes that meet customers' needs and regulatory, inspection, and accreditation bodies.

Keywords: Antimicrobial Resistance, Antimicrobial Stewardship, Microbiology Laboratory, Antimicrobial Surveillance Program, Quality Management System, Accreditation.

Introduction

The emergence of Antimicrobial Resistance (AMR) and the need for institutionalization of Antimicrobial Stewardship (AMS) program in hospitals worldwide have brought microbiology laboratories to the forefront. This is crucial because laboratory-based surveillance is now required, which is vital for monitoring antimicrobial susceptibility patterns and detecting AMR pathogens. Thus, laboratory strengthening and quality in the microbiology laboratory processes needs to be worked on.

Antimicrobial resistance (AMR) occurs when microorganisms evolve to resist medications designed to eliminate them. This growing global challenge has limited effective antimicrobials. It poses significant public health risks, making it a top priority of the World Health Organization (WHO), which identified it as one of the leading health threats. So important that it became the subject of an unprecedented United Nations meeting, becoming the 4th healthcare issue afforded its session in the United Nations Assembly. Its impact on the Sustainable Development Goal (SDG) is multidimensional. It poses a formidable challenge to achieving Universal Health Coverage (UHC).

In response, the Philippines established a national plan to combat AMR through Administrative Order No. 42 in 2014 (DOH, 2014), leading to the launch of the Philippine Action Plan and the National Policy on Infection Prevention and Control in 2016, with the AMS as part of its listed priority areas. The Antimicrobial Stewardship (AMS) program institutionalization in healthcare facilities aims to optimize antimicrobial use in healthcare settings, promoting rational prescribing to reduce AMR infections and enhance patient outcomes (AMS Manual, 2016).

To curb AMR in healthcare settings, the Center for Disease Control (CDC) campaigned to use the local cumulative antibiogram to guide empiric decisions as its AMR program's key to success. This includes the need for tailor-made interventions for local setups. CDC suggests aligning the antimicrobial formulary to local facility-specific susceptibility data, ensuring the right antibiotics are in each local formulary (CLSI, 2017).

The Journal of Clinical Microbiology states that laboratory results influence 50- 70% of antimicrobial therapy decisions. Thus, in the fight against AMR, the microbiology laboratory is the cornerstone of the hospitals' AMS effort. According to Lance Peterson, an infectious disease specialist, the laboratory is the backbone of infectious disease control. The Australian Commission on Safety and Quality in Healthcare (2018) states that microbiological testing is a vital component of AMS. The microbiology laboratory does patient-specific diagnostic testing, guiding direct patient care by generating timely susceptibility data. It is responsible for diagnostic stewardship, performs surveillance of resistant organisms through the antibiogram. that it generates and is at the forefront of an outbreak investigation (Alame et al., 2020).

The findings of the recent study by Yamba et al. (2024) in Zambia on the AMR laboratory-based surveillance capacity of hospitals reinforced the inadequacies of most developing countries to conduct microbiological tests required for AMR surveillance. To effectively combat AMR, particularly in resource-limited settings, it is crucial to enhance laboratory capacity and build AMR surveillance systems that enable laboratories to gather reliable and accurate data on resistance patterns, monitor resistance trends, and implement effective strategies. Countries that have managed to control AMR are those that have established functional surveillance systems that provide accurate data on resistance patterns, analyze trends, and implement strategies. Key components of AMR surveillance include antimicrobial susceptibility testing (AST) reporting, data management, analysis, and reliable laboratory practices, as demonstrated by Sweden's robust microbiological diagnostic laboratories (Saeed et al., 2017). In the Philippines, the Department of Health initiated several orders, including Department Order 339J 1988, to standardize susceptibility testing and equip laboratories (Hufano, 2013; DOH, 2017). The Antimicrobial Resistance Surveillance Reference Laboratory at the Research Institute for Tropical Medicine oversees the AMR program, reflecting the importance of a well-organized approach to AMR surveillance.

The issuance of Administrative Order (AO) No. 2015-0049-A (DOH, 2017), which amends previous regulations, aimed to enhance the Antimicrobial Stewardship Program (AMS) in the Philippines. This order mandates that all tertiary clinical laboratories at all PhilHealth-affiliated hospitals with AMS programs will comply with quality assurance standards, which now allow reimbursements for select antibiotics (DOH, 2017; DOH-AMS, 2016; Philippine Health Insurance Corporation, 2018). It has been years since the AO was established and five years since the AMS program started, yet during the period of this study, only two laboratories in Region X have achieved accreditation despite years of implementation. This highlights the need to evaluate the status of private microbiology laboratories in the city, as they serve numerous referral and paying patients. The objective of this study is to assess the current status of the microbiology laboratory among private hospitals to determine its readiness for RITM-ARSP accreditation, look into existing gaps and challenges encountered, and demonstrate how RITM-ARSP accreditation will improve laboratory standards, yielding high-quality results vital for effective AMS and better patient care.

Methods

Research Design

A mixed research method was utilized in the study using the sequential explanatory design, which involves two phases. The integration of quantitative and qualitative findings allowed for a more comprehensive understanding of the research phenomenon, enabling the identification of patterns and relationships that may have been missed out on by just using a single methodological approach. Purposive sampling was employed. The researcher collected and analyzed both quantitative and qualitative data coupled with observation and interview to present facets of the problem existing during the period of the study and was correlated to come up with a sound analysis. The quantitative method was used in the determination of the current status of the microbiology laboratory, the extent of noncompliances/non-conformities of the microbiology laboratories, gaps and challenges with the minimum requirements from the adapted DOH-RLED, RITM-ARSP, and WHO-based assessment tool checklist/questionnaire. Qualitative methods, interviews, and observation were used in the subsequent interpretation and clarification of the results from the quantitative data analysis and also in determining the factors affecting the attainment of a quality microbiology laboratory, including the gaps, challenges, and opportunities. Descriptive statistics was the statistical analysis used for this study.

Research Environment

The study was conducted among six key private, Level 2 and 3, Department of Health-Regulatory Licensing and Enforcement Division (DOH-RLED) -classified hospitals in Cagayan de Oro City, having a bed capacity of 100 to 200 and an established Antimicrobial Stewardship (AMS) program. These hospitals were selected for their tertiary-level microbiology laboratory capabilities and similarities in patient demographics; the dynamics and culture of the laboratory's operation and set-up were more or less comparable, plus the similarities of the bed capacities made it easier to get more or less homogeneous data. These were also where most of the Region X paying patients from the barrios, towns, and municipalities were being referred for microbiological workups. The data collection spanned from 2021 to 2023, targeting medical technologists who head the microbiology departments at these facilities. The purposive sampling method ensured one representative per laboratory, ideally, someone trained at the Research Institute for Tropical Medicine (RITM) or RITM-accredited institutions. This choice aimed to gather comprehensive and insightful responses about the entirety of the microbiology setup and system to better understand the current status, noncompliances, gaps, and challenges within the laboratory hindering the quality process needed to pass the RITM-ARSP accreditation.

Data Gathering Instrument

The measuring/assessment tool used for this study was adapted from three reliable open sources, most of which came from the World Health Organization (WHO). RITM-ARSP training notes/slides and manuals (WHO-based) were also used for the management and identification of multi-drug resistant organisms (MDRO), and the Department of Health- Regulatory and Licensing Enforcement Division (DOH- RLED) assessment tool for the basic national laboratory licensing requirements involving the microbiology unit.

Four microbiology experts reviewed the adapted assessment tool to assess its consistency and validity. It underwent revisions as specified by the experts. The questionnaire was then pilot-tested on five microbiology staff outside Cagayan de Oro City for reliability testing to gauge the questionnaire's comprehensibility. Reliability analysis: Cronbach's alpha results for the Set A-DOH-RLED-based assessment tool is 0.607

(acceptable), Set B- RITM-ARSP based training notes/slides/manuals is 0.925 (highly reliable), and the WHO-based tool is 0.909 (highly reliable).

The tool was based on the 2003-released WHO (WHO, 2003) microbiology-specific tool anchored on three basic standards: basic laboratory capability, isolation and identification of bacterial isolates, and antimicrobial susceptibility testing. The adapted tool has a total of 299 indicators. A four (4) point rating scale was set as a form of measurement for the questionnaire.

Questionnaire	Source	Included Standards
QUANTITATIVE DATA		
SET A	DOH-RLED	1. Required physical plant structure of the Microbiology unit. 2. Proof of Training 3. Daily temperature monitoring 4. Proper waste disposal and hazardous infectious substances conforming to DOH standards.
SET B	RITM-ARSP Training Lecture Slides	1. Basic Microbiology equipment 2. Culture media and supplemental tests required for both multi-drug resistant organisms (MDRO) and non-MDRO. 3. Standard Operating Procedures (SOPs)
SET C	WHO	Everything will be included other than the equipment, culture media, and supplemental tests needed. The network communication and local data user's part will also be omitted because it does not apply to the research environment chosen.

QUALITATIVE DATA
A combination of researcher-created, open-ended questions and WHO questionnaire- derived questions for each standard will be used, designed to further check the authenticity of the answers on the quantitative aspect and also to probe further and get into the root cause of all the underlying issues and factors affecting the current status, non-compliances, gaps/difficulties, and challenges encountered by the Microbiology laboratories.

Data Collection Procedure

The sampling procedure consisted of the adapted DOH-RLED, RITM-ARSP, and WHO-based assessment tool checklist/questionnaire, semi-structured interview questions and direct observation. The primary data collection instrument was the adapted tool used for the quantitative aspect of the study specifically tailor-made for the Philippine setting following the target accreditation body's (RITM-ARSP) standards and DOH licensing requirements.

Permission letters were sent to hospital administrators and laboratory heads. The study obtained ethical approval by following the hospital's protocol, which required permission from either the hospital administrator or the designated research review person. After receiving the approval of the heads, a personal visit with the microbiology unit heads followed in their respective laboratories. The study was explained to them, after which the Informed Consent Form was handed over, giving them one week to decide on their participation. A week later, the signed consent forms were collected, and exchanged with the adapted tool. Respondents were given one week to answer the tool. An appointment was then set with the respondents on their preferred interview schedule, ensuring that the answered tool was thoroughly read first by the researcher before the second visit commenced. The second visit covered the qualitative aspect of the study, namely the interview and observation of the microbiology unit's working environment, including physical conditions and microbiological processes, which were then correlated with respondents' quantitative answers. In-depth interviews clarified any unclear responses. Transparency was guaranteed, and respondents were free to contact the researcher for any concerns. Data was collected via a 4-point Likert scale, measuring compliance with indicators from the three adapted assessment tools by the DOH-RLED, RITM, and WHO are presented in the table below. Responses were averaged, and qualitative analysis supplemented the quantitative results to provide deeper insights. This approach encouraged open discussions, allowing respondents to express their thoughts in a comfortable and respectful environment. Results were collected and organized in Microsoft Excel.

The summary and results of the study will be relayed to the respondents once it is concluded and finalized.

Scoring Guidelines and Descriptions for the Mean

Points	Rating	Description (Interval Scale)	Interpretation
4	Strongly Agree	3.51 – 4.00	**Very high adherence** (Pass accreditation)
3	Agree	2.51 – 3.50	**High adherence** (Meets basic requirements only and needs leveling up)
2	Disagree	1.51 – 2.50	**Low adherence** (Has not met basic requirements and needs more improvement)
1	Strongly Disagree	1.00 – 1.50	**Very low adherence** (Failed to meet accreditation standards)

Results

Problem 1: What is the current status of the private microbiology laboratory in terms of the following standard requirements provided in the adapted microbiology laboratory assessment tool?

1.1 Basic laboratory capability and infrastructure
1.2 Isolation and identification of bacterial isolates
1.3 Antimicrobial susceptibility testing

***Table 1.1** Overall Mean Based on the Three Groups of Standards for the Three Adapted Tools*

1. Basic Laboratory Capability And Infrastructure:						
	Lab A	Lab B	Lab C	Lab D	Lab E	Lab F
A. DOH - RLED	3.11	3.61	2.95	2.89	2.84	3.17
B. RITM	2.88	3.76	2.72	2.96	2.88	3.08
C. WHO	3.31	3.63	3.57	3.19	3.27	3.14
Average Mean:	3.10	3.67	3.08	3.01	3.00	3.13
Interpretation:	High Adherence	Very High Adherence	High Adherence	High Adherence	High Adherence	High Adherence
2. Isolation and Identification of Bacterial Isolates						
	Lab A	Lab B	Lab C	Lab D	Lab E	Lab F
A. RITM	2.08	3.77	1.78	1.99	2.04	2.23
B. WHO	3.73	4.00	3.87	3.68	3.59	3.73
Average Mean:	2.91	3.89	2.83	2.84	2.82	2.98
Interpretation:	High Adherence	Very High Adherence	High Adherence	High Adherence	High Adherence	High Adherence
3. Antimicrobial Susceptibility Testing						
	Lab A	Lab B	Lab C	Lab D	Lab E	Lab F
A. RITM	2.64	4.00	2.91	3.73	3.09	3.45
B. WHO	2.81	3.36	2.86	2.71	2.71	2.83
Average Mean:	2.73	3.68	2.89	3.22	2.90	3.14

Interpretation:	High Adherence	Very High Adherence	High Adherence	High Adherence	High Adherence	High Adherence
Overall Mean:	2.91	3.74	2.93	3.02	2.90	3.08
Overall Interpretation:	High Adherence	Very High Adherence	High Adherence	High Adherence	High Adherence	High Adherence

Among the six (6) private microbiology laboratories, LAB B got the highest mean of 3.74 (very high adherence-passed accreditation mark). Laboratory B is a RITM- ARSP-accredited facility, which explains its very high adherence status in the overall mean. All the rest got high adherence of varying ranges, the lowest of which is LAB E (2.90), while LAB F got the highest range of (3.08). Low adherence was particularly significant in the second standard on isolation and identification using the RITM-based tool, where most labs received similar ratings, except lab B. Among the three assessment tools, the RITM-based tool is the most comprehensive, particularly in identifying Multidrug-Resistant Organisms (MDRO). It was noted that almost all laboratories scored a 2 for low adherence in critical areas such as the primary culture medium, supplemental testing, and manual tests for MDRO isolation. Lab C scored the lowest at 1.78, while lab B scored the highest at 3.77. These findings are alarming, particularly regarding the identification and confirmatory testing of MDROs, as the limited capacity of automated machines for MDRO identification can lead to MDROs being misidentified as ordinary organisms, thereby compromising patient treatment and prognosis.

Problem 2: What are the nonconformities/noncompliances of the private microbiology unit considering the following:

2.1 Basic laboratory capability and infrastructure

2.2 Isolation and identification of bacterial isolates

2.3 Antimicrobial susceptibility testing

The assessment results were consolidated for each of the two hundred ninety nine (299) indicators for the three adapted assessment tools. The numbers of compliant (C) and noncompliant (NC) laboratories were tallied. Some indicators showed significant results while others exhibited insignificant results. Less than four (4) point ratings are automatically given a noncompliance rating. All Cs and NCs are totaled for all 299 indicators to come up with the total number. Problem 2.1 table below states the summary of the total number of noncompliances according to standards. The highest number of noncompliances among all the indicators is laboratory F, while laboratory B got the least number.

Table 2.1. *Summary of Total Number of Noncompliances According to Standards*

Standards	Lab A	Lab B	Lab C	Lab D	Lab E	Lab F
	1. Basic Laboratory Capability and Infrastructure					
1A. DOH-RLED	8	5	7	8	7	7
1B. RITM-ARSP	12	6	12	12	10	13
1C. WHO	19	9	10	24	16	28
Total:	39	20	29	44	33	48
	II. Isolation &Identification					
IIA. RITM-ARSP	74	16	80	74	74	72
IIB. WHO	4	0	1	5	3	6
Total:	78	16	81	79	77	78
	III. Antimicrobial Susceptibility Testing					
IIIA. RITM-ARSP	8	0	4	3	4	4
IIIB. WHO	26	13	25	31	26	28
Total:	34	13	29	34	30	32
Overall Total:	151	49	139	157	140	158

Basic Laboratory Capability and Infrastructure-DOH-RLED Tool

The table shows that labs A and D have eight (8) noncompliances exhibiting the highest number for this tool, while lab B got five (5), the lowest number of noncompliances among all the facilities. For the first standard on the basic laboratory capability and infrastructure under DOH-RLED, most of the noncompliances in all laboratories are in the microbiology-required rooms.

Another major noncompliance shared by all laboratories except lab B during the period of this study was the lack of trained medical technologists on Direct Sputum Smear Microscopy (DSSM) and staff trained from RITM-ARSP/RITM-ARSP- accredited training laboratories for laboratories C and D. Most of the significant noncompliances and total quality management breaches stem from this deficiency for these two laboratories.

The absence of an updated policy and procedure for proper waste disposal and infectious substances conforming to the DOH standards and the practice of these procedures were noncompliance of labs A, D, E, and F. Noncompliance was also noted in the daily monitoring of the microbiology processing room and laboratory equipment such as the incubator and refrigerator freezer. This was a violation of lab B and lab C.

Basic Laboratory Capability and Infrastructure- RITM-ARSP Tool

Lab F got the highest number, thirteen (13) noncompliances under this tool while lab B got the least number, six (6) noncompliances. Major noncompliance was focused mainly on the absence of differentiating disks routinely used in the designated daily workup of organism identification, such as Optochin, X, V, XV disks, Bacitracin, Oxidase, 5ug Novobiocin, and Cefinase for all the laboratories. With the advent of machine automation for all of these laboratories, the use of these differentiating disks has now been considered redundant. Since these are basic confirmatory disks; the use of these disks in the daily routine workup is required.

Another significant noncompliance was the lack of a CO2 incubator or candle jar for lab C. Lab C and lab F were noncompliant with the annual calibration and preventive maintenance of certain equipment. There were also noncompliances with the Standard Operating Procedures (SOPs) that were not updated for labs C, D, and E and F. Lab D has noncompliance with the consistent practice of this SOP. There was also noncompliance with the lack of SOP for internal quality control after equipment maintenance for labs A, C, D, and F. A designated autoclave for decontamination was a noncompliance with labs A, D, E, and F.

Basic Laboratory Capability and Infrastructure- WHO Tool

Lab F has the highest, twenty-eight (28) noncompliances under this tool, while lab B got only 9. The following were the significant noncompliances under this tool: obtaining supplies of essential reagents/ materials for all of the laboratories, maintaining these supplies for all of the labs except lab B, and reviewing the results before release by a microbiology-trained staff.

Another significant noncompliance was in the reporting protocol to the DOH. It is not being practiced by all of the laboratories to have a registry of persons with notifiable diseases nor the presence of a list of diseases that will be reported to the DOH once isolated.

On the indicators of safety, significant noncompliance was in the lack of annual training for labs A, B, D, and F on laboratory safety. There was also a lack of accessibility of these safety manuals to the staff for labs A, D, and F. Proper waste disposal of solid waste was noncompliance of labs D, E, and F while on the proper disposal of liquid waste, labs A, D, E, and F were non-compliant.

Isolation and Identification-RITM-ARSP Tool

The data revealed that lab C has the most number of noncompliances under this tool, while lab B has the least number.

Major noncompliance was concentrated mainly on the lack of the essential primary culture media, especially for stool and genital culture, common to all the laboratories except for lab B. The lack of essential respiratory tract primary media, was a noncompliance for labs C, D, and E. Another major noncompliance for all laboratories other than lab B was the omission of performing the supplemental tests needed for routine workup in addition to the automated system for the identification of bacterial isolates. The lack and omission of performing manual supplemental tests whenever MDROs are isolated was another crucial noncompliance for all of the laboratories. Pertaining to media production, all laboratories except lab B use human blood in lieu of sheep or horse blood as the source of blood in the preparation of blood agar. With SOPs and technical procedures noncompliance, the majority of the laboratories except laboratory E didn't have updated technical procedures.

Following these technical procedures consistently were nonconformities of labs A, C, D, and E. Labs D, E, and F were noncompliant with comprehensive SOPs on specimen processing. There were no SOPs on media production, internal quality control of media, and internal quality control of reagents for labs A, C, E, and F. Among all of the standards, this was where all of the laboratories except lab B, got a low adherence mark. The RITM-ARSP tool is the only one with indicators on the MDRO isolation and identification.

Isolation and Identification—WHO Tool

The table shows lab F has the most number of noncompliance, six (6), while lab B is fully compliant with this standard. This standard showed an overall very high adherence rating for all the laboratories. Significant noncompliance was the lack of SOP/flow charts ensuring the quality of media for bacterial culture for labs A, E, and F. Lab D was uncertain as to where the source of their written procedures came from since it's outdated. They also processed specimens beyond the thirty-minute requirement for transport time. Labs A, E, and F have no SOP for assuring the quality of the identification procedure for bacterial isolates. Lab A's noncompliance with the SOP was more on its incompleteness rather than its absence.

Antimicrobial Susceptibility Testing (AST) - RITM-ARSP

The table shows that lab A has the most noncompliance, eight (8) for this tool while lab B is fully compliant. Lab A's noncompliance was mostly on the SOPs as no specific provisions for the indicators required in the checklist were indicated in their existing SOP. There were no manual AST backup procedures for confirming/checking results and whenever the automated analyzer malfunctions for labs C and D. There were no SOPs for internal quality control (IQC) of antibiotics for labs A, C, and E. On the indicators of the evaluation and reporting of AST results, labs A, C, E, and F were not using WHONET software within the microbiology unit. There were no SOPs for AST for labs A and F. No SOPs for AST reporting for labs A, E, and F and no SOPs for database management of results for labs A, D, E, and F.

Antimicrobial Susceptibility Testing (AST)—WHO tool

The table shows that lab D has the most number of noncompliances, thirty- one (31), while lab B has the least number, thirteen (13). Significant noncompliance for this tool under General Information was the laboratory participation in the RITM Antimicrobial Resistance (AMR) Network in which all the laboratories other than lab B were noncompliant. Labs A, C, D, and F were non-compliant with the RITM-trained staff deciding whether AST will be performed based on the criteria that only clinically significant organisms will be followed up. The absence of written protocols stating that only clinically significant organisms will undergo the AST procedure was a noncompliance of labs C, D, and E. Labs C and D were noncompliant on the indicator that only significant organisms undergo AST for all specimen sources.

Under the Performance of AST, labs A, E, and F were non-compliant with the presence of SOP for assuring the quality of AST. There were no written procedures/flow charts in use for the performance of AST for labs A and E. The SOPs didn't specify the scheduled AST performance of quality control strains for labs A, D, and E. Lab D had no ATCC 25923 - S. aureus. Lab C was non-compliant with the automated analyzer undergoing quality control testing. Labs E and F had noncompliance on the indicator stating that unacceptable errors once discovered during the review will have to undergo troubleshooting procedures following written laboratory protocols.

Under Evaluation and Reporting of AST results, labs C, D, and F lacked a RITM-trained staff who conducted a review of AST data for meaningfulness and determine what would be reported. Labs C and D, which have no RITM-trained staff, reported all organisms regardless of their significance to the healthcare providers. The reporting of AST results based on general considerations of clinical significance written in the SOP was a noncompliance for labs A, C, and F. The absence of a computer software for analyzing AST data was another noncompliance of labs A, C, E and F. AST results are stored in a format allowing sorting according to where the infecting organism is acquired (hospital/community) was a noncompliance with labs. A, E, and F. AST results for labs A, D, E, and F were not stored in a format that allows the laboratory to link its AST results with patient treatment and clinical outcome information.

Discussion

This study assessed the current status of the microbiology laboratory among private hospitals to determine its readiness for the Research Institute for Tropical Medicine—Antimicrobial Resistance Surveillance Program (RITM-ARSP) accreditation. From a thorough analysis of the data collected and results obtained, the current status results of the private microbiology laboratory showed that among the six respondents' laboratories, only lab B received a very high adherence rating, indicating its readiness to pass the RITM-ARSP accreditation. Lab B is an RITM-ARSP accredited laboratory during the period of this study. Most of the laboratories got only a high adherence mark, implying the need for further improvement by working on their noncompliance. One must aim and work for a very high adherence mark to pass the RITM-ARSP accreditation. Less than a very high adherence mark equates to failing the certification.

Basic Capability and Infrastructure

The Basic Laboratory Capability and Infrastructure standard includes the microbiology unit setup, laboratory equipment and maintenance, reagents and materials, laboratory staff competency, supervision and management, reporting procedures, and safety.

Most of the noncompliance with all the laboratories under this standard were in the microbiology-required rooms. The recently revised DOH-RLED laboratory licensing tool A.O. # 2021-0037 Annex B1 (DOH, 2021) now requires room-type designs in the media preparation, decontamination, sterilization, and processing rooms. These rooms used to be just sections within the microbiology unit. Major reconstruction is now required to comply with this requirement, owing to a larger space needed to accommodate these changes. This was cited by Kozlazakidis & Vandenberg (2022), stating that infrastructure is one of the major challenges of clinical microbiology along with equipment, logistics, quality assurance, and human resources. Laboratory C stated,' The management does not support the laboratory needs because their primary concern is lessening the expenses. DOH licensing should not approve the operation of a designated section if it lacks the basic requirements, especially in areas with critical processes," highlighting a critical aspect of noncompliance issues.

Under reagents and materials, the major non-compliance with all the laboratories was the omission of the routine use of the basic differentiating disk designated for the daily workup routine of organism identification. All the respondents no longer consider using these disks because they are time-consuming and rely solely on the organism identification provided by the automated machine. However, using these differentiating disks ensures accurate identification along with the automated machine, especially for organisms isolated with a low percentage of discrimination.

Lab C faces significant equipment compliance issues, particularly the absence of a CO2 incubator or candle jar, which compromises the isolation of critical organisms of public health importance, such as Streptococcus pneumoniae and Neisseria species. This gap affects treatment capabilities, monitoring changing trends, and data supporting country-specific vaccine development (Brueggemann et al., 2021). Furthermore, labs C and F had poorly complied with calibration and preventive maintenance of essential analyzers, risking reliability and accuracy aligned with CLSI guidelines. A lack of autoclaves in most laboratories means infectious waste, particularly from multidrug-resistant organisms, was disposed of without decontamination, endangering staff and the environment (Jasovsky et al., 2016). Laboratory D stated,' We only have one autoclave, and it is located in our operating room.' Laboratory E also said, 'Our autoclave for decontamination is located outside the hospital'. These statements support the issues with autoclaves. Standard Operating Procedures (SOPs) are crucial for ensuring quality microbiology results. Therefore, inconsistent access and adherence among staff lead to compromised testing. Additionally, the absence of an SOP on internal quality control post- equipment maintenance indicated negligence in these practices across multiple labs. Processes must be meticulously followed to uphold quality standards in the microbiology laboratory.

Under laboratory staff competency, the absence of trained staff on DSSM with labs A, C, D, E, and F were a significant non-compliance shared by the majority of the laboratories. This is crucial because to diagnose tuberculosis (TB) patients, sputum smear microscopy for tubercle bacilli is needed. Untrained staff always means unreliable results. This concern has already been referred to the DOH, which for a long time seems to prioritize/prefer giving the DSSM training to government hospitals and rural health workers, neglecting the private hospitals where all the paying patients go for workups and check-ups. Barbe et al. (2017) cited this as an issue in low-resource settings where most international initiatives addressing laboratory health strengthening focus mostly on public health and outbreak management rather than hospital-based patient care.

The absence of trained staff from RITM-ARSP or accredited training facilities for labs C and D was a crucial finding. A critical requirement and yet set aside or overlooked by the management. Laboratory D echoed this statement: 'Management is supportive enough to sponsor staff training but lacks urgency.' To produce quality results, qualified personnel with the necessary education and training is a must, not just one being taught in-house, as highlighted by Collignon et al. (2019).

Microbiology-trained staff play a crucial role in reviewing results before release and deciding on further testing. However, with only one trained staff member available, laboratories face challenges when the staff member is off duty. Laboratory B attested to this concern: ' I would like to raise this point for improvement, working alone in the the microbiology department with all the workload plus the documentation itself is difficult; additional staff in the microbiology section is needed'. To ensure effective reporting, an SOP must guide operations, and there needs to be clear coordination between the microbiology lab and the infection control unit concerning notifiable diseases. Without proper collaboration, the surveillance of multi-drug resistant organisms (MDRO) will be ineffective. Additionally, improving the turnaround time (TAT) for reporting is essential. Labs D and F have not conducted the necessary studies for this improvement.

Safety is a very important aspect of the laboratory. An updated SOP for biosafety measures were absent in labs A, E, and F. SOPs must be accessible and consistently practiced. Laboratory staff safety training needs to be conducted annually which was not done by labs A, B, D, and F. The proper disposal of solid and liquid waste conforming to the DOH standards is crucial. When infectious waste disposal is just taken for granted, with a lack of concern for ensuring that these infectious microorganisms are properly decontaminated before disposal, staff and environmental safety is at stake, especially if we are dealing with multi-drug resistant organisms. (MDRO)

Isolation and Identification

Isolation and identification of bacterial isolates include media production, specimen processing, isolation, and identification of bacterial isolates. Among all of the standards, the RITM-ARSP tool is where all of the laboratories except lab B got a low adherence mark. The RITM-ARSP tool is the only one with indicators on MDRO isolation and identification. In contrast, the WHO tool under this standard has a very high adherence mark for all of the laboratories.

Under media production, the use of human blood instead of sheep or horse blood in the preparation of the blood agar is practiced by all the laboratories except lab B. Using human blood as the blood source compromises the clarity of the type of zone of inhibitions that the microorganisms exhibit. There are also issues with the SOPs under this indicator with labs A, C, E, and F, such as the absence of an SOP for media production, internal quality control of media to ensure media quality, and internal quality control of reagents (Basu et al., 2005). Laboratory D doesn't follow its SOP on isolation and identification. Our SOP is not updated, and it lists reagents that are not available in the laboratory. Sometimes I accidentally work up insignificant isolates.' The absence of these SOPs indicates that these particular procedures are not done, and if they are being done, the procedure is not reliable and standardized.

Labs D, E, and F need comprehensive SOPs for specimen processing, covering all stages from collection to storage. Currently, these SOPs gather dust on shelves, as staff rely mostly on verbal instruction and endorsement. Lab D often exceeds the critical thirty-minute transport time for specimens, risking inaccurate results due to the rapid growth of commensal bacteria and the degradation of critical pathogens like those in CSF samples. Additionally, there is significant noncompliance in isolation procedures, particularly the absence of Modified Thayer Martin Medium, an essential culture media for isolating Neisseria gonorrhea from genital specimens with labs A, C, D, E, and F. The lack of Gentamicin Blood Agar and Bacitracin Chocolate Agar in labs C, D, and E also hampers the identification of key respiratory pathogens like Haemophilus and Streptococcus pneumoniae. Laboratory A justified this issue: ' We use alternative media whenever appropriate culture media is unavailable.' Overall, these deficiencies severely limit the laboratory's capability to isolate and grow microorganisms that need specific growth requirements.

The laboratories are not consistently performing essential supplemental tests alongside their automated analyzers, except for lab B. This oversight compromises the accuracy of identifying microorganisms. Specifically, labs A, C, and D fail to conduct gram staining on all specimens, which is crucial in the identification process, especially on contaminant assessment. It also informs the staff if a sputum sample is significant for culture or not. The absence or failure to consistently follow updated Standard Operating Procedures (SOPs) raise serious concerns about the reliability of laboratory processes. Laboratory C, when asked about the SOP for MDRO claims,'We do not have an SOP for MDRO.' Additionally, not conducting manual supplemental tests for multi-drug-resistant organisms (MDROs) prevent proper identification and reporting of these critical pathogens. With limited staffing, reliance on automated systems is high, but manual testing remains vital to ensure comprehensive MDRO identification.

Antimicrobial Susceptibility Testing (AST)

General information on AST, AST performance, evaluation, and reporting of AST results are all included in this standard. Antimicrobial susceptibility testing's major clinical goal is to assist clinicians in the management of individual patients. This mandates the timely communication of accurate information to the decision-maker, along with appropriate interpretation.

Under general information, the majority of laboratories, apart from lab B, are not accredited to the RITM-ARSP and thus do not participate in the RITM (AMR) network or submit monthly quality control results. Only government sentinel hospitals identified by RITM-ARSP are part of the nationwide AMR program. Laboratories must maintain records of the number of ASTs performed each month, and an SOP must specify the requirement that only clinically significant organisms must undergo AST, a responsibility of the RITM-trained staff. Laboratories C and D (no RITM-ARSP trained staff) stated, 'We follow up on all organisms because it is the protocol of our microbiology laboratory'. On AST performance, a lack of a manual AST procedure leads to delays in patient results, as laboratories cannot switch to manual methods when automated analyzers fail. Laboratories C and E claimed, 'We send out samples to another laboratory when the automated machine breaks down or if we run out of reagents. Adhering to SOPs for internal quality control (IQC) of antibiotics is essential for accurate AST results, requiring the presence of the RITM-ARSP three required quality control strains. Additionally, separate quality control strains for automated analyzers must also be tested to ensure reliability (Chugh, 2020). Pertaining to breaches in quality control laboratory A stated, 'Sometimes we proceed with the sensitivity testing even if the MacFarland standard is out of control.' Any errors discovered during the review must be addressed according to laboratory SOPs.

To ensure reliable AST results and effective antibiogram creation under the evaluation and reporting of AST results, WHONET software should be utilized for managing data, eliminating duplicates, sorting by specimen type, and linking AST results with patient treatment/clinical outcome information. Standard Operating Procedures (SOPs) must be established for AST procedures and database management. Any questionable results from AST analyzers need revalidation before release.

The overall evaluation revealed that laboratories A, D, and F have noncompliances way beyond their compliances, with laboratory F showing the highest non-compliance. Significant noncompliances were identified in the RITM-ARSP indicators, especially regarding the isolation and identification of bacterial isolates. This points out the main issue as to why laboratories A, C, D, E, and F are not yet ready for accreditation. Addressing these non-compliances is crucial for certification.

Conclusion

This study showed that to pass the RITM-ARSP accreditation, microbiology laboratories must aim for and work on a very high adherence mark. All the noncompliances, gaps, and challenges uncovered in this study pointed mostly to a weak quality management system (QMS) within the facility. QMS, being the backbone and the strong foundation of a quality facility, must go hand in hand with laboratory capacity building. Staff training alone is never enough in the absence of a QMS in the laboratory. Most of all, management support is critical for the achievement. of a quality laboratory. Without management support, the facility is unlikely to succeed in any accreditation it seeks (Carey et al., 2018).

Among the six respondents' laboratories, only one made it to this mark. The rest of the facilities, although showing a high adherence mark, still need to upgrade further capacity building and QMS in their respective institutions. The inadequacies of the laboratory on the aforementioned aspects affect the quality of the microbiology services and their ability to accurately identify MDROs, thereby affecting overall AMR surveillance capacity. Addressing these barriers will ensure passing the accreditation, leading to quality microbiology services and improved AMR surveillance (Otieno et al., 2022; Kotwani et al., 2023). This calls for further studies to look into the annual management review, continuous quality improvement, and quality audit, including the team morale, to identify what is the root cause of all these TQM issues in the laboratory that need to be acted upon or further strengthened to plan and implement effective intervention, addressing these TQM issues to elevate the quality of the microbiology laboratory to be at par with the RITM-ARSP standards.

This study provides a novel framework for understanding the strengths and weaknesses as well as providing crucial information in developing effective strategies for strengthening the laboratories' diagnostic capacity in addressing the issue of AMR.

To the researcher's knowledge, this is the first study done in the Philippines to assess private microbiology laboratories in the hospital on their readiness for the RITM-ARSP accreditation in connection with the AMS program using an adapted assessment tool tailor-made for the Philippines microbiology laboratory setup.

The finding validates the theory that TQM depends upon a continuous commitment and total adherence to standards through process and structure, ensuring team morale, engagement, and staff autonomy to come up with quality laboratory services and processes needed to upgrade and strengthen quality to meet customer satisfaction, and regulatory and inspection bodies requirements to pass RITM-ARSP accreditation.

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