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Validation of the Adapted Scale of Perception of Respect for and Maintenance of the Dignity of the Inpatient for Brazilian Portuguese:

A Multicenter Cross-Sectional Study

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Abstract

Objective: Dignity and respect are the basis for professional codes and legislation on human treatment. During illness, patients undergo physical, emotional, and social changes and adapt to losses that reshape their self-concept. Some patients keep a stable sense of dignity despite their losses, although their perception of it fluctuates throughout their illness. As symptoms progress, adaptation and the feeling of respect and dignity remain dynamic. The objective of this study is to assess the validity evidence of an adapted version of the Scale of Perception of Respect for and Maintenance of the Dignity of the Inpatient (referred to as the APREMDI in Brazil).

Methods: To culturally adapt and validate the APREMDI for Brazilian Portuguese, a multicenter observational study was conducted. The study included a convenience sample of 337 inpatients from 3 tertiary hospitals in Rio de Janeiro, Brazil, between September 2022 and May 2024. All participants provided informed consent. SPSS, Factor, Jamovi, and JASP were used to conduct the statistical analysis.

Results: The data confirmed the model's adequacy (Kaiser-Meyer-Olkin = 0.895, Bartlett test: $\chi^2_{171} = 3{,}785.8$, $P = .000010$), high reliability ($\alpha = .949$, $\omega = 0.951$, composite reliability = 0.941), and good fit indices.

Conclusion: The APREMDI scale has strong psychometric properties and is applicable for assessing the quality of health care. It was adapted for southeastern Brazil and may not cover all linguistic variations in Portuguese-speaking countries.

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Dignity, universally acknowledged as a fundamental human right, is a core principle in ethical, legal, and clinical care frameworks. Likewise, it is also foundational to patient-centered practice. However, its interpretation and operationalization are shaped by cultural, social, and institutional contexts. Particularly in hospital environments, where patients often experience dependency, stigma, and loss of autonomy, the perception of dignity becomes a dynamic and vulnerable dimension of care. In Western societies, dignity is regarded as inherent and indivisible, forming the basis of civil and political rights.[1] It is embedded in major international codes, such as the Universal Declaration of Human Rights,[2] the Nuremberg Code,[3–5] the Declaration of Helsinki,[6] and regional bioethical declarations.[7]

Frameworks such as the Principles for the Protection of Persons with Mental Illnesses,[8] the Salamanca Statement,[9] and the Caracas Declaration[10] guide mental health policy with an emphasis on autonomy and

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Clinical Points

- The APREMDI scale allows clinicians to quantitatively assess patients' perceptions of respect and dignity during hospitalization, helping to identify subtle dignity violations that may compromise recovery and satisfaction.
- Higher anxiety levels predict lower dignity perception, indicating that monitoring psychological distress should be an integral part of inpatient care to preserve patients' sense of respect and autonomy.
- Implementing APREMDI-based feedback in wards can guide targeted training in communication and ethical sensitivity, improving humanized care practices and institutional accountability across medical, surgical, and psychiatric settings.

humane care. In Brazil, Law No. 10,216/2001[11] restructured psychiatric care toward a rights-based model. Those legal boundaries have turned respect and dignity into legal and moral imperatives, in both psychiatric and general medical settings. Despite these advances, dignity violations persist, often subtly embedded in routine care.[12,13] Validated tools for assessing dignity from the patient's perspective are essential for identifying, quantifying, and addressing such violations.

The Scale of Perception of Respect for and Maintenance of the Dignity of the Inpatient was developed in Spain to assess this construct in hospitalized patients.[14,15] Its adaptation to other cultural contexts requires more than direct translation; it demands linguistic, experiential, conceptual, and semantic equivalence through a rigorous process. In Brazil, no instrument has been validated for this purpose, despite increasing emphasis on patient-centered and humanized care.

We adapted the Scale of Perception of Respect for and Maintenance of the Dignity of the Inpatient for Brazilian Portuguese as the APREMDI scale.[16] It evaluates 6 dimensions of dignity: privacy/intimacy, integrity, identity, information, respect, and consideration, and is rated on a 1 to 5 Likert scale.[17] This study presents the psychometric validation of the APREMDI scale in a diverse inpatient population. By providing a culturally appropriate and statistically sound instrument, this work aims to strengthen health care quality assessment, clinical training, and policy formulation that uphold human dignity in hospital settings.

METHODS

Study Design and Setting

This multicenter cross-sectional study was conducted to culturally adapt and validate the Scale of Perception of Respect for and Maintenance of the Dignity of the Inpatient[14,15] for use in Brazil.[16] The adapted version (APREMDI)[16] was evaluated in 3 tertiary hospitals in Rio de Janeiro: the Institute of Psychiatry (IPUB/UFRJ) and the Clementino Fraga Filho University Hospital (HUCFF/UFRJ), both at the Federal University of Rio de Janeiro (UFRJ), and the Lourenço Jorge Municipal Hospital (HMLJ). These facilities serve diverse patient populations, including general medical, surgical, and psychiatric inpatients.

Ethical Approval and Informed Consent

The study was approved by the respective institutional ethical review boards: IPUB/UFRJ (register no. 4.678.189, 04/28/2021), HUCFF/UFRJ (register no. 5.035.181, 10/13/2021), and the Municipal Health Department, responsible for HMLJ (register no. 5.118.710, 11/22/2021). All conducted procedures are compliant with the cornerstone ethical guidelines.[6,18] All participants provided informed consent after full explanation of the study's objectives, procedures, and confidentiality safeguards.

Sample Size

According to Hair et al,[19] an absolute minimum of 100 participants is required, with a preferred ratio of at least 5 to 10 participants per item, and ideally up to 20:1 to enhance statistical power and generalizability. With 19 items on the APREMDI, a minimum of 95–190 participants is implied, while the best target would range from 190 to 380 cases.

Additionally, considering potential exclusions and aiming to strengthen subgroup representativeness across diverse hospital units and demographic strata, we added a conservative 20% margin to compensate for attrition or noncompletion. Therefore, the target sample was set between 228 and 456 participants. The final sample included 337 completed responses, which not only exceeds the minimum methodological threshold but also falls within the optimal range for robust exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). This ratio of approximately 17.7 participants per item minimizes the risk of model overfitting and enhances the stability and generalizability of the factor structure.

Participants

Eligible participants were adults aged 18 years or older, with a hospitalization length of at least 1 day or discharged within 30 days prior to the interview, that were able to understand and respond to the scale items. Those who declined to take part, withdrew consent, were illiterate, were cognitively impaired, had delirium, or had dementia were ineligible. All included eligible participants were inpatients.

Location and Time

A total of 337 inpatients were recruited through convenience sampling from psychiatric, medical, and

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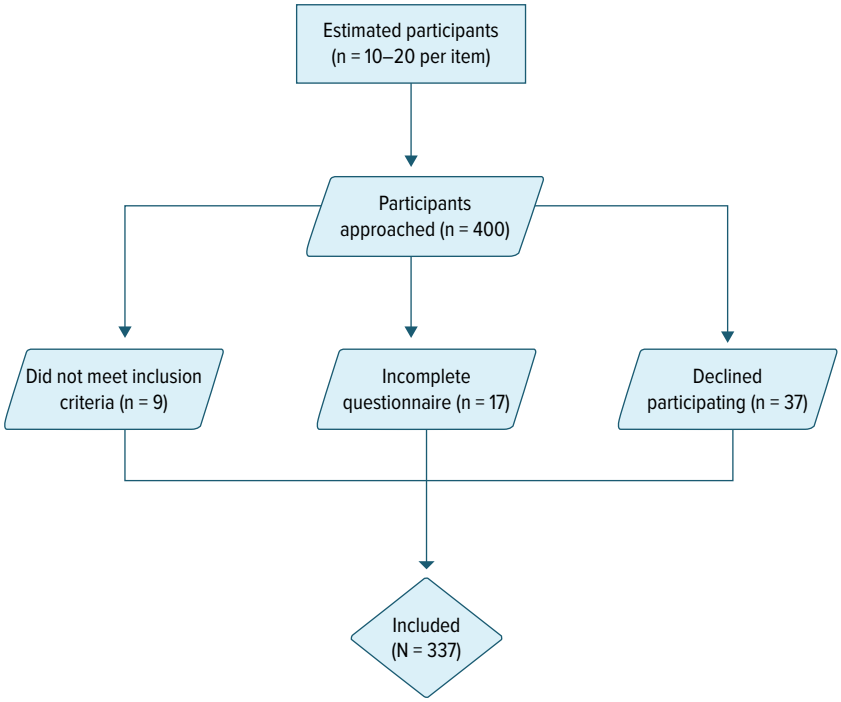
Figure 1.

Participant Recruitment and Inclusion Diagram Prepared in Accordance With Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Guidelines



surgical units across 3 tertiary hospitals in Rio de Janeiro: HUCFF/UFRJ, IPUB/UFRJ, and HMLJ, between September 2022 and May 2024. The final sample was demographically diverse in terms of age, sex, education level, and hospital unit. Figure 1 illustrates a STROBE (Strengthening the Reporting of Observational Studies in Epidemiology)–compliant[20] flow diagram of participant recruitment and inclusion.

Data Collection Procedures

Trained research assistants collected data at the participating hospitals, conducting interviews in private settings to ensure comfort and confidentiality. Sociodemographic variables included age, sex, education level, ward type, hospital, length of hospitalization, and time to complete the APREMDI scale.

Statistical Analysis

SPSS[21] version 29.0.2.0 was used for descriptive statistics, convergent, discriminant, and predictive validity via multiple linear regression using APREMDI scores as the dependent variable. Factor Analysis[22–24] version 12.04.05 was set to run the EFA, employing polychoric correlation matrices and 1,000 bootstrap[25] samples to accommodate the ordinal nature and nonnormal distribution of the data, assessed via the Mardia test,[26] using Hot deck imputation[27] on parallel analysis,[28] robust diagonally weighted least squares,[29] and robust Promin rotation.[30,31] When the correlation matrix was not definite, the sweet smoothing algorithm[32] was applied to stabilize estimates. Model fit and internal consistency were assessed through root mean square error of approximation (RMSEA), comparative fit index (CFI), Tucker-Lewis index (TLI), goodness-of-fit index (GFI), root mean square of residuals (RMSR), Cronbach α,[33] McDonald ω,[34] and composite reliability.[35,36]

We ran the CFA on JASP[37] version 0.17 to evaluate the second-order factorial structure (Figure 2) and Jamovi[38] version 2.5 to generate the correlation heatmap and the network graph (Figure 3 and Figure 4).

Instruments

Participants completed the APREMDI, a sociodemographic questionnaire, and validated Brazilian versions of the following psychometric instruments: Connor-Davidson Resilience Scale (CD-RISC-Br),[39] Patient Health Questionnaire-9 (PHQ-9),[40] Lawton-Brody Instrumental Activities of Daily Living Scale,[41] Pfeffer Functional Activities Questionnaire,[42]

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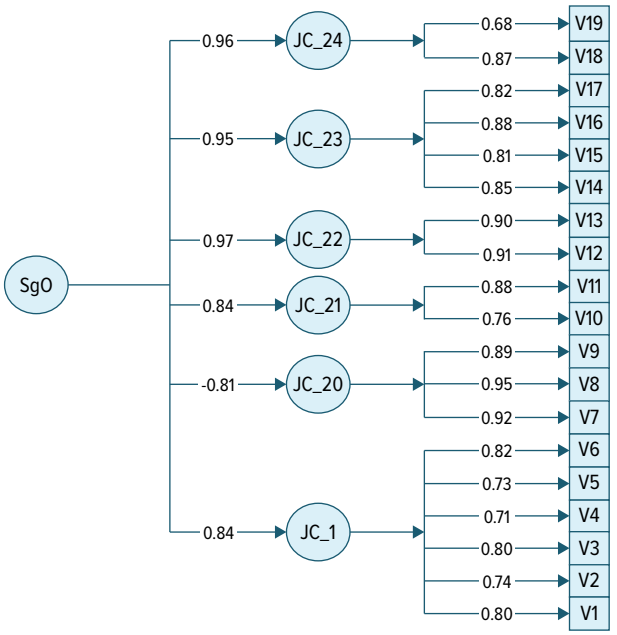
Figure 2.

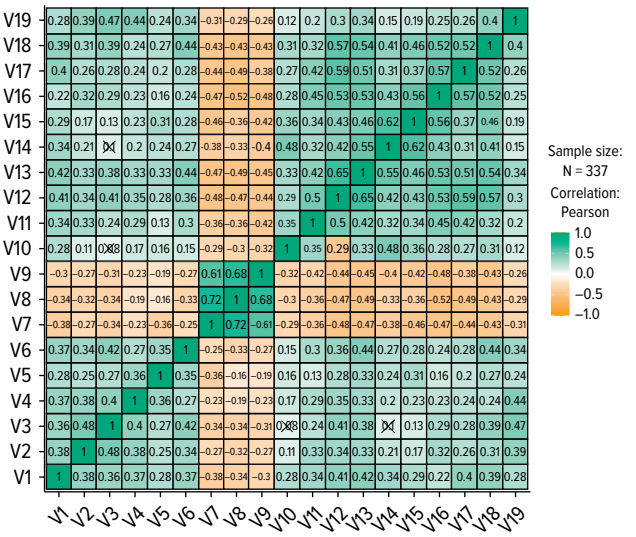
Graph of the Hierarchical Factor Model in Confirmatory Factor Analysis[a]



[a]The hierarchical factor model presented aligns with the theoretical proposal of the author of the original instrument, featuring a second-order factor (dignity) composed of 6 first-order factors (F1: intimacy, F2: integrity, F3: identity, F4: information, F5: respect, and F6: consideration). Created with JASP.[37] Abbreviations: JC_1 = intimacy, JC_20 = integrity, JC_21 = identity, JC_22 = information, JC_23 = respect, JC_24 = consideration, SgO = dignity, V = variable.

Figure 3.

Heatmap of Correlations Between the Scale Items[a]



[a]Items marked with "X" indicate nonsignificant correlations at P < .05 (adjustment: none). Darker colors (green and orange) represent stronger correlations. Correlations without statistical significance are marked in white. Sample size: n = 337. Created with Jamovi.[38]

and Hospital Anxiety and Depression Scale (HADS).[43] These instruments were used to assess convergent, discriminant, and predictive validity.

Readability Assessment

To assess the comprehensibility of the APREMDI scale, 7 readability indices were applied: Flesch Reading Ease, Flesch-Kincaid Grade Level, Automated Readability Index,[44–46] Gulpease Index,[47] Gunning Fog Index,[48] Coleman-Liau Index,[49] and average reading time[50] to assess the comprehensibility of the APREMDI and to evaluate its appropriateness for different literacy levels within the sample.

RESULTS

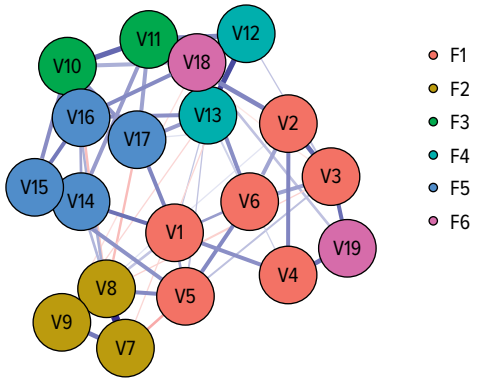
Participant Characteristics

The study included 337 inpatients from psychiatric, surgical, and clinical units across 3 public tertiary hospitals in Rio de Janeiro. Their ages ranged widely, and educational attainment varied from primary education to university level. Descriptive statistics revealed meaningful differences based on demographic and clinical subgroups (Table 1).

Female, surgical, and HUCFF/UFRJ inpatients tended to be older. Male, psychiatric, and IPUB/UFRJ inpatients had longer hospitalization, particularly the less educated. Female, university educated, psychiatric, and IPUB/UFRJ inpatients took longer to complete the scale. These findings show variability in reading time

Figure 4.

Network Analysis of Correlations Between the Variables[a]



[a]The lines represent associations between variables, with the thickness of the lines and intensity of the colors indicating the strength of these associations. Created with Jamovi.[38]

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Table 1.
Descriptive Statistics of the Participants by Sex, Ward Type, Hospital, and Education Level (N = 337)

		95% CI BCa	
Statistic	**Mean**	**Lower**	**Upper**
Age, y			
Female (n = 202)	45.97	43.67	48.24
Male (n = 135)	41.71	39.08	44.35
Internal medicine	44.49	41.33	47.68
Psychiatry	40.36	37.92	42.99
Surgery	47.49	44.56	50.44
HMLJ	45.43	42.45	48.19
HUCFF	46.56	43.45	49.78
IPUB	40.14	37.51	42.85
Elementary	45.98	43.32	48.75
High school	43.16	40.68	45.49
College	42.95	36.61	47.27
Length of stay (days)			
Female (n = 202)	13.16	10.61	15.65
Male (n = 135)	27.01	16.00	41.25
Internal medicine	12.50	10.07	15.12
Psychiatry	30.73	16.97	49.17
Surgery	13.50	10.91	16.27
HMLJ	14.06	11.35	16.86
HUCFF	12.91	10.30	15.75
IPUB	30.97	16.25	50.79
Elementary	21.44	11.54	37.75
High school	15.85	12.33	19.66
College	21.18	15.97	27.79
Time to complete the scale (min)			
Female (n = 202)	21.74	20.56	22.89
Male (n = 135)	21.22	19.88	22.67
Internal medicine	20.00	18.46	21.61
Psychiatry	23.34	21.62	25.16
Surgery	21.27	19.82	22.66
HMLJ	21.70	20.24	23.22
HUCFF	19.98	18.67	21.37
IPUB	23.26	21.62	24.94
Elementary	21.58	20.29	22.95
High school	21.36	19.98	22.74
College	22.10	19.65	24.54

Abbreviations: BCa = bias-corrected and accelerated, HMLJ = Lourenço Jorge Municipal Hospital, HUCFF = Clementino Fraga Filho University Hospital, IPUB = Institute of Psychiatry.

and comprehension that may relate to both clinical status and health literacy.

A 1-way analysis of variance was run to examine whether age, length of hospitalization, and time to complete the scale differed according to participants' education level, and the results indicated no statistically significant differences among education levels for age ($F_{2,334} = 1.27$, $P = .281$), length of stay ($F_{2,334} = 0.31$, $P = .731$), or time to complete the scale ($F_{2,334} = 0.13$, $P = .877$). Post hoc comparisons using Tukey and Games-Howell tests confirmed the absence of significant pairwise differences for all 3 variables, and none of them violated the homogeneity of variances (Levene $P > .05$). Effect sizes were negligible ($\eta^2 < 0.01$), suggesting that education level did not explain variance in the studied outcomes.

Validity Evidence

Content validity was previously established, confirming the relevance and clarity of all 19 scale items.[16] We used correlations between APREMDI scores and other validated instruments to assess convergent and discriminant validity. The APREMDI showed a weak but statistically significant negative correlation with the HADS total score ($r = -0.20$, $P = .019$), suggesting that higher levels of anxiety and depression were associated with a lower perception of dignity. Correlations found with the Lawton-Brody ($r = -0.06$, $P = .468$), the Pfeffer ($r = -0.09$, $P = .293$), the PHQ-9 ($r = -0.13$, $P = .130$), and the CD-RISC-Br ($r = 0.11$, $P = .195$) were not significant, indicating good discriminant properties.

We examined concurrent validity through Pearson correlations between APREMDI scores and key clinical predictors and found weak negative correlations with anxiety (HADS-A, $r = -0.23$), depression (HADS-D, $r = -0.13$; PHQ-9, $r = -0.13$), functional dependency (Lawton-Brody, $r = -0.06$), and reduced ability (Pfeffer, $r = -0.09$), but a weak positive correlation ($r = 0.11$) with resilience (CD-RISC-Br). Although statistically weak, these findings suggest that greater psychological distress and functional decline may be associated with reduced perceived dignity.

When assessing predictive validity through multiple regression analysis with APREMDI scores as the dependent variable, only anxiety (HADS-A) was statistically significant ($\beta = -0.17$, $P = .031$), showing that higher anxiety was a predictor of worse perceived dignity. The model explained a modest part of the variance ($R^2 = 0.062$), suggesting that other factors—potentially interpersonal and contextual—may play a larger role as well.

Exploratory Factor Analysis

Sampling adequacy was good: Bartlett test of sphericity was highly significant ($\chi^2 = 3{,}785.8$, $df = 171$, $P < .001$), and the Kaiser-Meyer-Olkin measure was 0.895 (Table 2). Principal axis factoring with oblique rotation revealed a 6-factor structure. The first factor accounted for 53.56% of the total variance (eigenvalue = 10.19), and the cumulative variance explained by the first 4 factors was 72.45%, suggesting a strong unidimensional structure with meaningful secondary dimensions.

The correlation matrix required sweet smoothing[32] due to nonpositive definiteness, which improved the matrix stability for factor extraction. All items had a measure of sample adequacy[51] >0.50, suggesting no item removal. The relative difficulty index[51] ranged from 0.40 to 0.60, indicating good balance across item responses. Item distributions also passed the quartile of ipsative mean[51] criteria, indicating the absence of outlier behavior.

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Table 2.
Exploratory Factor Analysis

Factor analysis	Results		
Adequacy of the polychoric correlation matrix			
Bartlett sphericity test	3,785.8, *df*=171, *P* = .000010		
KMO test	0.895		
Internal consistency			
Cronbach α	0.949		
McDonald ω	0.951		
		95% CI BCa	
Fit indices		Lower	Upper
RMSEA	0.000	0.000	.6865
CFI	0.999	0.003	1.000
TLI	1.035	1.054	1.075
GFI	0.987	1.000	1.000
RMSR	0.0277	0.0140	0.020

Abbreviations: BCa = bias-corrected and accelerated, CFI = comparative fit index, GFI = goodness-of-fit index, KMO = Kaiser-Meyer-Olkin test, RMSEA = root mean square error of approximation, RMSR = root mean square of residuals, TLI = Tucker-Lewis index.

Parallel analysis[28] supported the 6-factor solution, with F1 explaining 53.71% of the variance in real data—well above the 95th percentile of randomly simulated datasets (12.36%). Additional indicators of closeness to unidimensionality[52] included unidimensional congruence (0.977), explained common variance (0.885), and mean item residual absolute loading (0.227). These indices collectively support the conclusion that the APREMDI is unidimensional, despite its conceptual multidimensionality.

Confirmatory Factor Analysis

CFA confirmed the second-order model structure, with 6 first-order factors corresponding to the theoretical dimensions of dignity. Most standardized factor loadings exceeded 0.70, showing strong relationships between latent variables and items. One item (V19) had a loading slightly below this threshold.

Fit indices were good: RMSEA = 0.000 (95% CI, 0.000–0.6865), CFI = 0.999, TLI = 1.035, GFI = 0.987, and RMSR = 0.028. Despite favorable point estimates, the wide CIs—particularly for RMSEA—suggest potential estimation instability[53] and justify further validation in independent samples.

Item Response Theory

We assessed item-level discrimination[54] (Table 3) using a multidimensional graded response model[55,56] and structural equation modeling.[57–59] Discrimination (MDisc) values ranged from 0.532 (V16) to 3.718 (V8). Items V7 and V8 showed particularly strong discrimination, meaning they were extremely sensitive to variations in perceived dignity. Conversely, V4 and V16 showed weaker but acceptable performance. The category intercepts revealed that some items (eg, V7) needed higher latent trait levels for endorsement, consistent with their negative phrasing.

Readability Assessment

Readability analyses (Table 3) showed that the APREMDI scale is moderately complex. Flesch Reading Ease (44.9), Gunning Fog Index (10.5), Flesch-Kincaid Grade Level (11.1), Coleman-Liau Index (12.0), Automated Readability Index (9.6), and Gulpease Index (59.6) suggest that the instrument is proper for readers with at least a high school education. Average reading time ranged from 1.08 to 1.35 minutes. These results confirm that the scale is suitable for educated populations, but it may require simplification for use in lower-literacy settings.

Visual Representations

Figure 2 shows the CFA model, including 6 first-order latent dimensions contributing to a second-order dignity construct. Standardized loadings between the dimensions and the general factor ranged from 0.81 to 0.97, reinforcing the hierarchical nature of the construct. Figure 3 presents a correlation heatmap illustrating relationships between variables, with stronger correlations clustering along the diagonal. Figure 4 is a network graph displaying item-level interactions and factor structure, with central nodes such as V1, V14, and V16 serving as hubs.

DISCUSSION

Our study reports the psychometric validation of the APREMDI for Brazilian Portuguese, confirming its reliability, factorial structure, and alignment with dignity-related constructs in health care. The readability assessment suggests that the scale is best suitable for individuals with at least 11 years

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Table 3.

Correlation Matrix (N = 307)[a]

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19
V1	1	0.601	0.595	0.348	0.489	0.622	−0.540	−0.528	−0.485	0.472	0.512	0.615	0.619	0.565	0.459	0.264	0.569	0.598	0.462
V2		1	0.666	0.337	0.492	0.600	−0.401	−0.476	−0.427	0.255	0.495	0.505	0.496	0.456	0.364	0.311	0.410	0.498	0.572
V3			1	0.357	0.509	0.659	−0.484	−0.534	−0.490	0.237	0.414	0.619	0.587	0.332	0.339	0.293	0.433	0.600	0.641
V4				1	0.391	0.291	−0.211	−0.196	−0.227	0.216	0.265	0.324	0.304	0.246	0.229	0.147	0.221	0.265	0.374
V5					1	0.654	−0.563	−0.387	−0.413	0.355	0.314	0.531	0.564	0.568	0.552	0.225	0.371	0.511	0.424
V6						1	−0.432	−0.517	−0.454	0.373	0.525	0.611	0.657	0.560	0.485	0.27	0.508	0.651	0.503
V7							1	0.876	0.796	−0.452	−0.589	−0.639	−0.624	−0.593	−0.645	−0.411	−0.625	−0.590	−0.428
V8								1	0.857	−0.486	−0.576	−0.648	−0.643	−0.541	−0.573	−0.445	−0.665	−0.580	−0.412
V9									1	−0.521	−0.625	−0.632	−0.599	−0.608	−0.608	−0.410	−0.558	−0.572	−0.358
V10										1	0.67	0.525	0.510	0.691	0.569	0.296	0.494	0.530	0.211
V11											1	0.686	0.615	0.551	0.542	0.413	0.636	0.529	0.336
V12												1	0.819	0.684	0.619	0.440	0.761	0.754	0.473
V13													1	0.77	0.620	0.432	0.681	0.708	0.509
V14														1	0.792	0.403	0.517	0.657	0.293
V15															1	0.466	0.551	0.611	0.317
V16																1	0.458	0.421	0.244
V17																	1	0.693	0.380
V18																		1	0.592
V19																			1

All correlations were significantly different from zero at population (95% CI BCa)

Variable score mean

V	Mean	SD
V1	4.635	0.835
V2	4.418	1.072
V3	4.113	1.449
V4	4.223	1.273
V5	4.567	1.007
V6	4.549	1.040
V7	1.623	1.216
V8	1.605	1.254
V9	1.590	1.239
V10	4.801	0.658
V11	4.659	0.883
V12	4.409	1.144
V13	4.469	1.074
V14	4.759	0.714
V15	4.641	0,872
V16	4.617	0.972
V17	4.528	1.074
V18	4.442	1.065
V19	3.688	1.673

Composite reliability

	SL	EV	R^2
V1	0.338	0.886	0.114
V2	0.708	0.499	0.501
V3	0.772	0.404	0.596
V4	0.414	0.829	0.171
V5	0.610	0.628	0.372
V6	0.488	0.762	0.238
V7	0.847	0.283	0.717
V8	0.978	0.044	0.956
V9	0.790	0.376	0.624
V10	0.518	0.732	0.268
V11	0.794	0.370	0.630
V12	0.896	0.197	0.803
V13	0.786	0.382	0.618
V14	0.476	0.773	0.227
V15	0.379	0.856	0.144
V16	0.373	0.861	0.139
V17	0.918	0.157	0.843
V18	0.725	0.474	0.526
V19	0.743	0.448	0.552

CR = 0.941

Rotated loading matrix

	F1	F2	F3	F4	F5	F6	Com
V1		0.314	0.338				0.606
V2		0.368	0.708				0.608
V3			0.772				0.740
V4			0.414				0.213
V5			0.396			0.610	0.679
V6			0.488				0.661
V7					0.847		0.825
V8					0.978		0.930
V9					0.790		0.786
V10	0.304	0.518					0.617
V11		0.794					0.802
V12				0.896			0.809
V13				0.786			0.771
V14	0.339					0.476	0.827
V15	0.351					0.379	0.716
V16				0.373			0.302
V17				0.918			0.686
V18	0.303			0.725			0.808
V19			0.734				0.556

MDisc

V1	0.877	V11	1.839
V2	1.307	V12	2.052
V3	1.564	V13	1.679
V4	0.558	V14	1.557
V5	1.319	V15	1.105
V6	1.06	V16	0.532
V7	2.093	V17	1.699
V8	3.718	V18	1.928
V9	1.745	V19	1.147
V10	1.005		

Factor means

	Mean	SD
F1	4.418	1.113
F2	1.606	1.236
F3	4.730	0.770
F4	4.439	1.109
F5	4.636	0.908
F6	4.065	1.369

Readability assessment of the scale

Flesch Reading Ease	44.9	Gunning Fog Index	10.5	Flesch-Kincaid Grade Level	11.1	Minimum average reading time (min)	1.08
Gulpease Index	59.6	Automated Readability Index	9.6	Coleman-Liau Index	12.0	Maximum average reading time (min)	1.35

Abbreviations: BCa = bias-corrected and accelerated, MDisc = multidimensional graded response model with normal ogive function, SL = standardized loading, EV = error variance.

of education, but statistical analysis found that differences in age, hospitalization length, or scale completion time across educational groups were not significant, reinforcing the scale's generalizability. Otherwise, the small effect sizes found require a cautious interpretation, as they underscore the need for further research into potential sociodemographic or clinical moderators. Possible solutions include testing the scale with diverse samples, developing a simplified version or assisted format of the APREMDI for those with lower literacy.

EFA and CFA revealed a cohesive structure with strong fit indices, though some RMSEA uncertainty suggests the need for replication. Likewise, the APREMDI revealed excellent reliability: Cronbach α, McDonald ω, and composite reliability. It is also sensitive,

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especially in detecting respect and dignity violations, reinforcing its value for identifying areas for clinical improvement.

Dignity is especially at risk in institutional settings, where patients often experience dependency, loss of control, and impersonal care—in both psychiatric and general hospitals. The APREMDI offers a structured, patient-centered tool to assess perceptions of respect and dignity, enhancing health service evaluation. Likewise, anxiety symptoms were associated with lower APREMDI scores, highlighting the psychological relevance of dignity and suggesting that patients in distress may perceive care as less respectful—consistent with prior findings linking emotional well-being to perceived care quality.

Clinically, the APREMDI can be applied across inpatient settings to evaluate respect-related experiences, inform quality improvement, and guide ethics reviews or satisfaction assessments. Its 6-factor structure allows targeted feedback for training in humanized care and communication. Additionally, the scale can monitor ethical practices, particularly in psychiatric contexts where dignity may be compromised, supporting reflective practice and institutional accountability.

Limitations

This study has several limitations. The convenience sample from 3 southeastern Brazilian hospitals may limit generalizability, as it may not capture the full cultural and geographic diversity of the country; adaptations may be needed for northern, southern, rural, or indigenous populations.

While model fit indices were strong, the wide RMSEA CI suggests possible overfitting, highlighting the need for replication in larger, independent samples. Although negatively worded items were reverse-scored to reduce response bias, some (eg, V7, V8) showed higher variability and lower means, suggesting a need to refine their wording for clarity without compromising psychometric quality. Self-report data, despite confidentiality measures, may have been influenced by social desirability or power dynamics, especially in psychiatric settings, which may require triangulation with interviews or observations to enhance insight. Lastly, readability indices do not fully capture cognitive or contextual barriers, requiring further validation in low-literacy and cognitively impaired populations.

CONCLUSION

The APREMDI is a reliable, valid, and practical tool for assessing inpatients' perceptions of dignity in Brazilian hospitals, capturing a complex, multidimensional construct through a concise, culturally adapted format. Its strong psychometric performance and clinical utility make it suitable for quality assessment, training, ethical review, and patient-centered care in both psychiatric and general settings. Future research should explore its application in other Brazilian regions and Portuguese-speaking countries, examine links with clinical outcomes, and test its sensitivity to institutional changes. As dignity gains importance in ethical health care, the APREMDI offers a valuable, patient-informed metric to promote more respectful and humane care.

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