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## ORIGINAL ARTICLE

### LGBT Moral Injury Scale: Initial Validation and Preliminary Psychometric Properties

Juan Aníbal González-Rivera <sup>1\*</sup>, Adam Rosario-Rodríguez <sup>2</sup>

<sup>1</sup> School of Behavioral and Brain Sciences, Ponce Health Sciences University, Puerto Rico, United States of America.

<sup>2</sup> Albizu University, San Juan Campus, San Juan, Puerto Rico, United States of America.

\* Correspondence: [jagonzalez@psm.edu](mailto:jagonzalez@psm.edu)

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#### ABSTRACT

**Background:** Moral injury has been linked to guilt, shame, self-condemnation, and moral disorientation; however, existing measures have been developed primarily in military, veteran, or healthcare contexts and may not adequately capture identity-related moral suffering in LGBTQ+ populations.

**Objective:** To develop the LGBT Moral Injury Scale (LGBT-MIS) and provide initial psychometric evidence for its use with LGBTQ+ adults in Puerto Rico.

**Method:** A total of 242 LGBTQ+ adults were recruited through social media and snowball sampling. Because multivariate normality was violated, we conducted confirmatory factor analyses using robust estimation to compare a unidimensional model, a theory-driven five-factor model, and refined alternative models. We evaluated global model fit, factor loadings, item discrimination, internal consistency ( $\alpha$ ,  $\omega$ , and composite reliability), convergent validity (AVE), discriminant validity (ASV, MSV), interfactor correlations, and external convergent associations with PTSD symptoms and Negative Religious Coping.

**Results:** The unidimensional model showed poor fit, whereas the theory-driven model demonstrated mixed fit and several loadings below .65. After item refinement, a 15-item, five-factor solution—Guilt, Shame, Moral Conflicts, Religious Struggle, and Self-Condemnation—showed adequate fit, satisfactory reliability, and acceptable item discrimination. AVE supported convergent validity, and ASV supported discriminant validity; however, MSV exceeded AVE for Guilt, Shame, and Moral Conflicts, indicating partial overlap among these factors. Interafactor correlations were positive and moderate. Associations with PTSD symptoms and Negative Religious Coping provided initial evidence of external convergent validity.

**Conclusions:** The LGBT-MIS provides promising initial support as a multidimensional measure of moral injury in Puerto Rican LGBTQ+ adults. With further validation, the scale may support research and clinically informed assessment of guilt, shame, moral conflict, religious struggle, and self-condemnation in LGBTQ+ populations.

**Keywords:** moral injury, LGBTQ+, minority stress, psychometrics, religious struggle, validity

#### INTRODUCTION

Moral injury is a complex psychological construct referring to the deep distress that arises when an individual perceives a transgression of their core moral beliefs and values, resulting in profound feelings of guilt, shame, self-condemnation, and

moral disorientation (Griffin et al., 2019). Originally described in the context of military personnel and veterans exposed to morally injurious events such as combat-related actions or betrayals, moral injury has been increasingly recognized as a distinct and clinically significant phenomenon with substantial im-

pact on mental health outcomes, including posttraumatic stress disorder (PTSD), depression, and suicidal ideation (Koenig et al., 2019; Maguen et al., 2022).

Although most research on moral injury has focused on military populations, recent scholarship highlights the relevance of this construct to marginalized groups experiencing chronic social and identity-related stressors, including sexual and gender minorities (SGM), often referred to collectively as the LGBTQ community (Nicholson et al., 2025). This population faces unique and persistent minority stressors, such as discrimination, stigma, rejection by family or community, and internalized homonegativity, which can serve as potentially morally injurious events (PMIEs) (Nicholson et al., 2025; Ren et al., 2018). These experiences challenge fundamental moral and identity beliefs and can elicit intense emotions of shame, guilt, and internal conflict, which are central elements of moral injury (Nicholson et al., 2025).

The minority stress model provides a valuable explanatory framework, elucidating how distal stressors (external discrimination and prejudice) and proximal stressors (identity concealment, internalized stigma) cumulatively exacerbate psychological distress among LGBTQ individuals (Nicholson et al., 2025; Herron, 2020). Empirical evidence substantiates associations between exposure to PMIEs and adverse mental health outcomes in this group, such as increased rates of anxiety, depression, substance use, PTSD symptoms, and suicidal behavior (Griffin et al., 2019; Mantri et al., 2020). These findings call for a nuanced understanding of moral injury beyond trauma-exposed military cohorts, with a culturally sensitive lens attentive to the lived experiences of LGBTQ people.

In LGBTQ+ populations, moral injury may arise not only from discrete potentially morally injurious events but also from chronic exposure to social and structural conditions that frame one's identity as wrong, sinful, unacceptable, or incompatible with dominant moral expectations (Herek, 2007; Meyer, 2003; Nicholson et al., 2025). Structural discrimination, stigmatization, family or community rejection, identity concealment, and conflict with heteronormative or cisnormative norms may function as morally injurious experiences when they undermine an individual's sense of worth, coherence, and belonging (Herek, 2007; Meyer, 2003). In this sense, moral injury overlaps with, but is not reducible to, minority stress or psychological trauma. Whereas minority stress theory helps explain the chronic burden imposed by stigma, prejudice, and internalized negativity, moral injury highlights the moral-emotional and existential consequences of these experiences, including guilt, shame, self-condemnation, spiritual struggle, and moral disorientation (Meyer, 2003; Nicholson et al., 2025). This distinction is important because it helps justify the need for a specialized instrument capable of capturing identity-based and socioculturally embedded forms of moral suffering in LGBTQ+ populations (Nicholson et al., 2025).

One particularly salient domain in the LGBTQ moral injury experience is the dimension of religious and spiritual struggle. LGBTQ individuals frequently contend with conflicting narratives between their sexual or gender identity and doctrinal teachings of faith communities, leading to feelings of divine punishment,

abandonment, and spiritual betrayal (Ren et al., 2018). This internal religious conflict further complicates moral distress and may contribute to self-condemnation or withdrawal from social support (Nicholson et al., 2025; Mantri et al., 2020). Conversely, spirituality may also serve as a source of resilience when integrated affirmatively (Nicholson et al., 2025).

Despite this growing body of knowledge, there remains a critical gap in validated psychometric instruments tailored to capture moral injury as it uniquely manifests in LGBTQ populations. Existing measures of moral injury, developed for military or healthcare professional contexts, tend to emphasize domains such as betrayal, guilt, and shame without addressing identity-specific conflicts, religious struggles, and internalized stigma typical in LGBTQ cohorts (Mantri et al., 2020). This lack of appropriate assessment tools limits the capacity for precise identification, research, and development of tailored clinical interventions.

To bridge this gap, the present study introduces and psychometrically evaluates the LGBT Moral Injury Scale (LGBT-MIS), a multidimensional instrument specifically designed for LGBTQ+ populations. Unlike existing moral injury measures developed primarily for military, veteran, or healthcare settings, the LGBT-MIS was constructed to assess morally injurious experiences that emerge within minority-stress contexts and that are closely tied to sexual and gender identity. Its distinctive contribution lies not only in assessing core moral emotions such as guilt and shame, but also in capturing identity-related moral conflicts, religious and spiritual struggle linked to sexual or gender identity, and self-condemnation associated with internalized stigma, social invalidation, and rejection. In this way, the LGBT-MIS extends the assessment of moral injury beyond betrayal- and transgression-focused models by addressing how chronic discrimination, concealment, family or community rejection, and conflict with heteronormative or cisnormative values may function as morally injurious experiences for LGBTQ+ individuals.

The scale was conceptually organized around five core dimensions: guilt, shame, moral conflicts, religious struggle, and self-condemnation. Guilt reflects feelings of having failed familial, cultural, or societal expectations and self-reproach related to one's sexual or gender identity; shame refers to perceived negative social judgment and internal embarrassment associated with identity; moral conflicts capture the internal struggle of reconciling one's authentic self with dominant social and moral norms; religious struggle addresses spiritual pain, alienation, and questions about divine justice in response to identity-related condemnation; and self-condemnation refers to harsh self-evaluation, self-blame, and diminished self-worth. Together, these dimensions provide added conceptual value for understanding the forms that moral injury may take in LGBTQ+ populations and offer a framework for assessing identity-salient moral suffering that existing instruments do not adequately capture (Nicholson et al., 2025; Ren et al., 2018).

Validating this scale provides a critical tool for early detection of severe moral distress among LGBTQ individuals, informing culturally competent mental health practices and affirming therapeutic interventions. Recent clinical frameworks emphasize that treatment of moral injury requires addressing moral

emotions, identity reconciliation, and spiritual healing, over and above standard trauma-informed approaches (Griffin et al., 2019). For LGBTQ persons in particular, affirmative therapy and integration of spiritual resilience emerge as essential components to counteract accumulated moral injury (Nicholson et al., 2025). Furthermore, considering intersectional identities—such as race, ethnicity, socio-economic status, and disability—is vital, as these factors influence the nature and severity of moral injury experiences within subgroups of the LGBTQ population (Nicholson et al., 2025). An instrument with validated psychometric properties sensitive to these complex experiences supports nuanced research and equitable clinical care.

To further situate the LGBT Moral Injury Scale within established clinical constructs and to provide external validity evidence, the present study also examines convergent validity with (a) posttraumatic stress symptoms and (b) negative religious coping. Specifically, the PTSD Checklist for DSM-5 (PCL-5) is a 20-item self-report instrument aligned with DSM-5 criteria that assesses PTSD symptom severity over the past month and has demonstrated strong psychometric properties across diverse samples (Blevins et al., 2015; Weathers et al., 2013). In parallel, the Negative Religious Coping subscale of the Brief RCOPE captures religious responses marked by struggle with the sacred—e.g., perceived divine punishment or abandonment and conflict with one's faith community—and is consistently associated with poorer psychological outcomes (Pargament et al., 1998). Given the centrality of shame, self-condemnation, and religious struggle in LGBTQ moral injury, we anticipate that the LGBT-MIS will correlate positively with both PTSD severity and negative religious coping, thereby providing theoretically coherent convergent evidence.

In sum, this study advances the scientific understanding of moral injury in LGBTQ individuals by providing an empirically grounded, multidimensional assessment tool. This effort responds to a critical gap in mental health research and practice, offering pathways to enhanced detection, culturally attuned intervention, and improved emotional and social well-being for sexual and gender minorities (Bohren et al., 2022).

## METHODS

### Design

This study is framed within an instrumental design, according to the classification proposed by Ato et al. (2013). Instrumental research primarily aims to construct, adapt, and validate measurement instruments, such as the LGBT Moral Injury Scale. This type of design is ideal for examining the psychometric properties of an instrument, such as reliability, validity, and factor structure. It provides evidence of its adequacy for measuring the construct of interest in a specific population. The instrumental design is characterized by a quantitative, cross-sectional, and non-experimental approach, focused on collecting data at a single point in time to evaluate how the proposed items and dimensions conform to and reflect the theoretical construct under study (Ato et al., 2013). Moreover, this design allows for performing exploratory and confirmatory factor analyses, as well as tests of internal consistency and convergent and discriminant validity.

### Participants

We recruited participants through a paid social-media advertisement (e.g., Facebook). Recruitment followed a non-probability convenience approach, amplified via snowball sampling of the post. Surveys were completed online in Spanish. To be eligible, respondents had to self-identify as LGBT+, be 21 years or older, and reside in Puerto Rico. A total of 242 adults completed the sociodemographic questionnaire, with no missing data. Ages ranged from 21 to 71 years ( $M = 39.55$ ,  $SD = 13.89$ ).

The final analytic sample of 242 participants was considered adequate for an initial confirmatory factor analysis (CFA). Methodological literature has noted that sample-size requirements in factor analytic research depend on multiple model features, including the number of factors, the number of items per factor, the magnitude of factor loadings, correlations between factors, and overall model complexity (Knekta et al., 2019; Wolf et al., 2013). In addition, although samples of around 200 participants are often regarded as acceptable starting points for initial CFA applications, more recent work has emphasized that adequacy should be evaluated in relation to model characteristics rather than relying exclusively on fixed rules of thumb (Knekta et al., 2019; Wolf et al., 2013). In the present study, the sample size was deemed sufficient for the initial evaluation of the proposed models, particularly for the final 15-item, five-factor solution. Nevertheless, given the use of non-probability sampling and the preliminary nature of this validation study, the findings should be interpreted cautiously and replicated in independent samples.

Most respondents identified their gender as male (57.0%) or female (37.2%), with smaller groups identifying as transgender (2.5%), non-binary (2.1%), or other (1.2%). For sex, 57.4% reported male, 41.3% female, 0.4% intersex, and 0.8% other. Regarding sexual orientation, 51.2% identified as gay, 22.7% as lesbian, 16.9% as bisexual, 5.8% as pansexual, and 3.3% as other. Relationship circumstances were diverse: single (45.0%), partnered and cohabiting (24.0%), partnered and not cohabiting (12.8%), married (14.0%), divorced (2.1%), separated (0.8%), and widowed (1.2%). Approximate annual household income clustered at the lower brackets—\$0–\$20,000 (37.2%) and \$21,000–\$30,000 (25.2%)—with fewer reporting \$31,000–\$40,000 (15.3%), \$41,000–\$50,000 (6.6%), \$51,000–\$60,000 (5.0%), or \$61,000 or more (10.7%). Religious and spiritual identities were varied: spiritual but not religious (28.1%), Catholic (27.7%), Protestant traditions (e.g., Evangelical, Methodist, Baptist, Pentecostal; 16.5%), none (10.3%), agnostic (7.0%), atheist (4.5%), Santería (2.1%), Buddhism (1.7%), Orthodox Christian (0.8%), and Adventist (0.4%). Reported attendance at religious services was predominantly never (55.8%), followed by once per year (21.5%), weekly (12.8%), monthly (9.1%), and daily (0.8%). As for the perceived influence of religious beliefs on lifestyle, 33.9% described it as positive, 2.9% as negative, 36.0% reported no influence, and 27.3% responded “maybe”.

### Instruments

*LGBT Moral Injury Scale (Spanish version; LGBT-MIS)*. The LGBT-MIS is a self-report measure developed by the principal in-

investigator and grounded in contemporary definitions and core dimensions of moral injury (guilt/shame and concealment, sexual-moral dissonance, spiritual/religious struggle, and global self-devaluation). The preliminary instrument contains 30 items administered online in Spanish; each rated on a 6-point Likert scale (1 = Strongly disagree to 6 = Strongly agree). Higher scores indicate greater moral injury.

Item development followed a theory-driven approach. The principal investigator generated an initial pool of 35 items based on a targeted review of the literature on moral injury, minority stress, internalized stigma, shame, guilt, religious/spiritual struggle, and identity-related conflict in LGBTQ+ populations. The goal of this stage was to ensure conceptual coverage of the main dimensions theorized to characterize moral injury in sexual and gender minorities. The preliminary item pool was organized to reflect five provisional domains: guilt, shame, moral conflicts, religious struggle, and self-condemnation.

After the initial drafting stage, content validity was evaluated by eight expert judges using the Lawshe content validity method. All eight judges held doctoral degrees, and their areas of expertise included clinical psychology, psychometrics, LGBTQ+ mental health, and trauma. Judges met two a priori criteria: (a) at least one professional publication in LGBT studies and (b) basic training in psychometrics. Of the eight judges, three had prior experience in research and instrument and scale development, whereas five had extensive clinical, academic, and research experience focused on LGBTQ+ populations. This multidisciplinary composition was intended to strengthen both the conceptual relevance and methodological rigor of the content-validation process. For each item, we computed the Content Validity Ratio (CVR) and applied the critical values recalculated by Wilson et al. (2012); for  $k = 8$  judges, the acceptance threshold was  $CVR \geq .693$  (two-tailed  $\alpha = .05$ ). Five items fell below this threshold and were removed, yielding the 30-item preliminary version used in subsequent psychometric analyses.

*Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5).* The PCL-5 is a 20-item self-report measure aligned with DSM-5 criteria for posttraumatic stress disorder that indexes symptom severity over the past month on a 5-point scale (0 = not at all to 4 = extremely), yielding total scores from 0 to 80; higher scores reflect greater PTSD severity (Blevins et al., 2015; Weathers et al., 2013). Following common practice, we computed a total severity score. In the present sample, the PCL-5 demonstrated strong internal consistency ( $\alpha = .97$ ;  $\omega = .97$ ).

*Negative Religious Coping (Brief RCOPE-N).* For convergent validity purposes, we administered only the Negative Religious Coping subscale of the Brief RCOPE (7 items), which captures struggle-oriented responses (e.g., perceived divine punishment or abandonment; conflict within one's faith community) in the context of stress (Pargament, Smith, Koenig, & Perez, 1998). Items were rated on a scale from 1 (not at all) to 4 (a great deal). In this study, scoring was performed by summing the seven items to yield a total Negative Religious Coping score (range = 7–28), with higher values indicating greater negative religious coping. A Spanish version with conceptual equivalence was administered. In the present sample, the subscale showed satisfactory reliability ( $\alpha = .88$ ;  $\omega = .89$ ).

## Data Analysis

Data were analyzed using IBM SPSS Statistics (Version 30), Stata (Version 18), and Gaskin's Stats Tools Package (Gaskin, 2016). We screened item distributions (means, standard deviations, skewness, and kurtosis). We assessed univariate normality with the Kolmogorov–Smirnov and Shapiro–Wilk tests, and multivariate normality with the Doornik–Hansen, Mardia, and Henze–Zirkler tests (Doornik & Hansen, 2008). Item quality was examined using corrected biserial item–total correlations, indicator reliabilities ( $R^2$ ), and alpha if deleted. Internal consistency for each factor was estimated using Cronbach's  $\alpha$  and McDonald's  $\omega$ ; values  $\geq .70$  were considered adequate (DeVellis, 2017).

Given the LGBT-MIS's 6-point Likert response format, the CFA models were estimated using maximum likelihood with Satorra–Bentler corrections to obtain robust standard errors and fit indices under non-normality. Although the item responses were ordinal, simulation studies have shown that variables with five or more ordered response categories can often be treated as approximately continuous in SEM/CFA, particularly when the goal is to obtain robust model-based estimates and compare competing models (Rhemtulla et al., 2012). Moreover, evidence comparing robust maximum likelihood and ordinal estimators indicates that, although categorical estimators may be preferable in many ordinal-data settings, robust maximum likelihood can perform adequately under several practical conditions, including models with six response categories and moderate sample sizes (Li, 2016). Accordingly, in this initial validation study, robust maximum likelihood was used as a pragmatic approach to model estimation, given the clear lack of univariate and multivariate normality. Model adequacy was judged holistically using the SB-corrected  $\chi^2$ , CFI, TLI, RMSEA, SRMR, and Akaike's Information Criterion (AIC) for model comparison, with lower AIC values indicating better expected out-of-sample fit. We considered commonly cited guidelines (e.g., CFI/TLI  $\geq .95$ ; RMSEA  $\leq .06$ – $.08$ ; SRMR  $\leq .08$ ; Byrne, 2010) together with theoretical interpretability and parameter reasonableness; for competing specifications, we also interpreted  $\Delta AIC$  (e.g., differences  $\geq 2$  as meaningful; Burnham & Anderson, 2002).

To evaluate convergent and discriminant validity of the LGBT-MIS latent factors, we computed the Average Variance Extracted (AVE) and, for discriminant evidence, the Maximum Shared Variance (MSV) and Average Shared Variance (ASV) (Hair et al., 2019); these indices were obtained with the Stats Tools Package (Gaskin, 2016). In addition, we incorporated two external criteria to examine convergent validity. For the PTSD Checklist for DSM-5 (PCL-5), we computed a total severity score (0–80). For the Brief RCOPE—Negative Religious Coping (Brief RCOPE-N), we administered only the 7 negative-coping items and derived a sum score (range = 7–28), with higher scores indicating greater negative religious coping. We estimated internal consistency ( $\alpha$  and  $\omega$ ) for both external measures in the present sample.

We then conducted Pearson correlations between LGBT-MIS total and subscale scores and (a) PCL-5 total and (b) Brief RCOPE-N (sum) to test convergent validity hypotheses. For all correlations, we reported 95% confidence intervals based on Fisher's  $r$ -to- $z$  transformation and interpreted magnitudes using

Champion’s scale (Champion, 1981): 0.00–0.25 = low, 0.26–0.50 = moderately low, 0.51–0.75 = moderately high, and 0.76–1.00 = high. The significance level was set at  $p < .05$  (95% confidence) for all inferential tests.

**Ethical aspects**

The protocol was reviewed and approved by the Institutional Review Board (IRB) of Ponce Health Sciences University (PHSU), Ponce, Puerto Rico. All participants provided written informed consent. Our study was conducted in accordance with the Declaration of Helsinki.

**RESULTS**

**Univariate and Multivariate Normality**

At the item level, LGBT-MIS responses showed clear departures from normality. Skewness was mostly positive, ranging from -0.511 (Item 26) to 3.350 (Item 14), indicating concentration of responses toward the lower end of the 6-point scale for many items. Kurtosis ranged from -1.567 (Item 10) to 12.047 (Item 14), with several items exhibiting pronounced leptokur-

tosis (e.g., Item 14: skew = 3.350, kurtosis = 12.047; Item 20: kurtosis = 8.786; Item 21: kurtosis = 5.907; Item 19: kurtosis = 5.683). Formal tests converged on non-normality at the univariate level: Kolmogorov–Smirnov statistics ranged  $D = .176-.465$ , and Shapiro–Wilk coefficients ranged  $W = .442-.857$  (all  $p < .001$ ; see Table 1).

Multivariate normality was likewise rejected by omnibus tests: Mardia’s skewness = 382.89,  $\chi^2(4,960) = 15,647.24$ ,  $p < .001$ ; Mardia’s kurtosis = 1,385.67,  $\chi^2(1) = 5,709.44$ ,  $p < .001$ ; Henze–Zirkler = 2.08,  $\chi^2(1) = 7.45$ ,  $p < .001$ ; Doornik–Hansen  $\chi^2(60) = 3,552.73$ ,  $p < .001$ . Given the lack of evidence for multivariate normality, CFA models were estimated using robust maximum likelihood with Satorra–Bentler corrections (Satorra & Bentler, 2001).

**Confirmatory Factor Analysis**

We tested five CFA specifications. M0 was a baseline unidimensional model and, as expected, did not provide an adequate representation of the data (see Table 2). M1 reflected the theoretical five-factor structure of the LGBT-MIS and yield-

**Table 1.** Descriptive Statistics, Normality, Item Quality Indices and Confidence Intervals for Factor Loadings

Item	M	SD	Skew	Kurt	KS	SW	$r_{bis}$	$R^2$	$\alpha_{id}$
1	2,44	1,71	0,83	-0,69	0,27	0,79	0,70	0,69	0,93
2	1,92	1,39	1,48	1,16	0,33	0,70	0,72	0,68	0,93
3	1,81	1,35	1,72	1,96	0,36	0,65	0,76	0,77	0,93
4	1,71	1,33	1,95	2,77	0,40	0,59	0,75	0,73	0,93
5	1,92	1,50	1,54	1,16	0,37	0,66	0,71	0,65	0,93
6	2,32	1,72	1,02	-0,40	0,29	0,75	0,68	0,67	0,93
7	2,62	1,63	0,60	-0,94	0,22	0,85	0,64	0,63	0,93
8	1,81	1,28	1,51	1,23	0,37	0,67	0,76	0,69	0,93
9	1,63	1,27	2,28	4,52	0,41	0,56	0,57	0,48	0,93
10	3,48	1,95	-0,02	-1,57	0,18	0,85	-0,03	0,17	0,94
11	2,44	1,90	1,04	-0,51	0,29	0,72	0,07	0,20	0,94
12	2,65	1,71	0,63	-0,95	0,22	0,84	0,54	0,53	0,93
13	2,52	1,79	0,78	-0,89	0,26	0,79	0,49	0,40	0,93
14	1,36	0,92	3,35	12,05	0,46	0,44	0,45	0,45	0,93
15	1,52	1,16	2,56	6,07	0,44	0,51	0,62	0,59	0,93
16	2,24	1,65	1,10	-0,12	0,30	0,75	0,58	0,55	0,93
17	1,57	1,28	2,38	4,72	0,45	0,51	0,52	0,50	0,93
18	1,72	1,40	1,99	2,80	0,41	0,58	0,54	0,59	0,93
19	1,49	1,18	2,56	5,68	0,46	0,48	0,69	0,72	0,93
20	1,41	1,06	3,01	8,79	0,47	0,45	0,70	0,76	0,93
21	1,49	1,18	2,59	5,91	0,46	0,48	0,66	0,78	0,93
22	1,75	1,43	1,85	2,13	0,42	0,59	0,51	0,57	0,93
23	2,17	1,72	1,20	-0,06	0,36	0,69	0,34	0,35	0,93
24	2,19	1,75	1,17	-0,20	0,35	0,69	0,42	0,43	0,93
25	1,61	1,37	2,36	4,39	0,44	0,50	0,65	0,62	0,93
26	2,33	1,71	0,95	-0,51	0,31	0,76	0,62	0,81	0,93
27	2,17	1,66	1,17	-0,07	0,34	0,72	0,64	0,87	0,93
28	1,98	1,53	1,39	0,60	0,36	0,68	0,61	0,80	0,93
29	2,07	1,62	1,30	0,31	0,36	0,69	0,64	0,75	0,93
30	2,70	2,04	0,66	-1,28	0,30	0,75	0,55	0,58	0,93

Note: M = Mean; SD = Standard deviation; Skew = Skewness; Kurt = Kurtosis; Standard error of skewness = .156; Standard error of kurtosis = .312. KS = Kolmogorov-Smirnov; SW = Shapiro-Wilk; Kolmogorov-Smirnov and Shapiro-Wilk degrees of freedom = 242, all  $p$ -values  $< .001$ ;  $r_{bis}$  = discrimination indices;  $R^2$  = explained variance;  $\alpha_{id}$  = Cronbach’s alpha if item deleted.

ed a substantial improvement in global fit relative to M0. We then explored three refinements. M2 retained the four highest-loading items per factor (20 items total), showing additional improvement. M3 removed the lowest-loading indicators observed in the theoretical model, resulting in an 18-item solution with better fit and parsimony. Finally, M4 retained three items per factor (15 items), prioritizing content coverage, conceptual balance across the five theoretical dimensions, and simplicity; this specification achieved the best overall fit among the candidate models and the lowest AIC, thus becoming the selected solution (see Table 2).

Item reduction was guided by both statistical and conceptual criteria rather than by fixed loading cutoffs alone. From a statistical standpoint, we prioritized indicators with stronger standardized loadings, adequate corrected item discrimination, and better contribution to global model fit and parsimony across competing CFA solutions. From a conceptual standpoint, we sought to preserve the theoretical breadth of each proposed domain so that the final version would retain meaningful coverage of guilt, shame, moral conflicts, religious struggle, and self-condemnation. Accordingly, items were not removed solely because of relatively lower loadings; retention decisions also considered whether an item represented a conceptually important aspect of the latent dimension. The final M4 solution retained three indicators per factor, balancing psychometric adequacy, conceptual interpretability, and practical brevity.

Consistent with guidance that treats loading thresholds as heuristic rather than rigid, retaining indicators with standardized loadings  $\geq .62$  is supported by classic and contemporary benchmarks (e.g.,  $\approx .60$  classified as good and  $\geq .63$  as very good; Comrey & Lee, 1992), as well as by SEM texts that accept loadings  $\geq .50$  as adequate for reflective indicators when the factor shows satisfactory reliability and the model exhibits strong global fit and parsimony (Brown, 2015; Hair et al., 2019; Kline, 2016). Figure 1 displays the final model (M4) for the LGBT-MIS.

**Internal Consistency and Item Discrimination**

Item discrimination for each M4 factor was examined using the corrected biserial discrimination index (rbisc) / corrected item–total correlation. All items within each M4 factor showed adequate discrimination, with all values  $> .30$  (see Table 3). Internal consistency for the M4 factors was estimated using Cronbach’s alpha, McDonald’s omega, and composite reliability. Findings indicated that each M4 factor achieved adequate

reliability, with  $\alpha$  and  $\omega > .70$  (see Table 3).

**Convergent Validity, Discriminant Validity, and Correlations**

Convergent validity was evaluated using the AVE, with AVE  $\geq .50$  indicating adequate convergence (Fornell & Larcker, 1981). All five M4 factors met this criterion, indicating that the retained items adequately represented their intended constructs. Discriminant validity was examined using the MSV and ASV, with evidence supported when both MSV and ASV are lower than the AVE (Hair et al., 2019). By this standard, all factors met the ASV criterion; however, Guilt, Shame, and Moral Conflicts did not fully meet the stricter MSV  $<$  AVE criteria, indicating partial overlap among these three dimensions (see Table 4). Given the close conceptual relatedness of these constructs, some shared variance was expected. Taken together with the strong global fit of the final model, the salience of the retained loadings, and the absence of problematic cross-loadings, these findings support adequate convergent validity for all factors and overall acceptable, although somewhat limited, discriminant validity among these three conceptually adjacent constructs. Finally, pairwise relationships among the five M4 factors were positive and statistically significant, ranging from moderately low to moderately high (see Table 4).

**External convergent validity with PTSD symptoms and negative religious coping**

Consistent with predictions, the LGBT-MIS total score correlated positively with PTSD severity (PCL-5) and with Negative Religious Coping (Brief RCOPE-N), showing moderately high and moderately low magnitudes, respectively, according to Champion’s scale. At the subscale level, associations with PCL-5 were most pronounced for Self-Condensation, followed by Guilt, with Religious Struggle and Shame showing moderate associations and Moral Conflicts, the smallest positive association. For Brief RCOPE-N, the strongest association was observed for Religious Struggle, followed by Self-Condensation, with Guilt and Moral Conflicts in the mid-range and Shame showing the smallest positive association. All effects were significant at  $p < .001$  (see Table 4).

**DISCUSSION**

This study introduces the LGBT Moral Injury Scale (LGBT-MIS) and provides initial and preliminary psychometric support for a multidimensional assessment of moral injury tailored to LGBTQ+ populations. Consistent with contemporary conceptu-

**Table 2.** CFA Model Fit Indices.

Model	$\chi^2_{sb}$	DF	RMSEA <sub>sb</sub>	CFI <sub>sb</sub>	TLI <sub>sb</sub>	SRMR	AIC
M0	1.503,78	405	0,11	0,66	0,64	0,09	23.450,0
M1	736,22	395	0,06	0,90	0,88	0,06	22.406,4
M2	287,3	160	0,06	0,94	0,93	0,06	13.978,9
M3	204,13	125	0,05	0,96	0,95	0,05	12.413,4
M4	135,76	80	0,05	0,96	0,95	0,04	10.455,2

Note. M0 = baseline unidimensional model; M1 = theoretical model; M4 = final model; *df* = degrees of freedom; RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; TLI = Tucker–Lewis Index; SRMR = Standardized Root Mean Square Residual; AIC = Akaike Information Criterion; SB = Satorra–Bentler correction. All  $\chi^2$  statistics were significant ( $p < .001$ ).

alizations of moral injury as a syndrome characterized by guilt, shame, moral disorientation, and self-condemnation (Griffin et al., 2019; Litz et al., 2009), the final 15-item solution (M4) demonstrated adequate fit under robust estimation, good internal consistency, satisfactory item discrimination, and convergent validity. These findings extend literature historically centered on military personnel (Koenig et al., 2019; Maguen et al., 2022) by operationalizing morally injurious processes embedded in minority-stress contexts among SGM (Bohren et al., 2022; Meyer, 2003; Nicholson et al., 2025).

The retained five-factor structure—Guilt, Shame, Moral Conflicts, Religious Struggle, and Self-Condensation—maps closely onto theorized components of moral injury (Griffin et al., 2019; Litz et al., 2009; Litz et al., 2022). Guilt captured perceived failure to meet familial and societal expectations tied to sexual or gender identity; Shame reflected anticipated negative evaluation and concealment; Moral Conflicts indexed dissonance between personal values and hetero/cisnormative moral codes; Religious Struggle encompassed perceived divine punishment, abandonment, and the need for forgiveness; and Self-Condensation represented global negative self-evaluation and diminished self-respect.

The moderate positive intercorrelations among factors, alongside mixed discriminant-validity evidence based on MSV (with ASV supportive), point to a common moral-injury core

with distinguishable—but closely related—facets. This pattern mirrors prior work showing that shame and guilt are intertwined yet separable moral emotions (Tangney & Dearing, 2002) and that moral-injury measures frequently exhibit correlated (and sometimes bifactor) structures (Currier et al., 2020; Tappenden et al., 2024). Within a minority-stress framework, concealment, anticipated rejection, and internalized stigma create identity-salient PMIEs that activate these emotions and value conflicts in LGBTQ+ persons (Bohren et al., 2022; Meyer, 2003; Nicholson et al., 2025). Practically, this implies that subscale scores can highlight predominant areas of distress (e.g., religious struggle vs. self-condemnation), while an overall score indexes global moral-injury severity.

The partial overlap observed among Guilt, Shame, and Moral Conflicts warrants particular attention. Although these dimensions were retained as distinct facets of the LGBT-MIS, their empirical proximity is theoretically understandable within LGBTQ+ populations. Experiences of minority stress often involve simultaneous exposure to rejection, concealment, internalized stigma, and conflict with heteronormative or cisnormative social expectations. In such contexts, individuals may not only experience shame in response to anticipated or actual negative evaluation but also guilt related to perceived failure to meet familial, cultural, or religious expectations, alongside broader moral conflict regarding the compatibility of their identity with dominant

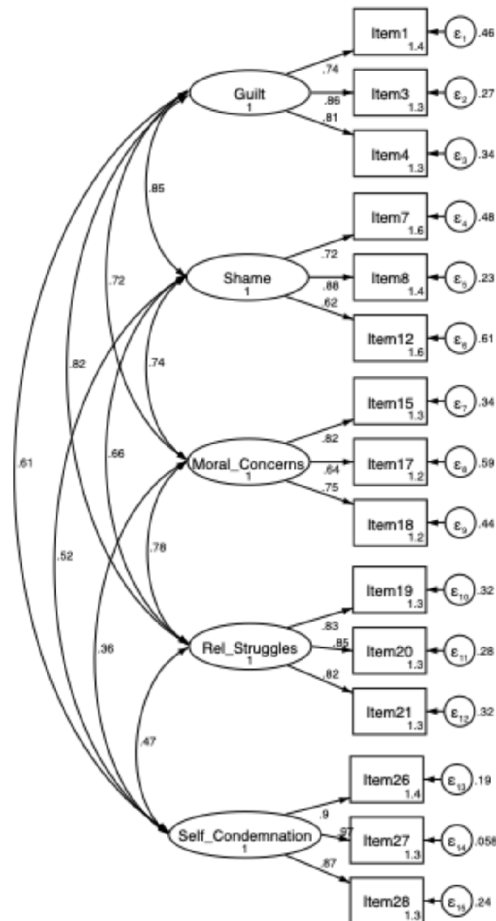


Figure 1. CFA of the final model (M4) of the LGBT Moral Injury Scale.

value systems. Thus, some degree of shared variance among these factors is expected and may reflect the interwoven nature of identity-related moral suffering rather than a failure of the construct. At the same time, their partial overlap suggests that future research should continue examining their factorial boundaries using complementary approaches, such as HTMT and higher-order or bifactor models.

Beyond internal structure, the observed pattern of external convergent validity situates the LGBT-MIS within clinically salient networks. The total score showed the expected positive

associations with PTSD symptom severity and with Negative Religious Coping, supporting linkage to trauma-related emotional processes and spiritually framed struggles. At the facet level, the strongest link with PTSD was observed for Self-Condensation, aligning with models in which self-directed moral emotions and global negative self-appraisals reinforce avoidance, hyperarousal, and negative alterations in cognition and mood (Litz et al., 2009; Griffin et al., 2019; Litz et al., 2022). The most proximal association with Negative Religious Coping emerged for Religious Struggle, consistent with accounts that

**Table 3.** Discrimination Indices, Standardized Regression Coefficient, and Confidence Intervals.

	Items	$r_{bisc}$	$\beta$	95% $CI_{sb}$
1	I feel guilty for failing my family's expectations [ <i>Me siento culpable por no cumplir con las expectativas de mi familia</i> ].	0,670	0,735	[.671, .799]
3	I feel guilty for not being heterosexual or cisgender [ <i>Me siento culpable por no ser heterosexual o cisgénero</i> ].	0,750	0,855	[.798, .913]
4	I feel guilty for being who I am [ <i>Me siento culpable por ser quien soy</i> ].	0,690	0,810	[.740, .879]
7	If people knew about my sexual orientation or gender identity, they would think less of me than they do now [ <i>Si las personas supieran mi orientación sexual o identidad de género, tendrían una opinión más negativa de mí que la que tienen ahora</i> ].	0,670	0,721	[.647, .794]
8	I feel ashamed of my sexual orientation or gender identity [ <i>Siento vergüenza de mi orientación sexual o identidad de género</i> ].	0,640	0,877	[.821, .932]
12	I feel embarrassed to speak in public about my sexual orientation or gender identity [ <i>Me avergüenza hablar en público sobre mi orientación sexual o identidad de género</i> ].	0,620	0,623	[.518, .727]
15	Because of my principles, I would like to change my sexual orientation and/or gender identity [ <i>Por mis principios, desearía cambiar mi orientación sexual y/o identidad de género</i> ].	0,670	0,815	[.721, .909]
17	From a moral point of view, being heterosexual and cisgender is morally right [ <i>Desde el punto de vista moral, ser heterosexual y cisgénero es lo moralmente correcto</i> ].	0,530	0,639	[.499, .779]
18	I enjoy my sexuality, but I recognize that it is not morally correct [ <i>Disfruto mi sexualidad, pero reconozco que no es moralmente correcto</i> ].	0,580	0,737	[.641, .854]
19	I wonder what I did for God to punish me [ <i>Me pregunto qué hice para que Dios me castigue</i> ].	0,730	0,826	[.746, .906]
20	I feel that God punishes me for my sexual orientation and/or gender identity [ <i>Siento que Dios me castiga por mi orientación sexual y/o identidad de género</i> ].	0,750	0,847	[.760, .934]
21	I wonder whether God has abandoned me [ <i>Me pregunto si Dios me ha abandonado</i> ].	0,790	0,824	[.745, .903]
26	At times I feel useless [ <i>En ocasiones, me siento inútil</i> ].	0,860	0,899	[.850, .947]
27	At times I feel that I am worthless [ <i>En ocasiones, siento que no sirvo para nada</i> ].	0,910	0,970	[.937, .999]
28	Overall, I tend to feel that I am a failure [ <i>En general, me inclino a sentir que soy un fracaso</i> ].	0,820	0,871	[.826, .917]

Note.  $r_{bisc}$  = corrected biserial discrimination index (corrected item-total correlation);  $\beta$  = standardized regression coefficient for each item;  $CI_{sb}$  = confidence interval with the Satorra-Bentler correction for non-normality.

**Table 4.** Descriptive Statistics, Internal Consistency, Convergent Validity, Discriminant Validity, and Correlations.

Factor	M	SD	$\alpha$	$\omega$	CR	AVE	MSV	ASV	1	2	3	4	5	6	7
1. Guilt	5,96	3,82	0,83	0,83	0,85	0,65	0,73	0,57	—						
2. Shame	7,07	3,91	0,79	0,80	0,79	0,56	0,73	0,49	0,66	—					
3. Moral Conflicts	4,83	3,18	0,76	0,76	0,78	0,55	0,61	0,45	0,56	0,55	—				
4. Religious Struggle	4,39	3,05	0,87	0,87	0,87	0,70	0,68	0,48	0,68	0,51	0,65	—			
5. Self-Condensation	6,51	4,63	0,93	0,94	0,94	0,84	0,37	0,25	0,56	0,42	0,32	0,43	—		
6. PCL-5 Total	22,65	20,39	0,97	0,97	-	-	-	-	0,47	0,35	0,31	0,46	0,57	—	
7. Brief RCOPE-N	9,54	4,30	0,88	0,89	-	-	-	-	0,41	0,35	0,38	0,57	0,30	0,34	—
8. LGBT-MIS Total	37,09	19,70	0,92	0,91	-	-	-	-	0,88	0,78	0,75	0,80	0,73	0,57	0,51

Note. M = mean; SD = standard deviation.  $\alpha$  = Cronbach's alpha;  $\omega$  = McDonald's omega; CR = composite reliability; AVE = Average Variance Extracted; MSV = Maximum Shared Variance; ASV = Average Shared Variance; <sup>nc</sup> = does not meet criterion). All correlations were significant at  $p < .001$ .

position spiritually oriented struggle—e.g., perceptions of divine punishment/abandonment or conflict with faith communities—as a mechanism that can intensify moral disorientation and impede meaning-making in LGBTQ+ contexts (see Currier et al., 2019; Exline et al., 2014; Park et al., 2023). Taken together, these convergences reinforce a view of moral injury as embedded in both trauma phenomenology and spiritual struggle, especially where minority-stress processes heighten vulnerability. Although the associations with PTSD symptoms and Negative Religious Coping provide theoretically coherent external support for the LGBT-MIS, they should be interpreted as initial convergent evidence rather than as a comprehensive test of the broader nomological network of LGBTQ+-related moral injury.

The prominence of Religious Struggle in this Puerto Rican sample is theoretically meaningful. In Puerto Rico, questions of sexuality and gender identity often unfold within a broader sociocultural context shaped by religious traditions, family expectations, and community norms. Even when individuals do not actively participate in organized religion, religiously informed beliefs and moral discourses may remain influential in shaping how sexual and gender diversity is interpreted, judged, or internalized. Thus, spiritual pain may persist outside formal religious participation and may be expressed through feelings of divine punishment, abandonment, moral conflict, or the perceived need for forgiveness. In the present sample, this interpretation is consistent with the substantial proportion of participants identifying as Catholic or spiritual but not religious, despite relatively low religious-service attendance. This pattern aligns with evidence linking religious and spiritual struggles to poorer mental-health outcomes (Currier et al., 2019; Exline et al., 2014; Park et al., 2023) and underscores the value of interventions that address faith-related meaning-making alongside identity affirmation. The convergent pattern with Negative Religious Coping further suggests that, when moral injury is entangled with conflicted relationships to the sacred or to religious communities, addressing spiritually framed cognitions and practices may be integral to moral repair.

The LGBT-MIS advances moral-injury assessment in several ways. First, it offers content-valid coverage of LGBTQ+-salient PMIEs by integrating identity-related guilt/shame, moral dissonance with hetero-/cisnormative codes, and religious/spiritual struggle into one instrument. Content validity was established a priori with a transparent CVR decision rule (Wilson et al., 2012), ensuring that retained items were judged essential by qualified experts. The subsequent CFA program with Satorra–Bentler corrections addressed observed non-normality (Satorra & Bentler, 2001), and selecting a parsimonious 15-item structure (three indicators per factor) improved interpretability, maintained strong global fit, and minimized AIC relative to the theoretical and unidimensional alternatives. This approach follows contemporary guidance to balance psychometric evidence with conceptual coverage rather than enforce rigid loading cutoffs (Brown, 2015; Hair et al., 2019; Kline, 2016).

Second, the scale demonstrates a robust internal structure and score reliability. All factors exceeded conventional thresholds for internal consistency ( $\alpha, \omega \geq .74$ ), and item discrimination statistics indicated that retained items contribute mean-

ingfully to their factors. In addition, composite reliability coefficients derived from the final factor model were satisfactory across the five dimensions, ranging from .78 to .94, thus providing further model-based evidence of score reliability. Convergent validity was uniformly adequate ( $AVE \geq .50$ ), comparable to or exceeding values reported for established moral-injury tools in non-military samples (Bryan et al., 2016; Currier et al., 2020; Tappenden et al., 2024). Although  $MSV > AVE$  for Guilt, Shame, and Moral Conflicts indicate overlap, this is theoretically coherent given the shared moral-emotion core of the construct (Griffin et al., 2019; Tangney & Dearing, 2002; Litz et al., 2022). Future confirmatory work should explicitly test higher-order or bifactor models to quantify the contribution of a general moral-injury factor while preserving clinically informative subscales (Currier et al., 2020; Litz et al., 2022; Tappenden et al., 2024). As a complementary sensitivity analysis, evaluating HTMT may further clarify discriminant evidence.

Third, the LGBT-MIS is practice-ready for Spanish-speaking contexts while remaining extensible for cross-cultural research. Using item-mean scoring (1–6) facilitates interpretation and communication of change over time in clinical and program-evaluation settings. The measure fills a gap left by instruments developed primarily for military or health-professional populations (Bryan et al., 2016; Currier et al., 2020; Tappenden et al., 2024; Litz et al., 2022), and it does so with explicit attention to identity-specific moral tensions highlighted by minority-stress scholarship (Bohren et al., 2022; Meyer, 2003; Nicholson et al., 2025). Next-step psychometric studies should examine measurement invariance (e.g., by gender identity, sexual orientation, religious affiliation), differential item functioning, and test–retest reliability; compare robust ML vs. ordinal estimators; and apply IRT models for polytomous items to inform short forms and adaptive testing.

Clinically, the LGBT-MIS enables a mechanism-focused assessment that complements trauma-focused screening. The total score indexes global moral-injury severity, while subscale profiles help tailor case formulations: prominent Religious Struggle may call for spiritually integrated care and meaning reconstruction (Currier et al., 2019; Exline et al., 2014; Park et al., 2023); elevated Shame may prioritize compassion-based, acceptance-focused, or exposure-with-compassion strategies; heightened Moral Conflicts may benefit from values clarification and moral reasoning work; and Self-Condensation suggests targeting global self-evaluation and worth. The external convergent findings further justify integrated assessment that includes (a) routine screening for PTSD symptoms and (b) brief appraisal of religious/spiritual struggle when elevated LGBT-MIS scores are observed. The instrument supports treatment planning and monitoring, including integration with Adaptive Disclosure and related MI-focused approaches adapted for LGBTQ+ clients (Litz et al., 2024; Griffin et al., 2019). Because moral injury is linked to PTSD symptoms, depression, substance use, and suicidality (Griffin et al., 2019; Koenig et al., 2019; Maguen et al., 2022), higher scores—especially on Shame and Self-Condensation—should trigger risk assessment, stepped-care triage, and referral pathways within affirmative practice frameworks.

For research, the LGBT-MIS offers a unified outcome and

mechanism measure to test models linking PMIE exposure, minority-stress processes, religious/spiritual struggle, and mental-health outcomes (Bohren et al., 2022; Meyer, 2003; Nicholson et al., 2025; Currier et al., 2019; Exline et al., 2014; Park et al., 2023). The convergent pattern with PTSD and Negative Religious Coping motivates longitudinal and mechanistic designs to evaluate mediation and moderation—for example, whether changes in Shame or Self-Condernation mediate symptom improvement, or whether Religious Struggle or Negative Religious Coping moderate the impact of PMIEs on distress. The LGBT-MIS can be paired with syndrome-level indices such as the Moral Injury Outcome Scale (MIOS) (Litz et al., 2022) to map how specific facets relate to global impairment. Cross-cultural studies should develop language adaptations (e.g., English via back-translation) and establish norms and cut-points for diverse LGBTQ+ subgroups. Finally, combining the LGBT-MIS with validated measures of minority stress, stigma, and spirituality can clarify incremental validity and inform multilevel interventions (e.g., clinician training, policy, and partnerships with affirming faith communities) aimed at reducing morally injurious contexts—not only their psychological sequelae (Bohren et al., 2022; Meyer, 2003; Nicholson et al., 2025; Litz et al., 2022).

Generalizability is limited by convenience sampling within Puerto Rico and snowball recruitment. The cross-sectional, self-report design raises concerns about shared method variance and social desirability. Accordingly, the present findings should be interpreted as preliminary evidence of validity rather than as definitive confirmation of the scale's psychometric properties. Although CFA supported the five-factor model after item reduction to 15 indicators, we did not conduct cross-validation in an independent sample. Discriminant validity was not fully supported by MSV for Guilt, Shame, and Moral Conflicts, and we did not assess test–retest reliability, sensitivity to change, or measurement invariance across key subgroups. Because the sample was non-probabilistic and restricted to Puerto Rico, the extent to which the factor structure generalizes to other LGBTQ+ populations and cultural contexts remains to be established. In addition, the present external validation strategy was limited to PTSD symptom severity and Negative Religious Coping; therefore, broader validity evidence involving constructs such as minority stress, internalized stigma, psychological well-being, and other moral injury measures remain to be established.

Future work should: (1) cross-validate the 15-item model and test higher-order/bifactor alternatives; (2) evaluate measurement invariance across subgroups and languages (including an English adaptation) and assess differential item functioning; (3) establish test–retest reliability, clinical cut-points, and responsiveness to intervention; (4) broaden convergent and incremental validity testing by examining associations with minority-stress constructs, internalized stigma, psychological well-being, moral emotions, and other moral injury measures, as well as predictive validity for clinical outcomes; (5) apply IRT to refine items and information functions, enabling short forms and computerized adaptive testing; and (6) develop normative data and interpretive bands for diverse SGM populations.

The LGBT-MIS demonstrates promising structural validity, reliability, and convergent validity as a measure of moral inju-

ry tailored to LGBTQ adults. Its five interrelated facets capture guilt, shame, moral dissonance, religious/spiritual struggle, and self-condernation—core experiences that extend the moral-injury construct beyond military contexts and into the lived realities of sexual and gender minorities. With further validation and cross-cultural testing, the LGBT-MIS can support earlier detection, targeted intervention, and culturally attuned care, advancing both research and practice aimed at reducing moral distress and improving the well-being of LGBTQ communities. For ease of use in future research, the complete final version of the LGBT-MIS, including administration instructions, is presented in Appendix A.

#### ORCID

Juan Aníbal González-Rivera: <https://orcid.org/0000-0003-0622-8308>

Adam Rosario-Rodríguez: <https://orcid.org/0000-0003-1603-5040>

#### AUTHORS' CONTRIBUTION

Juan Aníbal González-Rivera: Conceptualization, Investigation, Writing - Original Draft, Writing - Review & Editing, Visualization, Project administration.

Adam Rosario-Rodríguez: Methodology, Formal analysis, Writing - Original Draft, Visualization.

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#### CONFLICT OF INTEREST

The authors declare that there were no conflicts of interest in the collection of data, analysis of information, or writing of the manuscript.

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This study has been reviewed by Claudia Guevara Cordero and Fernando Joel Rosario Quiroz in double-blind mode. The editor in charge was David Villarreal-Zegarra. The review process is included as supplementary material 1.

#### DATA AVAILABILITY STATEMENT

Researchers and academics interested in accessing the research data may contact the corresponding author via email.

#### DECLARATION OF THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE

The authors used DeepL to translate specific sections of the manuscript and Grammarly to improve the wording of certain sections.

#### DISCLAIMER

The authors are responsible for all statements made in this article.

#### REFERENCES

Ato, M., López-García, J. J. L., & Benavente, A. (2013). Un sistema de clasificación de los diseños de investigación en psicología [A classification system for research designs in psychology]. *Anales de Psicología*, 29(3), 1038–1059. <https://doi.org/10.6018/analesps.29.3.178511>

- Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. *Journal of Traumatic Stress, 28*(6), 489–498. <https://doi.org/10.1002/jts.22059>
- Bohren, M. A., Vazquez Corona, M., Odiase, O. J., Wilson, A. N., Sudhinaraset, M., Diamond-Smith, N., Berryman, J., Tunçalp, Ö., & Afulani, P. A. (2022). Strategies to reduce stigma and discrimination in sexual and reproductive healthcare settings: A mixed-methods systematic review. *PLOS Global Public Health, 2*(7), e0000582. <https://doi.org/10.1371/journal.pgph.0000582>
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). Guilford Press.
- Bryan, C. J., Bryan, A. O., Anestis, M. D., Anestis, J. C., Green, B. A., Etienne, N., Morrow, C. E., & Ray-Sannerud, B. (2016). Measuring moral injury: Psychometric properties of the Moral Injury Events Scale in two military samples. *Assessment, 23*(5), 557–570. <https://doi.org/10.1177/1073191115590855>
- Burnham, K. P., & Anderson, D. R. (2002). *Model selection and multimodel inference: A practical information-theoretic approach* (2nd ed.). Springer.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Psychology Press.
- Champion, D. J. (1981). *Basic statistics for social research* (2nd ed.). MacMillan.
- Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis* (2nd ed.). Lawrence Erlbaum.
- Currier, J. M., Foster, J. D., Witvliet, C. V., Abernethy, A. D., Root Luna, L. M., Schnitker, S. A., VanHarn, K., & Carter, J. (2019). Spiritual struggles and mental health outcomes in a spiritually integrated inpatient program. *Journal of Affective Disorders, 249*, 127–135. <https://doi.org/10.1016/j.jad.2019.02.012>
- Currier, J. M., Isaak, S. L., & McDermott, R. C. (2020). Validation of the Expressions of Moral Injury Scale—Military Version—Short Form. *Clinical Psychology & Psychotherapy, 27*(1), 61–68. <https://doi.org/10.1002/cpp.2407>
- DeVellis, R. F. (2017). *Scale development: Theory and applications* (4th Ed). Sage Publications.
- Doornik, J. A., & Hansen, H. (2008). An omnibus test for univariate and multivariate normality. *Oxford Bulletin of Economics and Statistics, 70*(5), 927–939. <https://doi.org/10.1111/j.1468-0084.2008.00537.x>
- Exline, J. J., Pargament, K. I., Grubbs, J. B., & Yali, A. M. (2014). The Religious and Spiritual Struggles Scale: Development and initial validation. *Psychology of Religion and Spirituality, 6*(3), 208–222. <https://doi.org/10.1037/a0036465>
- Flora, D. B., & Curran, P. J. (2004). An empirical evaluation of alternative methods of estimation for confirmatory factor analysis with ordinal data. *Psychological Methods, 9*(4), 466–491. <https://doi.org/10.1037/1082-989X.9.4.466>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Gaskin, J. (2016). *Stats tools package*. <http://statwiki.gskination.com> (Retrieved September 11, 2025).
- Griffin, B. J., Purcell, N., Burkman, K., Litz, B. T., Bryan, C. J., Schmitz, M., Villierme, C., Walsh, J., & Maguen, S. (2019). Moral injury: An integrative review. *Journal of Traumatic Stress, 22*(3). <https://doi.org/10.1002/jts.22362>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage.
- Herek, G. M. (2007). Confronting sexual stigma and prejudice: Theory and practice. *Journal of Social Issues, 63*(4), 905–925. <https://doi.org/10.1111/j.1540-4560.2007.00544.x>
- Herron, P. D. (2020). Current perspectives on the impact of pre-exposure prophylaxis stigma regarding men who have sex with men in the United States. *HIV/AIDS (Auckland, N.Z.), 12*, 187–192. <https://doi.org/10.2147/HIV.S214380>
- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
- Knekta, E., Runyon, C., & Eddy, S. (2019). One Size Doesn't Fit All: Using Factor Analysis to Gather Validity Evidence When Using Surveys in Your Research. *CBE life sciences education, 18*(1), rm1. <https://doi.org/10.1187/cbe.18-04-0064>
- Koenig, H., Youssef, N., & Pearce, M. J. (2019). Assessment of moral injury in veterans and active duty military personnel with PTSD: A review. *Frontiers in Psychiatry, 10*, 443. <https://doi.org/10.3389/fpsy.2019.00443>
- Li, C.-H. (2016). Confirmatory factor analysis with ordinal data: Comparing robust maximum likelihood and diagonally weighted least squares. *Behavior Research Methods, 48*(3), 936–949. <https://doi.org/10.3758/s13428-015-0619-7>
- Litz, B. T., Lebois, L., Silver, R. C., et al. (2022). Defining and assessing the syndrome of moral injury and developing the Moral Injury Outcome Scale (MIOS). *Frontiers in Psychiatry, 13*, 923928. <https://doi.org/10.3389/fpsy.2022.923928>
- Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review, 29*(8), 695–706. <https://doi.org/10.1016/j.cpr.2009.07.003>
- Litz, B. T., Yeterian, J., Berke, D., Lang, A. J., Gray, M. J., Nienow, T., Frankfurt, S., Harris, J. I., Maguen, S., & Rusowicz-Orazem, L. (2024). A controlled trial of *adaptive disclosure-enhanced* to improve functioning and treat post-traumatic stress disorder. *Journal of Consulting and Clinical Psychology, 92*(3), 150–164. <https://doi.org/10.1037/ccp0000873>
- Maguen, S., Griffin, B. J., Vogt, D., Hoffmire, C. A., Blosnich, J. R., Bernhard, P. A., Akhtar, F. Z., Cypel, Y. S., & Schneiderman, A. I. (2022). Moral injury and peri- and post-military suicide attempts among post-9/11 veterans. *Psychological Medicine, 52*(8), 1491–1500. <https://doi.org/10.1017/S0033291721005274>
- Mantri, S., Lawson, J., Wang, Z., & Koenig, H. (2020). Identifying moral injury in healthcare professionals: The Moral Injury Symptom Scale-HP. *Journal of Religion and Health, 59*(6), 3051–3065. <https://doi.org/10.1007/s10943-020-01065-w>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Nicholson, A. A., Narikuzhy, S., Wolf, J., Pichtikova, M., Siegel, M., Mirabelli, J., Hatchard, T., Hosseini-Kamkar, N., Bawagan, E., Roth, S. L., Mutschler, C., Lanius, R. A., Hosseiny, F., Eckstrand, K., & Lueger-Schuster, B. (2025). Identity in turmoil: Investigating the morally injurious dimensions of minority stress. *European Journal of Psychotraumatology, 16*(1), 2479396. <https://doi.org/10.1080/20008066.2025.2479396>
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion, 37*(4), 710–724. <https://doi.org/10.2307/1388152>
- Park, C. L., Silverman, E. J., Sacco, S. J., Kim, D., Hall, M. E. L., McMartin, J., Kopic, K., Shannonhouse, L., David, A. B., & Aten, J. (2023). When suffering contradicts belief: Measuring theological struggling. *Current Psychology, 1–13*. <https://doi.org/10.1007/s12144-023-04642-w>
- Ren, Z., Howe, C. Q., & Zhang, W. (2018). Maintaining mianzi and lizi: Understanding the reasons for formality marriages between gay men and lesbians in China. *Sexual and Relationship Therapy, 33*(5), 465–482. <https://doi.org/10.1177/1363461518799517>
- Rhemtulla, M., Brosseau-Liard, P. É., & Savalei, V. (2012). When can categorical variables be treated as continuous? A comparison of robust continuous and categorical SEM estimation methods under suboptimal conditions. *Psychological Methods, 17*(3), 354–373. <https://doi.org/10.1037/a0029315>
- Satorra, A., & Bentler, P. M. (2001). A scaled difference chi-square test statistic for moment structure analysis. *Psychometrika, 66*(4), 507–514. <https://doi.org/10.1007/BF02296192>
- Schumacker, R. E., & Lomax, R. G. (2010). *A beginner's guide to structural equation modeling* (3rd ed.). Erlbaum.
- Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. Guilford Press.
- Tappenden, P. C., Cole, T. A., Valentine, J. N., & Lilly, M. M. (2024). Examining the psychometric properties of the Expressions of Moral Injury Scale in a sample of first responders. *Psychological Trauma: Theory, Research, Practice, and Policy, 16*(8), 1319–1328. <https://doi.org/10.1037/tra0001569>
- Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). *The PTSD Checklist for DSM-5 (PCL-5)*. National Center for PTSD.
- Wilson, F. R., Pan, W., & Schumsky, D. A. (2012). Recalculation of the critical values for Lawshe's content validity ratio. *Measurement and Evaluation in Counseling and Development, 45*(3), 197–210. <https://doi.org/10.1177/0748175612440286>
- Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample Size Requirements for Structural Equation Models: An Evaluation of Power, Bias, and Solution Propriety. *Educational and psychological measurement, 76*(6), 913–934. <https://doi.org/10.1177/0013164413495237>

**LGBT Moral Injury Scale (Spanish version)**

**Instrucciones:** Las siguientes afirmaciones preguntan cómo se siente respecto de usted mismo/a/e y de su vida. Algunos ítems se refieren a identidad, relaciones, espiritualidad/religión y valores personales. Indique cómo se siente ahora mismo frente a cada afirmación, seleccionando un solo número. No hay respuestas correctas ni incorrectas. Responda todos los ítems.

**Escala de respuesta (1–6):**

- 1 = Totalmente en desacuerdo
- 2 = En desacuerdo
- 3 = Algo en desacuerdo
- 4 = Algo de acuerdo
- 5 = De acuerdo
- 6 = Totalmente de acuerdo

	1	2	3	4	5	6
1. Me siento culpable por no cumplir con las expectativas de mi familia.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Me siento culpable por no ser heterosexual o cisgénero.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Me siento culpable por ser quien soy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Si las personas supieran mi orientación sexual o identidad de género, tendrían una opinión más negativa de mí que la que tienen ahora.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Siento vergüenza de mi orientación sexual o identidad de género.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Me avergüenza hablar en público sobre mi orientación sexual o identidad de género.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Por mis principios, desearía cambiar mi orientación sexual y/o identidad de género.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Desde el punto de vista moral, ser heterosexual y cisgénero es lo moralmente correcto.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Disfruto mi sexualidad, pero reconozco que no es moralmente correcto.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Me pregunto qué hice para que Dios me castigue.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Siento que Dios me castiga por mi orientación sexual y/o identidad de género.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Me pregunto si Dios me ha abandonado.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. En ocasiones, me siento inútil.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. En ocasiones, siento que no sirvo para nada.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. En general, me inclino a sentir que soy un fracaso.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Note.** The authors of the LGBT Moral Injury Scale hereby place the Spanish version of the instrument in the public domain to encourage its use in clinical practice and research. Therefore, no formal permission is required for its reproduction or use by third parties, beyond appropriate citation of the present article.