

Development and Validation of the Perception of Wife Battery Scale

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Abstract:

The present study developed and validated the Perception of Wife Battery Scale (PWBS) to assess culturally grounded beliefs and attitudes toward wife battering. Using a cross-sectional survey design, data were collected from 204 participants and analysed using exploratory factor analysis, reliability testing, and construct validation procedures. The suitability of the data for factor analysis was confirmed by a meritorious Kaiser–Meyer–Olkin value (.85) and a significant Bartlett’s Test of Sphericity, $\chi^2(190) = 1389.71$, $p < .001$. Principal Component Analysis with Varimax rotation yielded a four-factor structure comprising Psychological and Behavioural Risk Factors, Patriarchal and Normative Beliefs, Cultural Masculinity Ideology, and Protective and Preventive Factors, collectively explaining 54.06% of the total variance. One item was removed due to weak factor loading, resulting in a final 19-item scale. The PWBS demonstrated moderate internal consistency (Cronbach’s $\alpha = .65$), acceptable for a newly developed multidimensional instrument. Concurrent validity was supported by a significant positive correlation with the Domestic Violence Myth Acceptance Scale ($r = .44$, $p < .001$), while discriminant validity was established through a non-significant association with self-esteem ($r = -.02$, $p > .05$). Overall, the findings indicate that the PWBS is a psychometrically sound and culturally relevant measure for assessing perceptions of wife battering. The scale holds promise for research, policy evaluation, and intervention efforts aimed at addressing intimate partner violence within Nigeria and similar socio-cultural contexts.

Keywords: Perception of wife battering; intimate partner violence; scale development and validation; Nigeria

Introduction:

Wife battery, a prevalent form of intimate partner violence (IPV), remains a critical social, psychological, and public health challenge globally, with particularly high prevalence in Sub-Saharan Africa, including Nigeria (Odini et al., 2024; Okedare et al., 2025; Olatunde, 2025). Wife

battery encompasses physical, psychological, sexual, and economic abuse perpetrated by a husband against his wife and reflects deeply rooted gendered power imbalances within marital relationships (Abunike & Oli, 2022; Rakovec-Felser, 2014; Osakwe & Odungiweru, 2020). In

Nigeria, national surveys and empirical studies consistently document high rates of spousal violence, with a substantial proportion of women reporting lifetime experiences of physical, emotional, or sexual abuse by intimate partners (National Population Commission [NPC] & ICF, 2019). Despite its widespread occurrence, wife battery is frequently normalized, underreported, and inadequately addressed, largely due to prevailing socio-cultural beliefs and attitudes that shape how such violence is perceived.

Perception of wife battery refers to individuals' beliefs, judgments, and normative evaluations regarding the acceptability, justification, severity, and consequences of violence against wives (Tohan et al., 2025). These perceptions are particularly salient in patriarchal societies where cultural norms often legitimize male authority and female submissiveness within marriage (Shakya et al., 2022). In many Nigerian and broader Sub-Saharan African contexts, wife battery is sometimes viewed as a legitimate disciplinary measure, a private family matter, or a culturally sanctioned response to perceived marital transgressions such as disobedience, infidelity, or neglect of domestic roles. Such perceptions play a crucial role in sustaining wife battery by fostering social tolerance, discouraging victims from seeking help, and limiting community and institutional responses (Antai, 2011; Olatunde, 2025).

Psychological theories provide a useful framework for understanding how perceptions of wife battery are formed and maintained. Social learning theory posits that attitudes toward violence are acquired through observation and reinforcement within family and community settings, where exposure to intergenerational violence and rigid gender-role socialization is common (Eriksson & Mazerolle, 2015). Cognitive distortion theory further suggests that belief systems, moral reasoning, and victim-blaming cognitions influence whether abusive behavior is condemned or justified (Syasyila et al., 2024). Within the Nigerian socio-cultural milieu, religious interpretations, customary laws, and

communal value systems may further reinforce cognitive schemas that normalize or excuse wife battery, particularly when such beliefs are shared by both men and women.

Empirical evidence from Nigeria and other Sub-Saharan African countries indicates that acceptance of wife battery is influenced by multiple socio-demographic and psychosocial factors, including gender, educational attainment, socioeconomic status, religiosity, and rural–urban residence (Olatunde, 2024; Okedare & Fawole, 2023; Ikuteyijo et al., 2025; Okafor et al., 2023). Notably, studies using Demographic and Health Survey (DHS) data have shown that a significant proportion of women themselves endorse at least one justification for wife battery, reflecting the internalization of patriarchal norms and gender inequality (NPC & ICF, 2019). Such attitudinal acceptance has been associated with increased vulnerability to victimization, delayed help-seeking, and poorer mental health outcomes, including depression, anxiety, low self-esteem, and trauma-related symptoms.

The perception of wife battery has far-reaching implications for prevention, intervention, and policy formulation. Societal tolerance of spousal violence undermines the effectiveness of legal frameworks such as Nigeria's Violence Against Persons (Prohibition) Act and weakens institutional responses within law enforcement, healthcare, and social welfare systems (Okedare & Fawole, 2023; Okafor et al., 2023). From a psychological perspective, negative or permissive perceptions of wife battery contribute to self-blame, fear of stigma, and learned helplessness among victims, while simultaneously enabling perpetrators to morally disengage and justify abusive behavior (Wessells & Kostelny, 2022; Zepinic, 2023). Consequently, shifting perceptions and attitudes toward wife battery is widely recognized as a critical component of violence prevention strategies in Sub-Saharan Africa (Speizer, 2010).

Despite the importance of perception in shaping the occurrence and persistence of wife battery, there is a notable lack of culturally appropriate,

psychometrically sound instruments specifically designed to assess perceptions of wife battery within the Nigerian and Sub-Saharan African contexts. Existing measures often assess attitudes toward domestic violence more broadly, are developed in Western contexts, or focus narrowly on justification of violence without capturing other relevant dimensions such as victim-blaming, normalization of abuse, perceived severity, and moral or social acceptability. Moreover, several available instruments lack rigorous validation procedures, limiting their utility for research, clinical assessment, and program evaluation in culturally diverse settings.

The absence of a validated, context-specific instrument represents a significant gap in the literature and constrains empirical efforts to examine the psychological underpinnings of wife battery in Nigeria. Without reliable measurement tools, it is difficult to assess attitudinal change, evaluate intervention outcomes, or inform culturally responsive policies and psychosocial programs. Scale development and validation are therefore essential to advancing research on wife battery and supporting evidence-based prevention and advocacy initiatives.

In response to this gap, the present study aims to develop and validate the Perception of Wife Battery Scale (PWBS) within the Nigerian context. The study seeks to construct an instrument that captures key domains of perception relevant to wife battery. The development of the PWBS is expected to enhance understanding of the attitudinal foundations of wife battery in Nigeria and Sub-Saharan Africa and to support efforts aimed at transforming harmful social norms and reducing violence against women.

Methods:

Design:

A quantitative cross-sectional research design was employed for Phase I of this study. Prior to the collection of data from the respondents, a comprehensive literature review of relevant research papers was carried out, and there was

proper consideration of the relevant reviewed studies during the scale development phase. Also, a Key Informant Interview (KII) was carried out, and appropriate experts evaluated the generated items.

Item Generation for the Perception of Wife Battery Scale:

The items on the scale were developed following a comprehensive review of the existing literature on wife battering and assault. Relevant studies were sourced from reputable online databases, including PubMed, PsycINFO, PubMed Central (PMC), JSTOR, and ResearchGate, to ensure a thorough understanding of the diverse forms, dynamics, and manifestations of wife battery. In addition to the literature review, a Key Informant Interview (KII) was conducted with eleven (11) purposively selected informants who possess direct experience or expertise regarding domestic violence. The interviews provided first-hand, contextually grounded insights into the informants' perceptions, beliefs, and attitudes towards wife battery, allowing for the collection of accurate and culturally relevant information. Based on the integration of findings from the literature review and the KII, an initial pool of forty-seven (47) items was generated for the development of the Perception of Wife Battery Scale (PWBS). These items were carefully formulated to reflect the multidimensional nature of wife battery, encompassing physical, emotional, psychological, and social dimensions, and to capture both overt and subtle manifestations of spousal abuse.

Content and Face Validity of the generated items of the Perception of Wife Battery Scale (PWBS):

To ensure the content and face validity of the items generated for the Perception of Wife Battery Scale (PWBS), a panel of professionals and experts in psychology and sociology was consulted. The experts were tasked with evaluating the items for relevance, depth, clarity, and cultural appropriateness. A total of eleven (11) experts participated, representing diverse subfields: three Clinical Psychologists, two

Developmental Psychologists, two Industrial-Organizational Psychologists, two Social Psychologists, and two Sociologists, all with extensive experience in research or practice related to social behavior, marital dynamics, and domestic violence.

The experts were provided with clear instructions to assess each item on several dimensions: whether the behavior described could be considered abusive, its correspondence to a specific category of abuse, its representation of the range of abusive experiences encountered by married individuals, and its cultural, social, and ethical relevance within the Nigerian context. Experts were encouraged to provide critical feedback, suggest additional items, and recommend modifications to ensure cultural adaptability and conceptual clarity.

Each item was evaluated using a 3-point Likert scale: essential, useful but not essential, and not necessary. The Content Validity Ratio (CVR), as proposed by Lawshe (1975), was used to determine item retention. Items rated as *not necessary* by the experts were removed, while items rated as *useful* were retained if at least 75% of the experts agreed on their relevance, following the recommended inclusion criteria. Items flagged for cultural adaptation or clarity were reworded in accordance with expert suggestions.

Following this rigorous process, twenty (20) items were retained, reflecting a minimum of 75% agreement among the experts. This method of expert assessment is widely justified in psychometric research for establishing both face and content validity, particularly when combined with a structured item development process as described by Saw and Ng (2001). The final set of twenty items was subsequently subjected to further scale refinement and pre-testing, ensuring that the PWBS is both psychometrically sound and culturally appropriate for assessing perceptions of wife battery in the Nigerian context.

Sample Size Determination:

Determining an adequate sample size is a crucial step in the planning of research studies

(Althubaiti, 2022), particularly when performing factor analysis. For a study involving adults and utilising a questionnaire with 20 items, the sample size must be carefully calculated to ensure the reliability and validity of the factor analysis. A Rule of Thumb approach was used to calculate the sample size. One common rule of thumb for determining the sample size for factor analysis is to have between 5 and 10 respondents per item. This rule provides a straightforward method to estimate the minimum and maximum sample sizes needed for robust analysis.

Sample Size:

Using the lower end of the recommended range (5 participants per item):

$$5 \text{ participants} \times 20 \text{ items} = 200 \text{ participants}$$

Thus, for a scale with 20 items, the calculated sample size was 200. But 205 participants showed their interest in responding to the questionnaire and were subjected to factor analysis.

Study Participants and Sampling Procedure:

The study participants comprised adult residents of Lagos State, Nigeria. A convenience sampling technique was employed to recruit individuals who were readily accessible and willing to participate in the study. A total of 205 participants took part, including 65 males and 140 females, with ages ranging from 18 to 53 years (Mean = 25.95, SD = 5.63).

Before data collection, the researcher obtained informed consent from each participant, clearly explaining the purpose of the study, the procedures involved, and their rights as participants. Voluntary participation was emphasised, allowing participants to withdraw at any stage without any negative consequences. Participants were also assured of the confidentiality and anonymity of their responses to promote honest and accurate reporting.

Statistical Analysis:

The statistical package for the social sciences (SPSS) version 25 was used to input the data and aid in the analysis of the data. The PWBS was subjected to Exploratory Factor Analysis (EFA).

Results:

Exploratory Factor Analysis

Table 1: Kaiser–Meyer–Olkin Measure and Bartlett’s Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.851
Bartlett's Test of Sphericity	Approx. Chi-Square	1389.708
	df	190
	Sig.	.000

The suitability of the data for factor analysis was examined using the Kaiser–Meyer–Olkin (KMO) Measure of Sampling Adequacy and Bartlett’s Test of Sphericity. The KMO value obtained was .85, which exceeds the recommended minimum threshold of .60 and indicates that the sample size was adequate and that the pattern of correlations among items was appropriate for factor analysis. According to Kaiser’s (1974) classification, this value is considered “meritorious,” suggesting a high degree of common variance among the variables.

Bartlett’s Test of Sphericity was statistically significant, [$\chi^2(190) = 1389.71, p < .001$], indicating that the correlation matrix was not an identity matrix and that sufficient correlations existed among the variables to justify factor extraction. Overall, the results of the KMO and Bartlett’s Test confirm that the data were factorable and suitable for exploratory factor analysis.

Table 2 Summary table of the communalities

	Initial	Extraction
Item 1	1.000	.643
Item 2	1.000	.734
Item 3	1.000	.572
Item 4	1.000	.410
Item 5	1.000	.465
Item 6	1.000	.428
Item 7	1.000	.325

Item 8	1.000	.568
Item 9	1.000	.611
Item 10	1.000	.495
Item 11	1.000	.574
Item 12	1.000	.351
Item 13	1.000	.645
Item 14	1.000	.655
Item 15	1.000	.733
Item 16	1.000	.644
Item 17	1.000	.603
Item 18	1.000	.280
Item 19	1.000	.567
Item 20	1.000	.508
Extraction Method: Principal Component Analysis.		

From Table 2, twenty items were observed using the principal component analysis to determine the proportion of variance in a variable explained by the underlying factor it is most associated with. It is the rule-of-thumb that high communalities (typically above .50) are strongly associated with their underlying factors and contribute significantly to the factor structure. The communalities ranged from .280 to .734. Item 4,5,6,7,10,12 and 18 were below the acceptable values while item 1,2,3,8,9,11,13,14,15,16,17,19 and 20 were above the acceptable values.

Table 3 Summary table of the Eigenvalues, Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.600	27.998	27.998	5.600	27.998	27.998
2	2.741	13.703	41.701	2.741	13.703	41.701
3	1.377	6.885	48.586	1.377	6.885	48.586
4	1.095	5.473	54.059	1.095	5.473	54.059
5	.989	4.943	59.002			
6	.913	4.564	63.566			
7	.902	4.511	68.077			
8	.763	3.815	71.891			
9	.726	3.632	75.524			
10	.705	3.527	79.051			
11	.610	3.050	82.101			
12	.555	2.775	84.876			
13	.530	2.650	87.526			
14	.490	2.448	89.974			
15	.412	2.059	92.033			
16	.364	1.819	93.852			
17	.346	1.730	95.583			
18	.314	1.568	97.151			
19	.308	1.541	98.692			
20	.262	1.308	100.000			

Extraction Method: Principal Component Analysis.

Principal Component Analysis (PCA) was conducted to examine the underlying factor structure of the scale. The results of the eigenvalue analysis and total variance explained are presented in Table 3. Using Kaiser's criterion (eigenvalues ≥ 1.00), four components were retained for interpretation. The first component yielded an eigenvalue of 5.60, accounting for 27.99% of the total variance, indicating that it represents the most dominant underlying dimension of the scale. The second component had an eigenvalue of 2.74 and explained an

additional 13.70% of the variance, bringing the cumulative variance explained to 41.70%. The third component produced an eigenvalue of 1.38, accounting for 6.89% of the variance, while the fourth component yielded an eigenvalue of 1.10, contributing 5.47% to the explained variance. Collectively, the four retained components explained 54.06% of the total variance, which is considered adequate for exploratory factor analysis. Components five through twenty had eigenvalues below 1.00 and were therefore not retained, as they contributed marginally to the

explanation of variance and did not meet the criterion for factor retention. The extraction sums of squared loadings mirrored the initial

eigenvalues, confirming the stability of the retained components.

Figure 1: Scree plot for the four-factor Perception of Wife Battery Scale

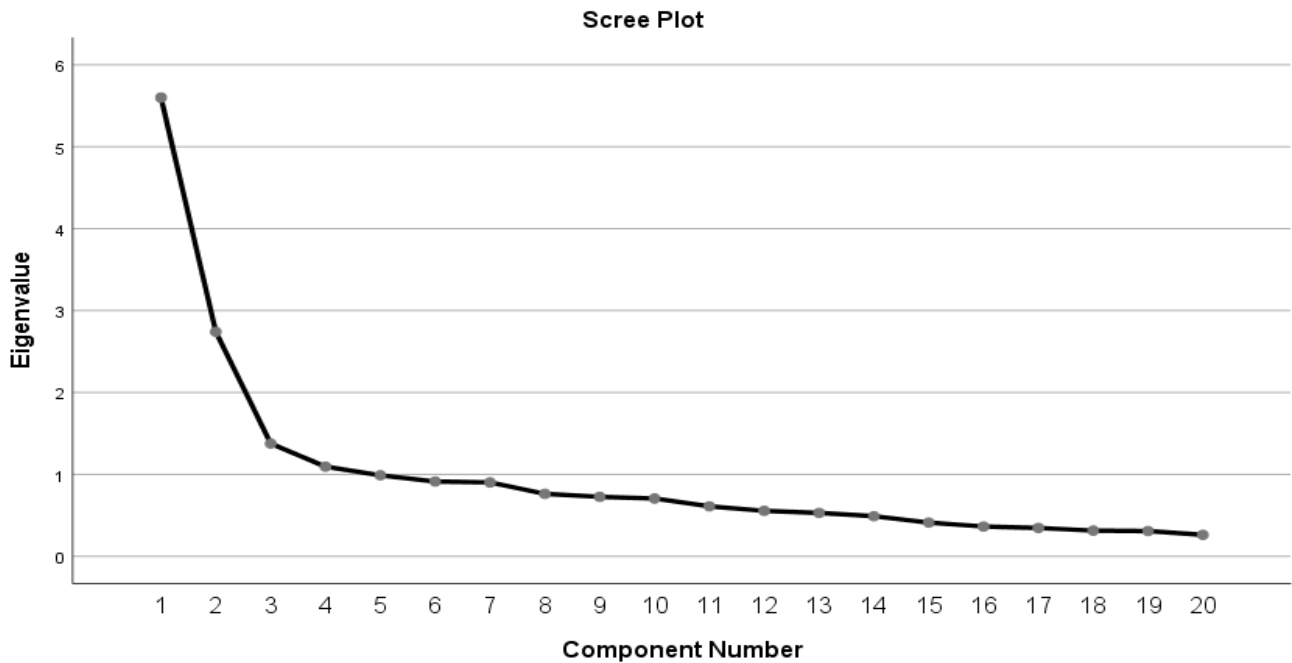


Table 4: Component matrix of the 20-Item Perception of Wife Battery Scale

	Component			
	1	2	3	4
Item 1	-.407	.409	-.234	.506
Item 2	-.579	.320	-.097	.535
Item 3	.256	.464	-.534	-.078
Item 4	.415	.325	-.328	.157
Item 5	.653	.072	-.148	-.108
Item 6	.492	.371	.200	.089
Item 7	-.130	.371	.401	.101
Item 8	.263	.260	.611	.243
Item 9	.761	.099	.145	.044
Item 10	.689	.062	.104	.078
Item 11	.663	.091	.355	.005
Item 11	.350	.418	-.047	.229
Item 13	.750	.202	-.181	-.097
Item 14	-.601	.443	.109	-.294
Item 15	-.522	.505	.236	-.388

Item 16	-.593	.508	.037	-.182
Item 17	-.464	.594	-.111	-.149
Item 18	.106	.496	.135	.065
Item 19	.578	.395	-.181	-.210
Item 20	.620	.318	-.009	-.150
Extraction Method: Principal Component Analysis.				
a. 4 components extracted.				

Table 5: Rotated Component matrix of the 20-Item Perception of Wife Battery Scale

	Component			
	1	2	3	4
Item 1			.771	
Item 2			.794	
Item 3	.696			
Item 4	.604			
Item 5	.552			
Item 6				.477
Item 7				.462
Item 8				.753
Item 9	.488			
Item 10	.435			
Item 11				.523
Item 11	.476			
Item 13	.706			
Item 14		.783		
Item 15		.839		
Item 16		.757		
Item 17		.710		
Item 18				.349
Item 19	.712			
Item 20	.609			

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.

A Varimax rotation with Kaiser normalisation was applied to the four-factor solution to achieve a simpler and more interpretable factor structure. The rotated component matrix is presented in Table 5. Factor loadings of .40 and above were considered meaningful for interpretation. The rotation converged after six iterations, indicating a stable solution.

Component 1 consisted of items reflecting individual-level psychological characteristics, learned behaviors, and situational risk factors associated with wife battering. Items loading saliently on this component included Item 3 (.70), Item 4 (.60), Item 5 (.55), Item 9 (.49), Item 10 (.44), Item 13 (.71), Item 19 (.71), and Item 20 (.61). This component reflects how personal history, emotional regulation, substance use, and weak social sanctions interact to increase the likelihood of wife battering. Accordingly, it was labelled **Psychological and Behavioural Risk Factors**

Component 2 was characterised by high loadings on items reflecting patriarchal authority, marital control, and normative justification of wife battering. Items such as Item 14 (.78), Item 15 (.84), Item 16 (.76), and Item 17 (.71) loaded strongly on this factor. These items emphasise beliefs about male dominance, female submission, disciplinary rights within marriage, and culturally sanctioned authority. This component was therefore labelled **Patriarchal and Normative Beliefs**.

Component 3 consisted of items that loaded strongly on cultural constructions of masculinity and social endorsement of dominance, including Item 1 (.77) and Item 2 (.79). These items reflect societal beliefs that equate masculinity with control, strength, and dominance over women. Based on the content and loading pattern, this component was labelled **Cultural Masculinity Ideology**.

Component 4 included items emphasizing protective, preventive, and emotional regulation factors, with high loadings observed for Item 6 (.48), Item 7 (.46), Item 8 (.75), and Item 11 (.52).

These items focus on emotional expression, communication, religious commitment, healthy masculinity socialization, and self-regulation as factors that may reduce the likelihood of wife battering. This component was labeled **Protective and Preventive Factors**. Item 18 was removed because it falls below the acceptable value (.349).

Table 6 Perception of Wife Battery Scale

	Psychological and Behavioural Risk Factors
1	Alcohol or drug use can trigger wife battering.
2	Many men get away with wife battering because they are rarely punished.
3	Men who don't share their emotional struggles are more likely to batter their wives.
4	Teaching young boys about healthy masculinity can prevent wife battering.
5	Some customs make men see their wives as their property.
6	Traditional beliefs that men are superior to women contribute to wife battering.
7	Anger and inability to control emotions can lead to wife battering.
8	Men who batter their wives often struggle with self-control.
9	Ego prevents many men from admitting they are wrong after beating their wives.
	Patriarchal and Normative Beliefs.
10	A man has the right to discipline his wife if she disobeys him.
11	A wife must always submit to her husband, even if he is violent.
12	A wife who challenges her husband's decisions deserves to be corrected physically.
13	Showing physical strength over one's wife proves masculinity in our culture.
	Cultural Masculinity Ideology.
14	Wife battering is considered a sign of masculinity in my culture.

15	My culture encourages wife battering and sees it as a way of correcting women's misbehaviour.
Protective and Preventive Factors	
16	Men who were raised in abusive homes are more likely to batter their wives.
17	A man may beat his wife when he feels disrespected or insulted by her.
18	Deep religious commitment helps men to avoid wife battering.
19	Men who value their wives are less likely to batter them.

Reliability of the Perception of Wife Battery Scale

Table 7 Summary Table of the internal reliability analysis for the PWBS

Cronbach's Alpha	N of Items
.648	19

An internal consistency reliability analysis was conducted for the Perception of Wife Battering Scale using Cronbach's alpha. The analysis yielded a Cronbach's alpha coefficient of .65 for

Table 8 Summary table of the Concurrent Validity of the PWBS

Variable	Mean	Std	df	r-value	Sig
PWBS	62.59	8.82	203	.444	.000
DVMAS	57.05	12.01			

Abbreviations: PWBS: Perception of Wife Battery Scale; DVMAS, Domestic Violence Myth Acceptance Scale

Concurrent validity of the Perception of Wife Battery Scale (PWBS) was examined by correlating PWBS scores with scores on the Domestic Violence Myth Acceptance Scale (DVMAS), a theoretically related and previously validated measure. As presented in Table 4.1.7, the mean score for the PWBS was 62.59 (SD = 8.82), while the DVMAS had a mean score of

the 19-item scale, indicating moderate internal consistency. Although the obtained alpha value falls slightly below the conventional .70 benchmark recommended for well-established instruments, it remains acceptable for exploratory research and newly developed or adapted scales, particularly within social and behavioral science contexts. The modest reliability coefficient may reflect the multidimensional structure of the scale, as the items capture diverse domains including cultural norms, patriarchal beliefs, psychological risk factors, and protective influences related to wife battering. Overall, the reliability result suggests that the scale demonstrates adequate internal consistency for research purposes and supports its continued use.

Validation of the Perception of Wife Battery Scale

The concurrent and divergent validity for the measure (PWBS) was established using a related construct of wife battery with the Domestic Violence Myth Acceptance Scale (DVMAS) developed by Peters (2008) for the concurrent validation and an unrelated constructs self-esteem developed by Rosenberg (1986) for the divergent validation. The result is presented below:

30.22 (SD = 4.15). Pearson product-moment correlation analysis revealed a moderate and statistically significant positive relationship between the two measures ($r(203) = .44, p < .001$) This significant positive correlation indicates that individuals who endorsed higher levels of wife-battering perceptions also tended to report greater acceptance of domestic violence myths. The

magnitude of the correlation suggests adequate shared variance between the PWBS and DVMAS while still indicating that the two instruments assess related but non-identical constructs. These findings provide strong empirical support for the

concurrent validity of the PWBS, demonstrating that the scale performs consistently with established theoretical expectations and aligns well with an existing measure of domestic violence-related beliefs.

Table 9 Summary Table of the Discriminant Validity of the PWBS

Variable	Mean	Std	df	r-value	Sig
PWBS	62.59	8.82	203	-.016	.816
Self-Esteem	30.22	4.15			

Abbreviations: PWBS: Perception of Wife Battery Scale.

The discriminant validity of the Perception of Wife Battery Scale (PWBS) was assessed by examining its relationship with self-esteem, a construct theoretically distinct from perceptions of wife battering. As shown in Table 4.1.8, the PWBS recorded a mean score of 62.59 (SD = 8.82), while the self-esteem measure had a mean score of 30.22 (SD = 4.15). Pearson product-moment correlation analysis revealed a very weak and non-significant negative correlation between PWBS and self-esteem, $r(203) = -.016, p = .816$.

The absence of a significant relationship between PWBS and self-esteem provides empirical evidence that the PWBS does not overlap meaningfully with unrelated psychological constructs. This finding supports the discriminant validity of the scale, indicating that the PWBS specifically measures perceptions of wife battering rather than general self-evaluative tendencies. Collectively, this result strengthens the psychometric soundness of the PWBS by demonstrating its capacity to distinguish between theoretically independent constructs.

Discussion:

The present study developed and validated the Perception of Wife Battery Scale (PWBS), providing empirical evidence for its factorial structure, reliability, and construct validity. The Kaiser-Meyer-Olkin (KMO) value of .85 indicated meritorious sampling adequacy,

suggesting strong shared variance among items and suitability for factor analysis (Kaiser, 1974; Field, 2018). The significant Bartlett's Test of Sphericity further confirmed that inter-item correlations were sufficient for factor extraction (Hair et al., 2019). These results provided a robust methodological basis for exploratory factor analysis. Communality estimates demonstrated that most items contributed meaningfully to the extracted factors, consistent with recommendations for scale development (Costello & Osborne, 2005). Although a few items exhibited lower communalities, the retention of theoretically salient items during early scale development is supported in the literature (Boateng et al., 2018).

Principal Component Analysis yielded a four-factor solution explaining 54.06% of the total variance, an acceptable level for newly developed psychosocial instruments addressing complex constructs such as IPV (Henson & Roberts, 2006). The scree plot corroborated this solution, supporting both statistical and theoretical justifications for factor retention (Cattell, 1966).

The first factor, Psychological and Behavioural Risk Factors, captured beliefs related to substance use, emotional dysregulation, poor self-control, and weak sanctions. This aligns with extensive evidence linking alcohol use, impulsivity, and anger dysregulation to IPV perpetration (Foran & O'Leary, 2008; Leonard & Eiden, 2007). Social

learning theory further explains how maladaptive emotional coping may predispose individuals to violent behaviour (Bandura, 1977).

The second factor, Patriarchal and Normative Beliefs, reflected culturally sanctioned male authority and female submission. This finding is consistent with feminist and sociological perspectives that identify patriarchy as a central driver of wife battering (Dobash & Dobash, 1979; Walby, 1990). Empirical studies in Nigeria similarly demonstrate that wife battering is often legitimised under traditional marital norms (Aihie, 2009; Oyediran & Isiugo-Abanihe, 2005).

The third factor, Cultural Masculinity Ideology, emphasised beliefs equating masculinity with dominance and control. This dimension aligns with hegemonic masculinity theory, which posits that violence may be used to assert masculine identity and reinforce gender hierarchies (Connell & Messerschmidt, 2005). Prior research indicates that endorsement of rigid masculine norms predicts tolerance of IPV (Moore & Stuart, 2005; Santana et al., 2006).

The fourth factor, Protective and Preventive Factors, captured beliefs about emotional regulation, communication, religious commitment, and respect within marriage. This aligns with ecological and resilience-based models of IPV that emphasise protective processes alongside risk factors (Bronfenbrenner, 1979; Heise, 1998). Evidence suggests that emotional self-regulation and prosocial values can mitigate violence risk (Fulu et al., 2013; Gibbs et al., 2018).

The PWBS demonstrated moderate internal consistency ($\alpha = .65$), which is acceptable for exploratory research and newly developed multidimensional scales (DeVellis, 2017; Nunnally & Bernstein, 1994). The multidimensional nature of the construct likely contributed to the modest alpha value.

Construct validity was strongly supported. The moderate positive correlation between the PWBS and the Domestic Violence Myth Acceptance Scale confirmed concurrent validity, consistent

with literature linking violence-supportive beliefs to IPV justification (Lonsway & Fitzgerald, 1994; Peters, 2008). Discriminant validity was established through the non-significant association with self-esteem, indicating that the PWBS measures a construct distinct from general self-evaluative tendencies (Campbell & Fiske, 1959).

Conclusion:

The Perception of Wife Battery Scale (PWBS) demonstrates satisfactory psychometric properties, including a coherent four-factor structure, acceptable reliability, and strong evidence of construct validity. The scale captures both risk-oriented and protective belief systems underlying wife battering perceptions, reflecting the complex interplay of psychological, cultural, and normative influences. As a culturally grounded and empirically supported instrument, the PWBS holds significant potential for advancing research, informing policy, and guiding intervention efforts aimed at reducing wife battering within Nigeria and comparable socio-cultural contexts.

Limitations and suggestions for future research:

Despite its strengths, the present study has several limitations that should be acknowledged. First, the use of a cross-sectional design limits the ability to draw causal inferences regarding the relationships among beliefs, psychological factors, and perceptions of wife battering. Longitudinal studies are needed to examine how these perceptions evolve over time and in response to social change or intervention efforts.

Second, the study relied on self-report measures, which are susceptible to social desirability bias, particularly when assessing sensitive topics such as domestic violence. Given the strong social norms surrounding marriage and gender roles in Nigeria, some respondents may have underreported socially undesirable beliefs. Future research could incorporate qualitative methods or implicit measures to complement self-report data.

Third, the moderate reliability coefficient suggests that further refinement of the PWBS is warranted. Future studies should examine subscale-specific

reliability indices and consider revising or expanding item pools within each factor to improve internal consistency.

Fourth, the sample characteristics may limit the generalizability of the findings. Replication studies across different regions, ethnic groups, religious contexts, and socioeconomic strata within Nigeria—and across other Sub-Saharan African countries—are necessary to establish the scale's broader applicability.

Future research should also subject the PWBS to confirmatory factor analysis (CFA) to test the stability of the four-factor structure. Additionally, examining predictive validity, such as the scale's ability to predict attitudes toward intervention, bystander behaviour, or IPV perpetration, would further strengthen its utility.

Finally, the PWBS holds significant promise for policy, prevention, and intervention research. Future studies may use the scale to evaluate the effectiveness of gender-transformative programs, legal reforms, and community-based interventions aimed at reducing wife battering and transforming harmful gender norms.

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