# Dynamics in Developing and Standardizing a Psychiatric Work Environment Scale in Nigeria

Dorothy Aumbur Igbende PhD¹ (Corresponding Author)

Phone: 08060256440

*Email:* igbendedorothy@gmail.com

**Leonsio Matagi PhD** <sup>2</sup> *Phone:* +256712800186

Email: matagileon@yahoo.com

Florence Nansubuga PhD <sup>3</sup>

Phone: +256752624899 Email: flonansu@yahoo.com

<sup>1</sup>Department of Psychology, Benue State University, P.M.B. 102119 Makurdi, Nigeria <sup>2,3</sup>School of Psychology, Makerere University, P.O. Box 7062 Kampala, Uganda

#### **Abstract**

Understanding the psychiatric work environment and experiences of mental health practitioners leads to better working conditions, relations, and the general treatment and care of patients. A remarkable need does exist to adequately understand practitioners' experiences as they give treatment and care to occasionally agitated, violent and difficult-to-calm patients. These favourable and unfavourable conditions typically characterize practitioners' psychiatric environment as they discharge their duties. Consequently, this study adapted and examined the work characteristics scale (Melchior et al., 2007) and developed a psychiatric work environment scale for mental health practitioners. This study utilized 206 mental health practitioners to conduct an exploratory and confirmatory factor analysis using SPSS version 23 and AMOS version 24 to obtain validity and model fit. Findings revealed three dimensions of the psychiatric work environment scale, i.e., psychological job demand, social support and physical job demand, with 13 items for the new measure. In addition, the scale demonstrated a strong reliability coefficient of .72 Cronbach's alpha with good validity and an excellent model fit. The new scale is, therefore, an extensive and excellent measure of the psychiatric work environment and is strongly recommended for use in research related to mental health practitioners and clinical settings.

*Keywords*: psychiatric work environment; mental health practitioners; scale; validity; reliability

#### Introduction

The psychiatric work environment has been the centre of concern for most researchers in their recent scholarly interrogations in the field of psychiatry and mental health care (Every-palmer et al., 2024; Gabrielsson et al., 2020). This high scholarly interest has been premised on the fact that a lot goes on in the psychiatric environment(Daniel & Daniel, 2020; Manga et al., 2023; Yang & Hayes, 2020), which is characterized by different approaches mental health practitioners use to treat and care for psychiatric patients (Deisenhofer et al., 2024; Kirmayer & Minas, 2000; Lewis-O'Connor et al., 2023). Consequently, the manner in which these patients react or behave

is incredible as it influences the practitioners' ability to address mental health issues (Arjmand et al., 2024; Pelto-piri et al., 2020). To this end, several researchers have different views on the psychiatric work environment, from its definition to the factors associated with favourable and unfavourable work environments. These differing views constitute a diverse understanding of the psychiatric work environment from a number of study populations across the globe.

## The Psychiatric Work Environment Across the Globe

Globally, many mental health practitioners perceive their practice environment as either favourable or unfavourable. Mainly, in a study on the barriers and opportunities to improve working conditions in emergency departments, practitioners identified poor leadership, inadequate facilities and unfit wards, high workload, unrealistic expectations, negative perception by colleagues, and lack of control as unfavourable work environments. In comparison, good leadership and relationships, teamwork, rest and lunch breaks, and adequate resources were defined as favourable work conditions. Consequently, an unfavourable work environment results in frustration and anxiety, thereby compromising patient care. However, a favourable work environment improves wellbeing and adequate service delivery (Daniels et al., 2024). Nonetheless, this study was based on a few emergency practitioners using a qualitative approach, limiting its generalization to other contexts. Similarly, mental health nurses identified inadequate staffing, increasing demand and its associated stress in the workplace as unfavourable. On the contrary, Implementing changes, improving outcomes for psychiatric patients, and organizational focus on wellbeing sustains the workforce, professional development, skills to build resilience, enabling time to reflect on practice, enhancing professional supervision, having the right managerial support and focusing on individual strengths as indicators of a favourable psychiatric environment New Zealand(O'Connor et al., 2024). Nevertheless, this study did not encompass the totality of mental health practitioners, and they were different in their contexts and experiences.

Accordingly, mental health practitioners showed satisfaction with the built environment in the inpatient psychiatric ward regarding overall hospital design; however, nurses rated the ward environment lower in terms of ensuring safety and fitness for purpose. That being so, 29% evaluated the overall design as good, but 19% assessed it as poor; 30% of the participants assessed the environment as fit for its purpose, while 18% perceived it as poor and unfit; moreover, 35% evaluated the work environment as safe, whereas 15% felt unsafe about their work environment in England (Sheehan et al., 2013). With the staff measurement scale, the work environment was identified as favourable in terms of the designs of the ward environment, wards without corridors and comfortable personal bathrooms for mental health patients. Nonetheless, practitioners tagged the work environment as unfavourable due to dissatisfaction with ward environment safety, the fitness of the wards that housed mental health patients and working in the wards with corridors (Sheehan et al., 2013). Nevertheless, the authors never investigated the factors of the entire psychiatric work environment, such as psychological and physical job demand, work decision latitude, and social support. Therefore, findings from this study do not provide exhaustive and conclusive situations in the psychiatric work environment and, thus, would not be generalized.

Furthermore, a qualitative study exploring psychiatric nurses' perceptions of their work environment revealed 5.7% discourse about patients' comfort, nursing work and staff comfort. In addition,32.6% of those discourses identified other factors such as patient violence, particular ward features and institutional care of patients who are at risk. Of these discourses, 39.7% were on organizational and group support and 21.9% on collegial collaboration in the management, treatment and interaction with psychiatric patients, confirming and demonstrating that psychiatric nurses had the ability to balance up the differences between their professional and personal lives in France (Cougot et al., 2020). Nonetheless, this study only mentioned factors influencing the psychiatric work environment but did not clearly explain the enlisted factors, nor did it define a psychiatric work environment.

In addition, an interrogation of nurses' experience with the acute care psychiatric

environment in the USA identified different experiences regarding relationship, freedom and time. Given these experiences, there was a cordial relationship among patients, and so was it among nurses. However, poor relationships and interactions existed between the patients and nurses in the psychiatric environment (Shattell et al., 2008). Both the nurses and patients felt they were denied their freedom because nurses operated from offices that were confined with barricaded glasses while the patients were kept in locked door wards and so felt the rules governing the psychiatric environment were too stringent. Furthermore, time was unfavourable for the nurses and patients; the nurses were busy as time moved too fast. Their engagements in searching and waiting for patients' medical records documentation and planning private appointments with them consumed much time(Shattell et al., 2008). The patients felt bored since they were not engaged in busy activities (working therapy and reading books) while waiting for treatment and care; time never moved fast. Besides, nurses were under pressure from the administration to leave work at the exact time of closure. At the same time, patients felt that nurses were not giving them adequate attention and maltreated them in every instance of unruly behaviour. Accordingly, nurses and patients wondered if punishment was going to benefit the patients at all (Shattell et al., 2008). However, inferring the findings of this study would be with caution since the experiences of the patients and nursing population vary from other categories of patients and mental health practitioners in the USA and the rest of Africa.

In the same way, an investigation on patient aggression and the wellbeing of nurses using a cross-sectional survey in psychiatric and non-psychiatric settings revealed that participants experienced 41% of patients' aggression in Finland. The experiences were .37% mental abuse, 25% physical violence, 21% assault on the ward property and 2% armed threat on mental health practitioners. To some extent, these paint a picture of an unfavourable work environment for the practitioner to operate (Pekurinen et al., 2017). However, the scope of the study was narrowed to unfavourable psychiatric work environment factors and, thus, did not enable a holistic understanding of what is obtainable in this environment.

On the other hand, a cross-sectional survey on the perceptions of ward atmosphere and psychosocial work environment among nursing staff in psychiatric inpatient care used a ward atmosphere scale and a general Nordic questionnaire for psychological and social factors at work in Sweden. Accordingly, organizational climate, ward atmosphere, role clarity, empowering leadership, control at work and support from superiors were identified as favourable and unfavourable work environment factors depending on the nurses' experience (Tuvesson et al., 2011). On the contrary, the study did not elaborate on how these psychiatric work environment factors affected mental health practitioners, and the extent of the effect remained unknown.

Furthermore, examining the effects of the nursing work environment on work-related outcomes among psychiatric nurses in China, 19.06% showed dissatisfaction with their overall practice environment. Besides, 24.34% felt displeased with their participation in hospital affairs, while 65.69% assessed the quality of care as excellent, though more than one-third of the psychiatric nurses did not consider the quality of care as excellent since there were some inadequacies. Using the practice environment scale, the psychiatric nurses classified their work environment as favourable or unfavourable (Huang et al., 2020). That being so, favourable psychiatric work environment in this contest was responsible for high-quality patient care, good co-worker relationships, involvement in the decision-making process, and adequate collegial and institutional support. These factors significantly improved psychosocial and physical satisfaction of nurses in the psychiatric work environment. However, the unfavourable psychiatric work environment was devoid of the benefits enjoyed in a favourable environment, with adverse effects on both mental health practitioners and their patients. The effects included low-quality care characterized by poor assessment by psychiatric nurses and medical errors in patient treatment and care (Huang et al., 2020). Nonetheless, the extent of effect of the psychiatric work environment factors on both the nurses and patient was not addressed. Besides, the experiences of favourable and unfavourable psychiatric work environments have differing implications for mental health practitioners around the world.

Furthermore, psychiatric nurses in tertiary psychiatric hospitals identified factors associated with their work environment, i.e. violence and respect from patients, social recognition of nurses' specialty, nurse-physician collaboration and trust using an online questionnaire related to work environment with a cross sectional approach. Accordingly, nurses in China described the psychiatric work environment as a place where mental health practitioners give treatment and care to their patients. That being so, their experience in these environments is either favourable or unfavourable depending on what the practitioner is presented with (Zhou et al., 2019). Nevertheless, the factors that influence psychiatric work environment favourably and unfavourably are not the same.

In the African context, creating positive practice environments in a primary healthcare setting was precisely explored using a qualitative approach among practitioners in South Africa. Given that, support, leadership and governance, collegial nurse-physician relationships, and factors influencing the quality of care were identified as favourable or unfavourable factors in the health environment. Besides, through community involvement and group cohesion, a participative decision-making culture encouraged teamwork and collegial relationships and improved patient care. In addition, good quality care was characterized by clinical audits, policies, guidelines, nursing skills, staff attitudes and dedication to duty. Nevertheless, reduced patient care was due to inadequate resources, infrastructure, and support from pharmacy, staff, equipment, and poor maintenance (Rabie et al., 2017). Nonetheless, the study could not be generalized due to its small sample size of 10 participants, context and inconsistencies identified after examining participants from a hospital with a positive practice environment.

. Similarly, an exploratory study on 32 psychiatric nurses in a child mental health environment about coping mechanisms in South Africa characterized the psychiatric environment as being favourable in terms of management interventions, continuous professional development, relevant child psychiatric curriculum, flexible time shift, cohesion, team sharing, and support that enhanced quality nursing care. On the other hand, taking accountability for one's own learning and development, inability to cope and achieve treatment plans, and too many demands on mental health nurses resulting to stress and poor health define an unfavourable psychiatry work environment (Machailo et al., 2023). However, the study was not based on the generality of mental health practitioners who attend to all the mentally ill.

Similarly, in Egypt, 75% of mental health nurses perceived the psychiatric work environment as civilized and polite, indicating a favourable atmosphere; 52% reported a moderate level of wellbeing, while 22% experienced happiness at work. In addition, being proficient, competent, having leadership skills and experiencing a climate of civility signifies a friendly and polite psychiatric work environment. However, experiencing an unfriendly and impolite work atmosphere indicates an unfavourable psychiatric work environment, as reported by 25% of the mental health nurses, with 26% of the nurses having low mental wellbeing (Elsayed et al., 2021). Besides, mental health nurses in Ghana described their work environment as unfavourable due to occupational hazards and risks associated with their practice environment, followed by issues of poor staff strength, inadequate resources, physical and verbal assault, injuries, overcrowding, and work overload. As such, 53% of the mental health nurses rated their situation in psychiatric hospitals as unfavourable. However, 47% of nurse practitioners reported that their practice environment was favourable because they felt that some resources were available for patient care (Alhassan & Poku, 2018). Additionally, mental health practitioners in Uganda described their practice environment as unfavourable due to inadequate staffing, lack of infrastructure and equipment, poor support and monitoring capacity. On the other hand, some practitioners described the psychiatric work environment as favourable due to the competence and engagement in handling psychiatric patients and support from colleagues. Given that, the psychiatric work environment is looked at in terms of favourable and unfavourable situations (Mugisha et al., 2019).

Furthermore, the psychiatric work environment in Osun, Nigeria, is characterized by bullying/mobbing and sexual harassment, leading to fear and worry among practitioners. These experiences by practitioners explain that their environment of practice is unfavourable. Nonetheless, this setting is likely to be favourable should there be regular programmes aimed at

preventing violence and reducing risks in mental health settings (Seun-Fadipe et al., 2019). Moreover, mental health nurses described the psychiatric work environment in Port Harcourt, Nigeria, as being unfavourable. This is due to the dilapidated state of psychiatric hospitals, shortage of working equipment, high cost of drugs, professional stigma, lack of training and poor support from colleagues and administrative authorities. Consequently, these factors were considered to affect mental health nurses in the psychiatric work environment unfavourably (Jack-Ide et al., 2013). Nevertheless, only the unfavourable conditions in the psychiatric environment were brought to book, yet the psychiatric work environment also has favourable conditions that could be improved for enhanced patient treatment and care. Moreover, a study on occupational stress and coping strategies among mental health practitioners in Kaduna, Nigeria, identified a stressful psychiatric work environment as unfavourable hence deteriorating practitioners' quality of life. In contrast, availability of coping strategies in the psychiatric work environment defines it as favourable leading to improved patient care (Ochanya et al., 2024). Nonetheless, the study was not specific to favourable and unfavourable psychiatric work environment neither was it carried out in many contexts for better comparison and understanding. In a different study on inadequacies in the mental health settings, like unfriendliness of the environment, unfitting architectural designs, inadequate staffing are unfavourable conditions, and leads to stress and depression. On the contrary, creating a befitting facility that stands the test of nature friendliness like beautiful colours and designs, makes the psychiatric environment favourable resulting in less stressful work environment and leading to increased healing process for mental health patients, and satisfaction on the part of the practitioner(Chisom et al., 2023). However, this study did not specify the extent of favourable and unfavourable nature of the psychiatric hospital in Awka.

Concerning the previous studies explored, all attempts to define the psychiatric work environment have been uneasy. Nonetheless, understanding the psychiatric work environment can only be adequately clear through the use of a standardized scale while investigating situations and experiences of mental health practitioners who give care and treatment to patients. Given that, psychiatric work environment in this study refers to an environment where mental health practitioners give adequate treatment and care to mental health patients. This is backed up by the notion that the unfavourable situations in the psychiatric work environment are expected to improve while the favourable ones are maintained; for instance, promoting a noble environment that allows patients to participate in daily life activities without fear of stigma as well an enabling environment for practitioners to handle their day to day tasks. Consequently, Karasek(1979); Karasek et al. (1998) emphasized that mental health practitioners' treatment and care in the psychiatric work environment are associated with the following dimensions: psychological and physical job demand, work decision latitude, and social support.

### Scale Review

The psychiatric work environment scale was adapted from Melchior and colleagues' work, which was also adapted from (Karasek & Theorell; Johnson et al., as cited in Melchior et al., 2007). The study utilized 972 female and male participants who were employed and born between April 1972 and March 1973 in Dunedin and whose assessment was completed at age 32 between 2004 and 2005. Accordingly, the 28-item scale had the following dimensions: psychological job demand with a reliability coefficient of 0.68, work decision latitude with 0.72 Cronbach's alpha, social support with a reliability coefficient of 0.74 Cronbach's alpha and physical job demand with 0.88 Cronbach's alpha. These items were scored on a three-point scale ranging from no=0, sometimes=1, to yes=2, with item correlations between 0.07 and 0.23 (Melchior et al., 2007). Besides, the 28 scale items were developed for the work environment, assuming that behaviour is somewhat generated by social environment or work situations (Karasek, Brisson, Kawakami, et al., 1998).

However, Melchior and colleagues did not run an exploratory and confirmatory factor analysis, which would have revealed the validity of the items and model fit. The items on the scale were in the form of questions that warranted the respondents to give yes or no responses that never provided the freedom to establish an exact degree of agreement or disagreement.

Consequently, the use of three response options narrowed the scope, and thus, the application of this measure across the globe would be with caution, given that different work environments have distinct exposures and breed unique resultant experiences. Therefore, we hypothesized that there is a relationship between items and dimensions on the psychiatric work environment scale.

# Methods

## Design

We employed a cross-sectional approach (Christensen et al., 2014) precisely, a correlation research design and determined the relationship between the scale items and dimensions (Privitera, 2017) on the psychiatric work environment scale. Besides, we used 206 mental health practitioners from a mental health setting in Nigeria.

# Development of Psychiatric Work Environment Scale

The quest for a psychiatric work environment scale to measure the mental health practitioners' experiences was the motivation behind the search for the available scale. In an attempt to develop a psychiatric work environment scale, the 28 items from the work characteristics scale (Karasek & Theorell; Johnson et al., as cited in Melchior et al., 2007) were adapted and validated. This work characteristics scale by Melchior and colleagues was based on statements about the work environment that collectively formed an important instrument for collecting work environment data (Karasek et al., 1998).

#### **Data Collection Procedure**

The psychiatric work environment scale was evaluated with permission from the Federal Medical Centre Research Ethics Committee, Makurdi, Benue State, Nigeria. Consequently, participants consented and partook in the research with assurance of confidentiality of their responses and personal information. To this end, the 28-item scale of Melchior and colleagues was reassessed, with the validity and model fit ascertained through exploratory and confirmatory factor analysis. This assessment led to the development of a current psychiatric work environment scale that is significant in capturing comprehensive understanding and providing explanations about the different experiences of mental health practitioners.

# Method of Analysis

The SPSS version 23 was used to run reliability analysis on data collected from mental health practitioners using responses on a 5-point Likert scale: Never=1, Seldom=2, Sometimes=3, Frequently=4, and Always=5. A higher score suggested an unfavourable psychiatric work environment, whereas a lower score connoted a favourable psychiatric work environment of mental health practitioners. Additionally, exploratory factor analysis was conducted using the maximum likelihood extraction method and eigenvalue >1. Besides, confirmatory factor analysis was done with the application of SPSS with AMOS version 24, and the model fit was arrived at.

#### **Ethical Considerations**

This study received approval from the Research Ethics Committee of Federal Medical Centre Makurdi, Benue State, with approval number FM/FMC/MED.108/VOL.1/X. The informed consent was also obtained from the participants after the purpose of the study was explained.

#### Results

Participants employed for the study were 206 mental health practitioners whose responses to 28 items revealed the reliability coefficient of the psychiatric work environment scale. To this end, the reliability analysis was conducted, and findings revealed that 9 items were removed from the 28 items to retain 19 items, consequently improving the reliability coefficient to .72 Cronbach's alpha. Thus, the reliability coefficient for this current scale developed is strong and indexed at .7 (Nunnally, as cited in Peterson, 1994).

## Results from Exploratory Factor Analysis (EFA)

The psychiatric work environment scale further underwent an exploratory factor analysis on 19 items, applying the maximum likelihood extraction method and eigenvalues of >1. For that reason, the exploration revealed that items with factor loading less than .4 were removed, thus improving scale validity at 39.99%, which explained the variance. Following the exploration, the study placed 4 factors from Melchior and colleagues on the analysis, yet the scale showed 3 factors, namely, psychological job demand (4 items) with 5.31% variance, social support (5 items) with 13.98% variance and physical job demand (5 items) with 16.85% variance. However, a social support item with 3.85% explained variance stood alone, giving a sum of 15 items on the psychiatric work environment scale. Besides, the work decision latitude items were all suppressed and invisible on the scale after exploration; thus, the scale's validity was improved when 4 items from 19 items were removed to retain 15 items on the psychiatric work environment scale. Nevertheless, the variance explained in the humanities ranged from 50 to 60%, as established by Hair et al., as cited in Williams, Onsman, yet Williams and colleagues utilized an eigenvalue >1 and a cumulative variance of 40.6% in a total of 7 components. Nonetheless, Petrillo, Capone, Caso and Keyes (2015) developed a mental health continuumshort form (MHC-SF) as a wellbeing measure and obtained a cumulative variance of 30.61% with an eigenvalue of >1in a total of two factors. On the other hand, the current study has demonstrated an explained variance of 39.99% with an eigenvalue of >1in a three-factor model for the new psychiatric work environment scale. That provides an upper hand to adopting the new scale as its variance is higher than that of (Petrillo, Capone, Caso, & Keyes, 2015).

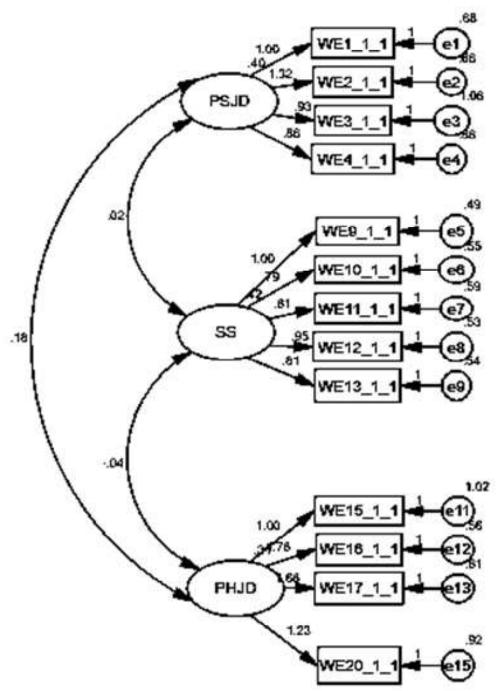
# Result from Confirmatory Factor Analysis (CFA)

A confirmatory factor analysis was conducted on the psychiatric work environment scale, and findings showed the validity and model fit for the scale ( $x^2=64.59$ , df=62, p=.39, GFI = .95, TLI=.99. NFI=.89, CFI=.995, RMSEA=.014). Additionally, the psychiatric work environment scale revealed a 3 factor structure, namely, psychological job demand (PSJD) with 4 items as factor 1, followed by social support (S.S.) with 5 items as factor 2, and physical job demand (PHJD) with 4 items as factor 3. In that case, 2 items from the 15 items were removed, and a good model fit was acquired.

**Table 1**A Table showing the Three Factor Model and item loading for the Psychiatric Work Environment Scale

Items		Factors		
		Psychological	Social	Physical
		Job Demand	Support	Demand
1.	I work under the pressure of time in this psychiatric hospital	.587		
2.	My job in the psychiatric hospital is hectic (emotionally disturbing)	.690		
3.	I am unclear about what I have to do in terms of helping the patients	.466		
4.	I have to work too hard to treat/calm highly agitated patients	.495		
5.	I get helpful feedback about my job performance		.652	
6.	I ever get praised for my work of helping psychiatric patients		.568	
7.	I get help and support from my colleagues at the psychiatric hospital		.573	
8.	I get help and support from my immediate supervisor at the psychiatric		.593	
	hospital			
9.	I am treated fairly at work		.519	
10.	I sweat daily from physical effort while helping psychiatric patients			.493
11.	My job in the psychiatric hospital exposes me to dirt			.720
12.	My job in the psychiatric hospital exposes me to very loud noise and excessive heat	1		.732
13.	I have to stand for long stretches of time while attending to patients			.605

**Figure 1**Confirmatory Factor Analysis (CFA) for Psychiatric Work Environment Scale



(Chi square=64.59, df=62, p=.39, GFI = .95, TLI=.99. NFI=.89, CFI=.995, RMSEA=.014) Key: PSJD=Psychological job demand, SS=social support, PHJD=Physical job demand

The above figure verifies and confirms the factor structure, ascertaining the convergent and divergent validity and model fit for the new psychiatric work environment scale. Furthermore, it reveals the interconnectedness and relationship between the factors and the items on the scale.

#### Discussion

The study investigated the psychometric properties of the psychiatric work environment scale, and the results revealed the scale's reliability, validity and good model fit. Moreover, the choice of items demonstrated the implications of psychological job demand, social support, and physical

job demand on mental health practitioners in the psychiatric work environment. Furthermore, exploratory factor analysis revealed the following psychiatric work environment dimensions in the order in which they were explored and confirmed: psychological job demand as factor 1, social support as factor 2 and physical job demand as factor 3 with an eigenvalue of >1. In the same way, confirmatory factor analysis obtained a good model fit and validation of distinctive items on the 3 factor structure for the psychiatric work environment scale.

Similarly, items for the development of the psychiatric work environment scale were adapted from the work characteristics scale by (Melchior et al., 2007). Nevertheless, 3 out of 4 factors from the work characteristics scale and 13 out of 28 items were retained. Meanwhile, the work decision latitude factor was suppressed and invisible following the exploratory and confirmatory factor analysis. On the other hand, none of the 13 items drifted from one factor to the other in the final analysis; thus, all items were maintained in their usual factors on the scale of the psychiatric work environment.

## **Implication**

This study's implication was based on the information derived from the research findings. The study revealed that psychological job demand, social support, and physical job demand components of the psychiatric work environment scale are inherent in the mental health practitioners' environment of practice. Besides, the result showed how convergent and divergent the items on the factor structure are, indicating their reliability, validity, and model fit that explains the experiences of practitioners in the psychiatric work environment. As such, mental health practitioners are likely to be influenced by psychological job demand, social support and physical job demand positively or negatively as they carry out their day-to-day tasks in the mental health setting. Therefore, this psychiatric work environment scale is likely to have an extensive reach for application to various clinical and psychiatric settings across the world and most probably to have an outstanding relevance to mental health practitioners.

#### Limitations and Future Research

Despite the practicality and research implication of this study, the study is limited because the researchers selected only a sample of mental health practitioners; as such, our results are not generalizable to health practitioners in other areas of medicine.

Though the study used a cross-sectional design, which gives room for generalization of findings and offers cost and control advantages, this design does not allow a close examination of several aspects of the relationships in the study.

Therefore, future researchers should explore the psychiatric work environment scale more using a mixed-method design for a larger population of mental health practitioners.

# Conclusion and Recommendation

Concerning the findings of this study, different existing work environment scales have evaluated distinct experiences depending on the nature of the environment and population under investigation. Nonetheless, they have had critical concerns about their conceptualization, definition, comprehensiveness, phrasing and contextual representation. For this reason, the current study revealed the uniqueness of the items and outstanding psychometric properties of the psychiatric work environment scale. Therefore, this new scale is considered a reliable and valid measure of individual experiences in an environment where mental health practitioners treat and care for psychiatric patients. Hence, the scale is recommended for use in mental health settings.

## Acknowledgements

The participants of this study are duly acknowledged for their constructive feedback and contribution to the study.

**Competing interests:** The authors assert that no financial or personal relationships improperly influenced them in writing this article.

**Authors' contributions:** All authors contributed equally to this study through the research's methods and implementation and the manuscript's preparation.

**Funding information:** This study did not receive any financial assistance from anywhere or a grant from any funding agency

**Data availability:** The data supporting the findings of this research is from the mental health practitioners' sample in Nigeria, and so cannot be made available.

**Disclaimer:** The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

## References

- Alhassan, R. K., & Poku, K. A. (2018). Experiences of frontline nursing staff on workplace safety and occupational health hazards in two psychiatric hospitals in Ghana. *BMC Public Health*, *18*(1), 1–12. https://doi.org/10.1186/s12889-018-5620-5
- Arjmand, H. A., O'Donnell, M. L., Putica, A., Sadler, N., Peck, T., Nursey, J., & Varker, T. (2024). Mental health treatment for first responders: An assessment of mental health provider needs. *Psychological Services*, 21(3), 489–499. https://doi.org/10.1037/ser0000832
- Chisom, D., Agbonome, P. C., Chinedu, D., Praise, E., & Jude., B. (2023). Inadequacies in mental health centres in Anambra state: The case of negligence of depression as a mental illness and the need for a depression treatment centre in Awka. *African Journal of Educational Management, Teaching and Entrepreneurship Studies*, 9(1), 163–172.
- Christensen, L. B., Johnson, R. B., & Turner, L. A. (2014). *Research methods, design , and analysis* (S. Frail, C. Beimford, L. Dotson, L./: Behrens, S. Ghoshal, & S. Basu (eds.); Twelfth). Pearson Education.
- Cougot, B., Fleury-bahi, G., Gauvin, J., Armant, A., Durando, P., Dini, G., Gillet, N., Moret, L., & Tripodi, D. (2020). Exploring perceptions of the work environment among psychiatric nursing staff in France: A qualitative study using hierarchical clustering methods. *International Journal of Environmental Research and Public Health*, 17(1), 142–156.
- Daniel, V., & Daniel, K. (2020). Perception of nurses' work in psychiatric clinic. *Clinical Medicine Insights*, 1(1), 27–35. https://doi.org/10.52845/cmi/2020v1i1a5
- Daniels, J., Robinson, E., Jenkinson, E., & Carlton, E. (2024). Perceived barriers and opportunities to improve working conditions and staff retention in emergency departments: A qualitative study. *Emerg Med J*, 41, 257–265. https://doi.org/10.1136/emermed-2023-213189
- Deisenhofer, A. K., Barkham, M., Beierl, E. T., Schwartz, B., Aafjes-van Doorn, K., Beevers, C. G., Berwian, I. M., Blackwell, S. E., Bockting, C. L., Brakemeier, E. L., Brown, G., Buckman, J. E. J., Castonguay, L. G., Cusack, C. E., Dalgleish, T., de Jong, K., Delgadillo, J., DeRubeis, R. J., Driessen, E., ... Cohen, Z. D. (2024). Implementing precision methods in personalizing psychological therapies: Barriers and possible ways forward. *Behaviour Research and Therapy*, 172, 1–17. https://doi.org/10.1016/j.brat.2023.104443
- Elsayed, W. A., Hassona, F. M., Nageeb, S. M., & Mohamed, B. E. S. (2021). Leadership competencies, workplace civility climate, and mental well-being in El- Azazi hospital for mental health, Egypt. *Egyptian Journal of Health Care*, 12(2), 298–313. https://doi.org/10.21608/ejhc.2021.150275
- Every-palmer, S., Grant, M. L., Thabrew, H., Hansby, O., Lawrence, M., Jenkins, M., & Romans, S. (2024). Not heading in the right direction: Five hundred psychiatrists' views on resourcing , demand , and workforce across New Zealand mental health services. *Australian & New Zealand Journal of Psychiatry*, 58(1), 82–91. https://doi.org/10.1177/00048674231170572
- Gabrielsson, S., Tuvesson, H., Gustin, L. W., & Jormfeldt, H. (2020). Positioning psychiatric and mental health nursing as a transformative force in health care. *Issues in Mental Health Nursing*, 41(11), 976–984. https://doi.org/10.1080/01612840.2020.1756009
- Huang, X., Wang, L., Dong, X., Li, B., & Wan, Q. (2020). Effects of nursing work environment on work-related outcomes among psychiatric nurses: A mediating model. *Journal of Psychiatric and Mental Health Nursing*, 28(2), 186–196. https://doi.org/10.1111/jpm.12665
- Jack-Ide, I. O., Uys, L. R., & Middleton, L. E. (2013). Mental health care policy environment in Rivers State: Experiences of mental health nurses providing mental health care services in

- neuro-psychiatric hospital, Port Harcourt, Nigeria. *International Journal of Mental Health Systems*, 7(1), 1–9. https://doi.org/10.1186/1752-4458-7-8
- Karasek, R. A. (1979). Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly*, 24(2), 285–308. https://doi.org/10.2307/2392498
- Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The Job Content Questionnaire (JCQ): an instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*, 3(4), 322–355. https://doi.org/10.1037/1076-8998.3.4.322
- Karasek, R., Brisson, C., Norito Kawakami, Houtman, I., Bongers, P., & Amick, B. (1998). The job content questionnaire (JCQ): An instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*, *3*(4), 322–355. https://doi.org/10.1037/1076-8998.3.4.322
- Kirmayer, L. J., & Minas, H. (2000). The future of cultural psychiatry/: An international perspective. *Canadian Journal of Psychiatry*, 45(5), 438–446.
- Lewis-O'Connor, A., Olson, R., Grossman, S., Nelson, D., Levy-Carrick, N., Stoklosa, H., Banning, S., & Rittenberg, E. (2023). Factors that influence interprofessional implementation of trauma-informed care in the emergency department. *JACEP Open*, 4(4), 1–12. https://doi.org/10.1002/emp2.13001
- Machailo, R. M., Matsipane, M. J., & Koen, D. (2023). Coping mechanisms of psychiatric nurses in child mental health environments in north west province, South Africa: A qualitative call for urgency. *International Journal of Environmental Research and Public Health Article*, 20, 1–15.
- Manga, P. M., Yamte, V. J., & Yawate, V. E. (2023). A critical examination of the therapeutic architecture potentials at the psychiatric hospital Yola, Nigeria. *Savannah Journal of Science and Engineering Technology*, 1(4), 153–159.
- Melchior, M., Caspi, A., Milne, B. J., Danese, A., Poulton, R., & Moffitt, T. E. (2007). Work stress precipitates depression and anxiety in young, working women and men. *Psychological Medicine*, *37*(8), 1119–1129. https://doi.org/10.1017/S0033291707000414
- Mugisha, J., De Hert, M., Knizek, B. L., Kwiringira, J., Kinyanda, E., Byansi, W., van Winkel, R., Myin-Germeys, I., Stubbs, B., & Vancampfort, D. (2019). Health care professionals' perspectives on physical activity within the Ugandan mental health care system. *Mental Health and Physical Activity*, 16, 1–7. https://doi.org/10.1016/j.mhpa.2019.02.001
- O'Connor, E., Prebble, K., & Waterworth, S. (2024). Organizational factors to optimize mental health nurses' wellbeing in the workplace/: An integrative literature review. *Int J Mental Health Nurs.*, 33, 5–17. https://doi.org/10.1111/inm.13218
- Ochanya, I. P., Shekwolo, D. M., Monday, F. A., & William, A. (2024). Occupational stress and coping strategies as predictors of quality of life among mental health practitioners in federal neuro-psychiatric hospital Barnawa, Kaduna State. *Jalingo Journal of Social and Management Sciences*, *5*(3), 252–263.
- Pekurinen, V., Willman, L., Virtanen, M., Kivimäki, M., Vahtera, J., & Välimäki, M. (2017). Patient aggression and the wellbeing of nurses: A cross-sectional survey study in psychiatric and non-psychiatric settings. *International Journal of Environmental Research and Public Health*, 14, 1245–1258. https://doi.org/10.3390/ijerph14101245
- Pelto-piri, V., Warg, L., & Kjellin, L. (2020). Violence and aggression in psychiatric inpatient care in Sweden: A critical incident technique analysis of staff descriptions. *BMC Health Services Research*, 20, 1–11.
- Peterson, R. A. (1994). A meta-analysis of cronbach's coefficient alpha. *Journal of Consumer Research*, 21(2), 381–391. https://doi.org/10.1086/209405
- Petrillo, G., Capone, V., Caso, D., & Keyes, C. L. M. (2015). The mental health continuum-short form (MHC-SF) as a measure of well-being in the Italian context. *Soc Indic Res*, 121, 291–312. https://doi.org/10.1007/s
- Privitera, G. J. (2017). Research methods for the behavioral sciences (R. Hester, N. Davidson, L. Berbeo, M. Shannon, K. DeRosa, & C. West (eds.); Second Edi). Sage publication, Inc.

- Rabie, T., Klopper, H. C., & Coetzee, S. K. (2017). Creating positive practice environments in a primary health care setting. *International Journal of Nursing Practice*, 23(4), 1–8. https://doi.org/10.1111/ijn.12555
- Seun-Fadipe, C. T., Akinsulore, A. A., & Oginni, O. A. (2019). Workplace violence and risk for psychiatric morbidity among health workers in a tertiary health care setting in Nigeria: Prevalence and correlates. *Psychiatry Research*, 272, 730–736. https://doi.org/10.1016/j.psychres.2018.12.177
- Shattell, M. M., Andesb, M., & Thomas, S. P. (2008). How patients and nurses experience the acute care psychiatric environment. *Nursing Inquiry*, 15(3), 242–250.
- Sheehan, B., Burton, E., Wood, S., Stride, C., Henderson, E., & Wearn, E. (2013). Evaluating the built environment in inpatient psychiatric wards. *Psychiatric Services*, 64(8), 789–795. https://doi.org/10.1176/appi.ps.201200208
- Tuvesson, H., Eklund, M., & Wann-Hansson, C. (2011). Perceived stress among nursing staff in psychiatric inpatient care: The influence of perceptions of the ward atmosphere and the psychosocial work environment. *Issues in Mental Health Nursing*, 32, 441–448. https://doi.org/10.3109/01612840.2011.564344
- Williams, B., Onsman, A., & Brown, T. (2010). EDUCATION Exploratory factor analysis: A five-step guide for novices. *Journal of Emergency Primary Health Care*, 8(3), 2010–990399. https://doi.org/10.1080/09585190701763982
- Yang, Y., & Hayes, J. A. (2020). Causes and consequences of burnout among mental health professionals/: A practice-oriented review of recent empirical literature. *Psychotherapy*, 57(3), 426–436.
- Zhou, H., Jiang, F., Rakofsky, J., Hu, L., Liu, T., Wu, S., Liu, H., Liu, Y., & Tang, Y. (2019). Job satisfaction and associated factors among psychiatric nurses in tertiary psychiatric hospitals: Results from a nationwide cross sectional study. *J Adv Nurs*, 75, 3619–3630. https://doi.org/10.1111/jan.14202