

# Validation of the French version of the Gender Ideology and LGBTQ+ Lobby Conspiracies (GILC) scale in an African highly heteronormative context

Gustave Adolphe Messanga<sup>1,\*</sup>, Hermann Kevin Ekango Nzekaih<sup>1</sup>, Monique Pélagie Tsogo À Bebouraka<sup>2</sup>,  
Achille Vicky Dzuetsou Mouafo<sup>1</sup>, Sylvestre Nzeuta Lontio<sup>1</sup>

<sup>1</sup> Department of Philosophy-Psychology-Sociology, University of Dschang, Dschang B.P. 49, Cameroon

<sup>2</sup> Department of Psychology, University of Yaoundé 1, Yaoundé B.P. 755, Cameroon

\* **Corresponding author:** Gustave Adolphe Messanga, [messangaadolphe@gmail.com](mailto:messangaadolphe@gmail.com)

## CITATION

Messanga GA, Ekango Nzekaih HK, Tsogo À Bebouraka, MP, et al. (2025). Validation of the French version of the Gender Ideology and LGBTQ+ Lobby Conspiracies (GILC) scale in an African highly heteronormative context. *Applied Psychology Research*. 4(2): 3965. <https://doi.org/10.59400/apr3965>

## ARTICLE INFO

Received: 2 October 2025

Revised: 11 November 2025

Accepted: 14 November 2025

Available online: 10 December 2025

## COPYRIGHT



Copyright © 2025 Author(s).  
*Applied Psychology Research* is published by Academic Publishing Pte. Ltd. This work is licensed under the Creative Commons Attribution (CC BY) license. <https://creativecommons.org/licenses/by/4.0/>

**Abstract:** The conspiracy narrative surrounding the LGBTQ+ community is based on the belief in the existence of a gay lobby whose hidden agenda (the gay agenda) aims to destroy societal norms, institutions, and traditional values through the indoctrination of minors and the disruption of the natural/moral order. To study this little-explored conspiracy, the GILC scale was constructed and validated in an Italian context. However, this scale: 1) is only available in English; 2) has been validated only in a Western context, in a field where literature reports that context can impact not only the susceptibility to believe in certain conspiracies, but also the elements of a conspiracy that are highlighted; and 3) presents, moreover, a potential lack of content and factorial validities, linked to the fact that its conceptors present it as a unidimensional measure when it actually measures two conspiracies, therefore potentially two distinct constructs. To fill these gaps, this study evaluates the factorial structure of the French version of this measure in two independent samples of heterosexual people of Cameroonian nationality (N = 864). The first (n1 = 361, M = 22.86 ± 2.65 years) reported an exploratory unidimensional structure with 7 items of the original version measure, which contains 9 items; excluding items 3 and 5, relating to gender ideology conspiracy, which had very low factor loadings and therefore did not meet the recommended threshold. The second (n2 = 503, M = 23.60 ± 4.77 years) confirmed this unidimensional structure presenting an excellent fit. We concluded that this version of the GILC scale, which exclusively assesses the LGBTQ+ lobby conspiracy, is reliable.

**Keywords:** GILC scale; conspiracy theories; gender ideology conspiracy; LGBTQ+ lobby conspiracy; Cameroon

## 1. Introduction

Conspiracy theories can be defined as attempts to explain the ultimate causes of important political and social events and circumstances, highlighting secret plots hatched by two or more powerful actors (Douglas et al., 2019). Often linked to specific events, as in the case of the recent Covid-19 pandemic (Gökalp et al., 2025), these theories are the subject of progressive documentation in a field of knowledge that has undergone significant development in recent years (see Biddlestone et al., 2025; Douglas et al., 2024; Douglas and Sutton, 2025 for some reviews of the available literature). Despite this significant growth, a number of their aspects remain underexplored. This is the case of the conspiracy involving the LGBTQ+ community, on which the first systematic research is very recent (see Bettinsoli et al., 2022;

De Cristofaro et al., 2025; Dzuetso Mouafo, 2023; Dzuetso Mouafo et al., 2023; Gkinopoulos et al., 2024; Jaśkiewicz, 2024; Jolley et al., 2024; Panerati and Salvati, 2025; Salvati et al., 2023, 2024; Valsecchi et al., 2025). However, even if this specific conspiracy belief shares common features with general conspiracy beliefs (the presence of an elite opposed to the heterosexual majority; a secret dimension; and an aspect linked to power), it remains that it refers to a specific phenomenon, with unique characteristics, such as its belief content and the targeting of a particular group of people (Panerati and Salvati, 2025). As such, the LGBTQ+ conspiracy belief should therefore benefit from increased academic interest. It is in this perspective that the present research is situated.

The belief in the LGBTQ+ conspiracy is based on the idea that there exists a gay lobby whose objective is to destroy societal norms, institutions, and traditional values through the indoctrination of minors, the disruption of the natural/moral order, and an ideology based on the controversial “gender theory” (Salvati et al., 2023, 2024). In this vein, LGBTQ+ people represent a threat to the social and moral order, because they would be actors in a vast conspiracy against the community, moral, and ideological values on which societies and communities, generally heteronormative (Gulevich et al., 2018), are based (Dzuetso Mouafo et al., 2023). Empirical research conducted in recent years has provided support for the hypothesis of the existence of this conspiracy and is gradually revealing its consequences on the treatment of LGBTQ+ people in the societies where they live (see Dzuetso Mouafo et al., 2023; Salvati et al., 2023; Tsogo À Bebouraka et al., 2024), including those where progress in their favor can be noted in national legislation (see Salvati and Koc, 2022). These studies were, for the most part, conducted using the very first measurement scale dedicated to the analysis of this conspiracy: the Gender Ideology and LGBTQ+ lobby Conspiracies (GILC) scale (Salvati et al., 2023).

The GILC scale is an instrument for measuring beliefs in conspiracies related to gender ideology and the LGBTQ+ lobby. Despite measuring two conspiracies, it is a monofactorial scale. It consists of nine (9) items covering the most important themes of conspiracy beliefs (presence of a conspiratorial elite against the majority of people, i.e., heterosexual people; dimension relating to the secrecy of the conspiracy; and aspects relating to the power and malevolent scope of the conspiracy, such as spreading gender ideology; Salvati et al., 2023). Validation data for this scale indicate that it has a good internal consistency index ( $\alpha = 0.96$ ;  $\Omega = 0.96$ ), and it does not overlap with specific or general aspects of general conspiracy content, willingness to engage in the conspiracy mindset, or existing measures of sexual prejudice and negative attitudes toward members of the LGBTQ+ community. Furthermore, these data report that high GILC scores are predicted by several variables associated, by the literature, with conspiracy beliefs and sexual prejudices (religiosity or high social dominance orientation, for example).

Despite its undeniable metrological qualities, the GILC scale: 1) exists only in the English language, which prevents its administration to individuals who do not speak this language; 2) presents a potential lack of content and factorial validities, linked in particular to the fact that it is presented as a monofactorial scale, whereas it evaluates

two conspiracies, therefore two different constructs; and 3) it has so far only been tested in a Western context, since the few studies conducted outside this sociocultural context (Dzuetso Mouafo et al., 2023; Tsogo À Bebouraka et al., 2024) that have used it have not validated it within the prescribed psychometric standards. However, the specialized literature reports that conducting validation studies of the psychometric properties of scales in different languages is crucial for the measurement of conspiracy beliefs (see Stojanov and Hannawa, 2023). Moreover, cultural context is an important factor in the validation of a measurement instrument. This reality is all the more important in a field where literature reports that context can impact not only the susceptibility to believe in certain conspiracies, but also the elements of a conspiracy that are highlighted (Schlippak et al., 2021). In the specific case of the LGBTQ+ conspiracy, existing research suggests that despite the universality of this conspiracy (see Friedersdorf, 2012 in the American context; Salvati et al., 2023 in the European context; and Dzuetso Mouafo, 2023 in the African context), it remains that each context can highlight certain of its aspects. For example, analysis conducted in the Cameroonian context (Dzuetso Mouafo et al., 2023) highlights specific sociocultural dimensions. Hence, the interest of the present research which proposes a validation of the French version of the GILC scale in an African context.

### **1.1. Cultural context of adaptation of a measuring instrument and responses to items**

Cultures consist of shared constructions, representations, and beliefs that emanate from social interactions between groups of individuals who share overlapping social spaces (White, 2002). Indeed, cultural differences can explain the divergences in individuals' opinions, perceptions, judgments, and responses to a test. To explain how culture can impact responses to questionnaire items, Hofstede (2001) argues that in individualist cultural contexts, the tendency to acquiesce—which corresponds to respondents' inclination toward positive answers (yes vs. no, and true vs. false)—may be less common, since maintaining harmony is less emphasized. In contrast, individuals belonging to collectivist cultures are more subject to social pressures and, therefore, this tendency is weak among them.

The contextualization of Western models in traditional societies, such as African societies, is often questioned because they are considered poorly adapted to local cultures and these societies' practical needs (Trommsdorff and Dasen, 2001). This is why it is important to culturally adapt test items. This process aims to take culturally idiosyncratic aspects into account. In this process, one must be aware that the language of translation—an element through which a culture is expressed and transmitted—can impact the meaning of the items. Indeed, the meaning of a word or statement/item may no longer be equivalent in the two languages or cultures; this can discriminate between the groups tested. In addition to the language in which the items are translated, several items may contain or induce stereotypes and prejudices toward certain groups, such as LGBTQ+ people, if, for example, the items are adapted and addressed to individuals living in a heteronormative cultural context, as is the case in the present study (see Dzuetso Mouafo et al., 2023). Thus, participants' responses to the items may emanate

from cultural stereotypes shared in their environment; the cultural context may impact these responses or the way they use the response scales (see <https://globaledge.msu.edu/global-resources/resource/30212>). Ultimately, this could impact the internal structure of the measurement instrument administered outside the cultural context in which it was designed.

The dimensionality of a test or set of items is often difficult to judge. It is possible, in theory, to select items to measure a single dimension (Juhel, 1999), as is the case with Salvati et al.'s (2023) GILC scale. But, in practice, the picture is simple, because the dimensionality of a dataset, a model or a test depends fundamentally on the theory that underpinned its development, the internal elements of the test (items), and the characteristics of the respondents (Davis et al., 2019; Johnson et al., 2005). In this sense, individual factors (procedural choices, accuracy, level of anxiety and motivation, cultural beliefs, etc.) can influence participants' responses to items. Thus, some items may be more sensitive to individual differences than others. This is why the items and individuals' characteristics produce a set of data whose dimensionality must be systematically tested (see Hambleton and Rovinelli, 1986; Hambleton et al., 1991). It can also be noted that a certain heterogeneity can be found at the level of the nature of the items and their impact on the dimensionality of the test. In view of all these elements, this study questions the content of the items of the GILC scale in order to test its structure, in an African cultural, social and legal highly heteronormative context, therefore different, to a certain extent, from the context of its initial validation (see Dzuetso Mouafo et al., 2023). It adapts the GILC scale in this context and, in particular, tests its monofactorial structure (see Salvati et al., 2023), with regard to the content analysis of this instrument which measures two conspiracies: one relating to gender ideology and the other relating to the LGBTQ+lobby.

## **1.2. Conspiracy beliefs about LGBTQ+ people in an African highly heteronormative context: The case of Cameroon**

In Cameroon, a sub-Saharan African country where homosexuality is a criminal offense (see Article 347-1 of the Cameroonian Penal Code), the belief in a LGBTQ+ lobby conspiracy is rooted in the politicization of sexuality (Awondo, 2010). This politicization of sexuality, which specifically affects political, administrative, and economic elites, was brought to the public arena by the publication, in 2006, of a list of high-ranking figures accused of homosexual practices (see Machikou, 2009). According to Awondo (2010), these accusations were more motivated by political or economic objectives than sexual ones, in a sociopolitical and economic context characterized by the impoverishment of the popular masses, who pointed the finger at the responsibility of a corrupt elite that misappropriated public funds. This elite was accused of using its power and privileges to force individuals seeking recruitment or promotion to engage in homosexual practices in exchange for its intervention (Dzuetso Mouafo et al., 2023). This homosexuality, perceived not as sexual, but "political" (see Menguele Menyengue, 2016), is considered the most pernicious form of sexuality, practiced by a supposedly depraved and corrupt elite (Tsogo À Bebouraka et al., 2024) engaging in immoral acts. In this context, the thesis defended by Geschiere and Orock

(2021) is that the stigmatization of governing elites, due to their alleged homosexual practices, can be understood as a challenge to a model of governance whose most visible results are, on the one hand, elites' illicit enrichment, and on the other hand, popular masses' increased impoverishment. These authors indicate that according to the popular masses, in addition to acts of predation on public wealth, these elites would have created an *anusocratie* (see Geschiere and Orock, 2021), i.e., a rule of the anus (Hendriks, 2024), situated in a postcolonial conspiratorial perspective (Orock and Geschiere, 2024). *Anusocratie* refers to the perception of the anus as a source of wealth and power within circles of power and money, to humiliate and subjugate individuals seeking social advancement, particularly within a public administration where homosexuality would exist since the 1950s (Pigeaud, 2011).

The thesis that homosexual practices have been an important lever for the recruitment and promotion of individuals within the Cameroonian public administration for decades constitutes the cornerstone of the belief in the existence of a LGBTQ+ lobby conspiracy. This allegation allows for the public trial of homosexuality, against a backdrop of criticism of the neocolonial state and highlighting colonial responsibility in the moral degradation of society (Awondo, 2010). In this vein, popular imagery invokes the name of the French medical doctor and politician Louis Paul Aujoulat. For decades, in fact, this homo-Masonic (homosexual and Freemason) personality has crystallized the debate around the alleged link between political and administrative elites' membership in esoteric circles in general, and Freemasonry in particular, and their inclination for homosexual practices. It is widely believed that this personality would be the initiator of membership in Western esoteric brotherhoods (Freemasonry, Rosicrucians or Illuminati for example) of the local elites who were to take over from the French colonizers after independence (see Nken, 2014). This is particularly fueled by the allegation that Freemasonry would impose the ritual of anal penetration on its new initiates (Geschiere, 2024). In this context, certain homophobic discourses shared within Cameroonian public opinion are fueled by beliefs in the ritual and initiation uses of homosexuality (see Roxburgh, 2019), which would be related to an occult practice (Menguele Menyengue, 2016), witchcraft (Biligha Tolane, 2018), or a form of vampirism (Menguele Menyengue, 2014).

In the same vein, because the popular masses consider that Cameroonian political and administrative elites make access to employment and promotions conditional on individuals' adherence to homosexual practices, they believe that there is a plot hatched by these elites, holders of power, to convert heterosexuals, whose socioeconomic situation is precarious, to homosexual practices (Machikou, 2009). Thus, homosexual acts, or more simply sodomy, would have no link with the search for pleasure or people's sexual orientation. They would be more in the perspective of a pact of domination and submission (Menguele Menyengue, 2016), by which the powerful would exchange their intervention in the lives of the powerless, to give them access to money, a job or a promotion, against anal penetration, conceived as a ritual practice supposed to make the powerful acquire more authority, power and domination (Menguele Menyengue, 2016) relying on the vital energy they allegedly drew from the powerless through the sodomitic act (see Tonda, 2016). These conspiracy beliefs of

an esoteric nature contribute to catalyzing popular homophobia (Lado, 2011), i.e., all forms of stigma and discrimination based on sexual and gender characteristics faced by gender diverse individuals (Lamontagne et al., 2025); making their situation dangerous, since they make them the targets of various violence (see Dzuetso Mouafo et al., 2023). From a certain point of view, this homophobic violence appears as the consequence of heterosexual people’s reaction to the anomic and realistic threats that LGBTQ+ people represent for their way of life, viscerally opposed to an antisocial, anti-kinship, and anti-procreative sexuality like homosexuality (Ndjio, 2020). This specificity of conspiracy beliefs relating to the LGBTQ+ community in Cameroon distinguishes them from similar beliefs analyzed in the Italian context by Salvati et al. (2023). They therefore justify, from our point of view, the need to translate and validate these authors’ psychometric measurement in the Cameroonian context.

## 2. Study 1: French translation of the GILC scale and exploratory factor analysis (EFA)

### 2.1. Method

#### 2.1.1. Participants

The initial data collection involved 361 participants ( $n_{Men} = 166$ ,  $n_{Women} = 195$ ;  $Mean_{age} = 22.86$  years ( $SD = 2.653$ )). Inclusion criteria were: a) self-identifying as male or female; b) self-identifying as exclusively heterosexual; and c) being of Cameroonian nationality. Participants included in the sample voluntarily consented to participate in the research. This initial sample allowed us to verify whether the original one-factor structure of the GILC scale remained the same in the context of this study. From an ethics perspective, we submitted our protocol to the National Ethics Committee for Human Health Research, for validation. The Committee informed us that it was not competent to grant ethical clearance for studies outside the health field. Consequently, we had our protocol validated by the Department of Philosophy-Psychology-Sociology at the University of Dschang, and proceeded with our investigations without further hindrance.

**Table 1** presents the sociodemographic characteristics of this sample (Study 1, EFA sample).

**Table 1.** Sociodemographic characteristics of the samples (Studies 1 and 2).

Characteristics of samples		Study 1 (EFA sample, n1 = 361)		Study 2 (CFA sample, n2 = 503)		Overall samples (N = 864)	
		n	%	N	%	n	%
1. Sexual orientation	a) Heterosexual	361	100	503	100	864	100
	b) LGBTQ+	0	0	0	0	0	0
2. Gender	a) Men	166	45.98	268	53.28	434	50.23
	b) Women	195	54.02	235	46.72	430	49.77
3. Matrimonial status	a) Married	24	6.65	61	12.13	85	9.84
	b) Single	337	93.35	442	87.87	779	90.16
4. Age	a) Minimum	21	-	20	-	20	-
	b) Maximum	55	-	60	-	60	-
5. Socio-professional status	a) Workers	37	10.25	88	17.49	739	85.53
	b) Unemployed	324	89.75	415	82.50	125	14.47
6. Economic status	a) Rich	25	6.92	130	25.84	155	17.94
	b) Poor	118	32.68	179	35.58	297	34.37
	c) Middle class	218	60.38	194	38.57	412	47.68

Note: EFA: Exploratory Factorial Analysis; CFA: Confirmatory Factorial Analysis.

### 2.1.2. Measurement and procedure for adapting GILC in the Cameroonian context

Multilingual studies generally use successive translation. Following this process, three options can be taken. These are: 1) *application*, which is the literal translation of the instrument items; 2) *adaptation*, which may require translation and/or reformulation of the instrument items to ensure the inclusion of culturally idiosyncratic expressions of the construct; and 3) *assembly*, which requires aspects of the construct that are salient for certain cultures but are not covered in the instrument. An adaptation is equivalent to the literal translation of some of the items and/or changes in other items and/or the creation of new items. The choice of translation option has implications for the expected level of equivalence (see Boateng et al., 2018). This study opted for adaptation.

There are four techniques for adapting measurement instruments (back translation, bilingual technique, committee approach, and pretest). The translation of the GILC scale from English to French followed the procedure for cross-cultural validation of questionnaires suggested by the International Test Commission (2017) and Churchill’s (1979) model. This research obtained the tacit approval of Salvati et al. (2023), the conceptors of this scale, who suggested that future studies enrich research on LGBTQ+ conspiracy beliefs in order to increase gender equality and build a more inclusive society. This study, which used the standardized procedure of “back-translation”, is based on this perspective. In this logic, the 9 items of the GILC scale were first translated independently from English to French and from French to English (version not validated in the present research) by a bilingual translation specialist. Then, independently, two bilingual translators judged the concordance between the elements of the GILC scale and their facade validity. Finally, an expert in social psychology validated the French version obtained (see **Table 2**), in accordance with the English version. The response format proposed to the participants is a 7-point Likert scale, ranging from 1 (Strongly disagree) to 7 (Strongly agree).

**Table 2.** Description of the 7-items of the French version of the GILC.

Structure of the French version of GILC		FL	M	SD	$\omega$	$\alpha$	MSA	U <sup>2</sup>
	Item content							
GILC1	Un groupe organisé de personnes LGBTQ+ œuvre pour plus de pouvoir, se cachant derrière les revendications pour plus de droits. <i>An organized group of LGBTQ+ people works for more power, hiding behind the demand for more rights.</i>	0.650	4.91	1.45	0.801	0.802	0.879	0.57
GILC2	Il existe des personnes LGBTQ+ très puissantes qui parviennent à influencer les décisions du parlement et du gouvernement, au détriment des autres citoyens. <i>There are very powerful LGBTQ+ people who manage to influence the decisions of the Parliament and the Government, to the detriment of other citizens.</i>	0.645	5.13	1.37	0.802	0.802	0.873	0.58
GILC4	Un groupe de personnes LGBTQ+ s’est organisé pour infiltrer tous les principaux secteurs de la société, afin d’accroître leur influence sur elle. <i>A group of LGBTQ+ people has organized to infiltrate all major sectors of society to increase their influence on it.</i>	0.671	4.93	1.39	0.798	0.799	0.890	0.54
GILC6	Un groupe organisé de personnes LGBTQ+ travaille pour obtenir plus de pouvoir ; se cachant derrière la demande pour plus de droits. <i>An organized group of LGBTQ+ people works for more power, hiding behind the demand for more rights.</i>	0.630	4.97	1.38	0.804	0.805	0.889	0.55

**Table 2.** *Cont.*

Structure of the French version of GILC		FL	M	SD	$\omega$	$\alpha$	MSA	U <sup>2</sup>
	Item content							
GILC7	Les personnes LGBTQ+ veulent utiliser les lois et les tribunaux pour imposer une vision politique précise du monde. <i>LGBTQ+ people want to use laws and courts to impose a precise political view of the world.</i>	0.608	4.93	1.33	0.807	0.808	0.882	0.52
GILC8	Il existe des tentatives concrètes de propagande dans les écoles pour tromper les enfants et leur permettre de décider s'ils veulent être un homme ou une femme, comme ils le souhaitent. <i>There are concrete propaganda attempts in schools to plagiarize children and allow them to decide whether to be male or female as they wish.</i>	0.601	5.05	1.42	0.808	0.809	0.885	0.58
GILC9	Les personnes LGBTQ+ veulent promouvoir des lois pour se favoriser économiquement, professionnellement et socialement, au détriment des personnes hétérosexuelles. <i>LGBT people want to enact laws to favour themselves economically, professionally, and socially, to the detriment of heterosexual people.</i>	0.655	5.08	1.36	0.800	0.801	0.886	0.57
<b>Items excluded from the scale</b>								
GILC5	Il y a des personnes qui se sont organisées pour renverser l'ordre naturel des choses à travers « l'idéologie du genre ». <i>There are people who have organized themselves to subvert the natural order of things through 'gender ideology'.</i>	0.011 <0.40	4.81	1.52				
GILC3	Certaines personnes très puissantes veulent propager « l'idéologie du genre » dans les écoles pour endoctriner les enfants. <i>Some very powerful people want to spread 'gender ideology' in schools to indoctrinate children.</i>	-0.097 <0.40	4.92	1.41				

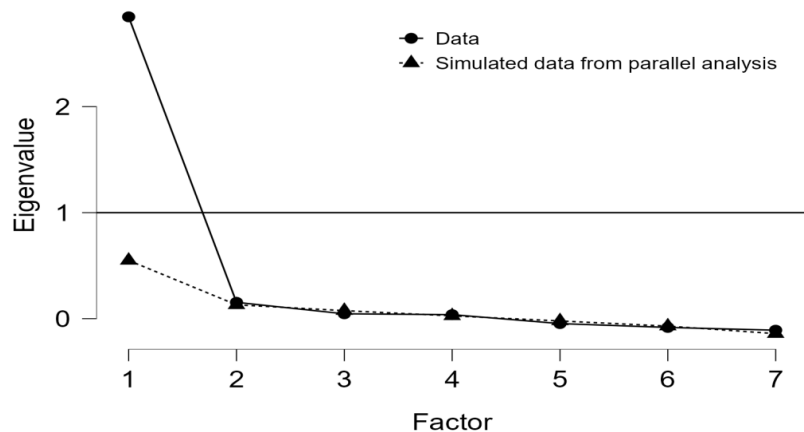
Note: GILC: Gender ideology and LGBTQ+ lobby Conspiracies; FL: Factor Loadings; M: Means; SD: Standard Deviation; MSA: Measure of Sample Adequacy; U<sup>2</sup>: Item's unique variance.

## 2.2. Results

### Exploratory factor analyses (EFA)

The internal structure of the GILC scale was explored by conducting an EFA on the first subsample (Table 1; n1 = 361). The EFA was performed using JASP.0.19.2. To make the results comparable, we used the principal axis factoring (PAF) method with oblique rotation (Oblimin), as it assumes a correlation between the scale items. Table 2 presents factor loadings, means and standard deviations, reliability and sampling adequacy indices, and eigenvalues of the items. The scores for each item ranged from 1 (low adherence to the GILC beliefs) to 7 (high adherence to the GILC beliefs). We observed that the means (standard deviations) were high and above the average of 3.5 for all items, as they ranged between 4.91 ( $\pm 1.45$ ) and 5.13 ( $\pm 1.37$ ). Regarding the uniqueness values, the seven items showed specific variance proportions not explained by the unidimensional structure of the scale, which ranged between 0.52 and 0.58 (<0.60). The examination of the GILC scale factor structure was performed by applying an EFA with a PAF method, due to its robustness, and Oblimin rotation. The analyses suggested removing items 3 and 5, which had very low factor loadings (i.e., 0.011 and -0.097 respectively) and therefore did not meet the recommended threshold (0.40) (Boateng et al., 2018). Indeed, the PAF method and Oblimin rotation revealed that these removed items were not positively related to the GILC scale, and that they assessed purely manifest aspects of the gender ideology conspiracy. After excluding these two items from the analysis, a new EFA indicated a unidimensional structure of 7 items. The factor loadings of these items range from 0.601 to 0.671 (Table 2), which justified the relevance of these items for the scale (see Broc and Loyal, 2016).

The Kaiser-Meyer-Olkin index and Bartlett's test of sphericity were used to ensure that the scale is suitable for factor analysis. For this purpose, the KMO index value was above 0.70 (KMO = 0.883, with item sampling adequacy measures ranging between 0.873 and 0.890), and the Bartlett's  $\chi^2$  value ( $\chi^2 = 701.492$ ,  $df = 21$ ;  $p < 0.001$ ) was significant (Loyal, 2016). The extraction of the latent factors of the GILC scale was based on the fixed number of factors with eigenvalues  $\geq 1$  (see Bourque et al., 2006; Loyal, 2016). The total variance explained by the factor model was estimated at 40.70%, with an eigenvalue of 3.438 and factor loadings ranging between 0.601 and 0.671 (see Raykov and Marcoulides, 2011). Items that accurately represent the latent construct and provide significant results are retained based on factor loadings that must be greater than or equal to 0.40 (see Boateng et al., 2018; Nunnally, 1978). Following these analyses (KMO, Bartlett's  $\chi^2$  value, eigenvalues, proportion of the total variance explained and factor loadings) the results yielded a unidimensional scale with a satisfactory factor structure, consisting of 7 valid and reliable items (**Figure 1**).



**Figure 1.** Parallel analysis scree plots.

As shown in **Figure 1**, parallel analysis suggested retaining one factor with an eigenvalue from the sample data greater than that produced by the simulated data (see Horn, 1965; Lautenschlager, 1989). Both the Kaiser Criterion and parallel analysis yielded the scree plot of the items (Cattell, 1966). All these results provide preliminary parameters supporting a unidimensional structure for the French version of the GILC scale. Thus, this scale captures the LGBTQ+ lobby conspiracy. Cronbach's alpha ( $\alpha$ ), McDonald's Omega ( $\omega$ ), Lambda 2 ( $\lambda_2$ ), and Guttman's reproducibility coefficient ( $\rho$  or  $\rho$ ) coefficients were used to test the reliability of this scale and that of each item. The reliability analysis of each of the 7 items of the GILC scale indicated satisfactory  $\alpha$  (ranging from 0.799 to 0.809) and  $\omega$  coefficients (ranging from 0.798 to 0.808), all above 0.70 (the acceptable threshold). As shown in **Table 3**,  $\alpha$ ,  $\omega$ ,  $\lambda_2$ , and  $\rho$  all indicated excellent values ( $\alpha = 0.827$ ;  $\omega = 0.827$ ;  $\lambda_2 = 0.828$ ;  $\rho = 0.827$ ). These results indicate that each item in this measure captures the LGBTQ+ conspiracy theory with an acceptable level of reliability. The same is true for the overall scale. Regardless of the reliability index calculated, the reliability level of this version of the scale is high ( $>0.80$ ).

**Table 3.** EFA’s indices of the unidimensional structure and Scale reliability statistics of the GILC.

KMO	$\chi^2$ -Bartlett	Df	<i>p</i>	EV
0.883	701.492	21	<0.001	3.438
Coefficient	Study 1 (EFA sample, n = 361)		Study 2 (CFA sample, n = 503)	Overall sample (N = 864)
Coefficient $\omega$	0.827		0.862	0.856
Coefficient $\alpha$	0.827		0.862	0.856
Guttman’s $\lambda_2$	0.828		0.863	0.857
Split-half coefficient rho ( $\rho$ )	0.827		0.886	0.873
AVE	0.520		0.520	0.530

Note: KMO: Kaiser-Meyer-Olkin; EV: EigenValue; df: degree of freedom; AVE: Average Variance Extracted; EFA: Exploratory Factorial Analysis; CFA: Confirmatory Factorial Analysis.

The structure of the scale was then subjected to confirmatory and validity analyses on a second sample (see Study 2). This is because the literature recommends, in the process of scale validation, that EFA be performed on one sample and confirmatory factor analysis (CFA) on another sample (see Corbière, 2014; Jackson et al., 2009; Osborne and Fitzpatrick, 2012; Thompson, 2004). This recommendation formed the basis for the second study. These results support a one-dimensional structure, as represented by the item scree plot (see **Figure 1**).

### 3. Study 2: Confirmatory factor analysis (CFA), reliability and validity of the French version of the GILC scale

The objective of this study was not limited solely to testing the confirmatory factor structure of the French version of the GILC scale. The study also established some evidence of the validity of this scale. To achieve this objective, it followed the following steps:

Firstly, the study tested the factor structure of the GILC scale using JASP.0.19.2, examining the factor loadings and the goodness of fit of the unidimensional factor model to the empirical data. It also assessed the reliability and convergent validity of this scale, by calculating, respectively, the internal consistency indices (Cronbach’s alpha, McDonald’s Omega, Guttman’s Lambda 2 and Rho) and the average variance extracted (Fornell and Larcker, 1981);

Secondly, in order to determine whether the French version of the GILC scale is sensitive to a given context or social category, the study analyzed multi-group invariances (configural, metric, scalar and strict) across participants’ gender (men vs. women), economic status (rich vs. poor vs. middle class), and socio-professional status (employed vs. unemployed);

Thirdly, to establish construct validity, we related the GILC scale to conspiracy mentality and generic conspiracy beliefs. We also investigated the relationships between the GILC scale and other variables including perceived anomic threat, negative emotions experienced (fear, disgust, and hatred), ideology of survival, perceived economic inequality, daily discrimination, and intention to engage in anti-LGBTQ+ collective action; constructs linked by literature to attitudes toward LGBTQ+ people in

an African context notably (see Dzuetso Mouafo, 2023; Dzuetso Mouafo et al., 2023; Tsogo À Bebouraka et al., 2024);

Fourthly, the study explained the variation in conspiracy beliefs related to gender ideology and the LGBTQ+ lobby, highlighting the sociodemographic variables (gender, age, marital status, socioeconomic status, and socio-professional status) of 503 participants. Furthermore, it analyzed perceived anomic threat, perceived economic inequality, and ideology of survival as other factors likely to influence conspiracy beliefs related to gender ideology and the LGBTQ+ lobby. All of this was done within the framework of linear regression, which also allowed for the study of the direct consequences of conspiracy beliefs related to gender ideology and the LGBTQ+ lobby, attempting to explain anti-LGBTQ+ attitudes and behaviors (emotions, tendency toward anti-LGBTQ+ discrimination, and intention to engage in anti-LGBTQ+ collective action, for example).

### 3.1. Method

#### 3.1.1. Participants

The characteristics of the participants in the second study are presented in **Table 1**. They were selected using the same inclusion criteria as those in Study 1, and the same ethical standards as in Study 1 were applied to them. This sample allowed for testing the confirmatory factor structure, reliability, and validity of the GILC scale. The same measures taken in study 1 were implemented to ensure research ethics in this study.

#### 3.1.2. Measures

Participants' characteristics, such as gender (1 = male; 2 = female), sexual orientation (1 = heterosexual; 2 = LGBTQ+), age, and economic status (1 = rich; 2 = poor; 3 = middle class) were assessed to test the invariance and predictive validity of the French version of the GILC scale. Several other variables were also collected by various measures presented below. They all adopt the 7-point Likert-type response format, ranging from 1 (Strongly disagree) to 7 (Strongly agree). These measures were as follows:

- The French version of the GILC scale, translated and validated following the first data collection for this research. In accordance with the EFA results presented above (see Study 1), this 7-item scale evaluates the Gender ideology and LGBTQ+ lobby conspiracy beliefs ( $\alpha = 0.862$ , 95% CI = 0.843, 0.880;  $\omega = 0.862$ , 95% CI = 0.842, 0.879). The exploratory factor structure is acceptable (KMO = 0.857; FL = 0.651, 0.730; Variable proportion = 47.10%);
- The Conspiracy Mentality Questionnaire (Bruder et al., 2013), which assesses conspiracy mentality among participants ( $\alpha = 0.746$ , 95% CI = 0.706, 0.780;  $\omega = 0.745$ , 95% CI = 0.710, 0.781). This measure has acceptable properties (KMO = 0.693; FL = 0.500, 0.807; Variable proportion = 44.60%);
- The Generic Conspiracist Beliefs scale (Brotherton et al., 2013), which measures conspiracy beliefs in general ( $\alpha = 0.831$ , 95% CI = 0.805, 0.854;  $\omega = 0.832$ , 95% CI = 0.808, 0.856). The items form an acceptable unidimensional structure (KMO = 0.806; FL = 0.688, 0.816; Variable proportion = 55.70%);

- The Perceived Anomie Scale (Teymoori et al., 2016), assesses two dimensions of perceived societal anomie (global scale,  $\alpha = 0.900$ , 95% CI = 0.885, 0.913;  $\omega = 0.900$ , 95% CI = 0.886, 0.913). The first concerns the perceived fracture of social structure ( $\alpha = 0.842$ , 95% CI = 0.817, 0.865;  $\omega = 0.842$ , 95% CI = 0.819, 0.866), while the second assesses the perceived fracture of leadership ( $\alpha = 0.859$ , 95% CI = 0.836, 0.879;  $\omega = 0.860$ , 95% CI = 0.839, 0.881). The overall structure of this scale complies with psychometric standards (KMO = 0.806; FL = 0.688, 0.816; Variable proportion = 55.70%);
- Negative emotions toward LGBTQ+ people were measured using a scale inspired by Giner-Sorolla and Russell (2019) and Hodson et al. (2013). Specifically, this scale assesses fear ( $\alpha = 0.868$ , 95% CI = 0.848, 0.886;  $\omega = 0.870$ , 95% CI = 0.846, 0.892; KMO = 0.808; FL = 0.733, 0.886; Proportion var. = 63.10.70%), disgust ( $\omega = 0.879$ , 95% CI = 0.856, 0.901;  $\alpha = 0.879$ , 95% CI = 0.861, 0.895; KMO = 0.806; FL = 0.688, 0.816; Proportion var. = 55.70%) and hatred ( $\omega = 0.882$ , 95% CI = 0.858, 0.903;  $\alpha = 0.881$ , 95% CI = 0.862, 0.897; KMO = 0.771; FL = 0.755, 0.845; Proportion var. = 65%). The overall scale has good internal consistency indices and factorial indices ( $\omega = 0.932$ , 95% CI = 0.923, 0.941;  $\alpha = 0.932$ , 95% CI = 0.923, 0.940; KMO = 0.923; FL = 0.452, 0.928; Variable proportion = 61.80%);
- The perceived economic inequality scale (Valtorta et al., 2024) was adapted to measure perceived economic inequalities between LGBTQ+ people and heterosexual people ( $\omega = 0.839$ , 95% CI = 0.818, 0.861;  $\alpha = 0.839$ , 95% CI = 0.815, 0.860; KMO = 0.878; FL = 0.525, 0.850; Variable proportion = 56%). These psychometric indicators validate this measure;
- Daily discrimination toward LGBTQ+ people was measured using items inspired by Ulusoy et al. (2023). This measure is reliable ( $\omega = 0.900$ , 95% CI = 0.880, 0.917;  $\alpha = 0.899$ , 95% CI = 0.884, 0.913; KMO = 0.833; FL = 0.759, 0.909; Variable proportion = 69.70%);
- The ideology of survival was assessed using a measure inspired by Adamczyk and Pitt (2009). This measure is reliable ( $\omega = 0.896$ , 95% CI = 0.863, 0.920;  $\alpha = 0.894$ , 95% CI = 0.877, 0.909; KMO = 0.749; FL = 0.831, 0.881; Variable proportion = 74.10%);
- The intention of collective action against LGBTQ+ people was measured using items inspired by the literature on collective action (see Tausch et al., 2011). This measure has acceptable psychometric properties. ( $\omega = 0.893$ , 95% CI = 0.869, 0.913;  $\alpha = 0.892$ , 95% CI = 0.875, 0.907; KMO = 0.778; FL = 0.788, 0.855; Variable proportion = 67.80%).

## 3.2. Results

### 3.2.1. Confirmatory factor analysis (CFA)

Confirmatory analyses (Table 4) were performed using JASP.0.19.2. They applied the Listwise deletion method when handling missing data. Residual covariances were examined and the Bootstrap method was applied to assess the robustness and accuracy of the model. Specifically, skewness values had to be within  $\pm 2$  and kurtosis values within  $\pm 7$  (Curran et al., 1996). The 7 items showed values of skewness between 2.11

and 2.61 and kurtosis between 3.30 and 5.14.

**Table 4.** CFA's parameter of the one-factor model of 7 items.

Indicator	Factor loadings		Residual variances				
GILC-1	0.639		0.591				
GILC-2	0.578		0.666				
GILC-4	0.691		0.523				
GILC-6	0.782		0.389				
GILC-7	0.783		0.387				
GILC-8	0.688		0.527				
GILC-9	0.643		0.587				

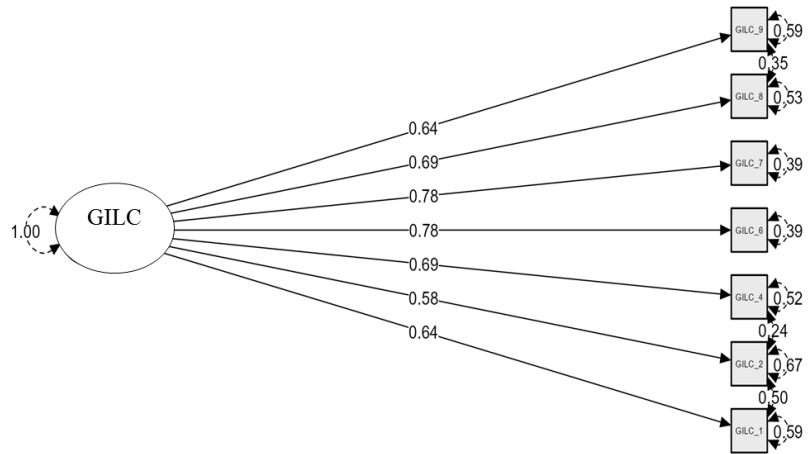
Model fit index							
$\chi^2$	Df	$\chi^2/df$	<i>p</i>	CFI	TLI	RMSEA (90%CI)	SRMR
35.440	28	1.265	0.19	0.998	0.996	0.04 [0.01; 0.07]	0.02

Note: GILC: Gender Ideology and LGBTQ+ lobby Conspiracies; TLI: Tucker-Lewis Index; CFI: Comparative Fit Index; RMSEA: Root Mean Square Error of Approximation; SRMR: Standardized Root Mean Square Residual.

The confirmatory factor analyses (CFA) yielded factor loadings for the GILC scale ranging from 0.578 to 0.783. Specifically, the factor loadings, derived from the confirmatory analysis of the 7 items are presented in ascending order of their indices: GILC2 = 0.578, GILC1 = 0.639, GILC9 = 0.643, GILC8 = 0.688, GILC4 = 0.691, GILC6 = 0.782, and GILC7 = 0.783. This means that these items are positively related to the scale and are capable of capturing conspiracy beliefs related to the LGBTQ+ lobby as mobilized in the sociocultural context where the scale is tested. The incremental adjustment indices support the unidimensional structure of the French version of the GILC scale. In fact, the CFA results, using the Robust Maximum Likelihood method, also reveal an excellent fit of the unidimensional factor model, with a non-significant chi-square value ( $\chi^2 = 35.44$ ,  $df = 28$ ,  $p > 0.05$ ), and very satisfactory incremental (CFI = 0.998; TLI = 0.996) and absolute (RMSEA = 0.04, 95% CI = 0.01, 0.07; SRMR = 0.02) fit indices, meeting the defined critical thresholds (CFI  $\geq$  0.95, TLI  $\geq$  0.95, RMSEA  $\leq$  0.06 with 95% confidence interval, SRMR  $\leq$  0.08) (see Bentler and Bonett, 1980; Browne and Cudeck, 1992; Hu and Bentler, 1999; Tucker and Lewis, 1973).

This confirmatory factorial informations indicate that the theoretical model established by Salvati et al. (2023) fits the data collected in the Cameroonian context. However, these results only support seven elements of these authors' measurement. These elements are explicit indicators of LGBTQ+ lobby conspiracy beliefs within the homophobic and heteronormative Cameroonian context (Dzuetso Mouafo et al., 2023). Overall, these results establish that the seven elements (observed variables) of this instrument accurately measure the latent construct (beliefs related to the LGBTQ+ lobby conspiracy), independently of the belief in the gender ideology conspiracy. They suggest the existence of significant links between these observed variables and the latent construct. Through the obtained fit indices, we observe that the theoretical model of the LGBTQ+ lobby conspiracy applies to the reality of the data in the context of the study. These indices report that objectively, the GILC only allows the collection of the

LGBTQ+ lobby conspiracy beliefs; excluding the gender ideology conspiracy which therefore, in the context of the present study, cannot be conceived as the means through which the LGBTQ+ lobby conspiracy unfolds. This robust unidimensional structure is summarized by the measurement model in **Figure 2**.



**Figure 2.** CFA Model plot.  
 Note: GILC: Gender Ideology and LGBTQ+ lobby Conspiracies.

EFA (Study 1) and CFA (Study 2) allowed for the identification and confirmation of the salient elements constituting the structure of the GILC scale. These elements, which form the unidimensional content of this scale, are the most suitable for the study sample (see **Figure 2**).

**3.2.2. Reliability and invariance of the French version of the GILC scale**

**Table 2** reports excellent Cronbach’s alpha, Omega, Lambda 2, and Rho coefficients obtained from the sample used for the CFA ( $\alpha = 0.862$ ;  $\omega = 0.862$ ;  $\lambda_2 = 0.863$ ;  $\rho = 0.886$ ). This indicates that the French version of the GILC scale has satisfactory internal consistency. Furthermore, the results show an acceptable Average Variance Extracted (AVE) value of 0.52 for the single factor (a value above the critical threshold of 0.50), supporting the convergent validity of this scale.

The robustness of the confirmatory structure, the generalizability of the results, and the stability of the one-factor model of the French version of the GILC scale were assessed across participants’ gender (Men vs. Women), economic status (Rich vs. Poor vs. Middle Class), and socio-professional status (Employed vs. Unemployed) by performing a series of four factorial invariance tests. The results reveal that the configural, metric, scalar, and strict models show excellent fits in all groups. As an illustration, **Table 5** reports CFI and TLI values greater than or equal to 0.95. The obtained RMSEA and SRMR values are below the thresholds of 0.08 and 0.06, respectively. Furthermore, by calculating the differences between the configural and metric models ( $\Delta CFI \leq 0.01$ ,  $\Delta TLI \leq 0.01$ ,  $\Delta RMSEA \leq 0.015$ , and  $\Delta SRMR \leq 0.015$ ) (Chen, 2007), the obtained values are all below the critical thresholds, fully supporting metric invariance. Similarly, scalar invariance is fully supported by the differences between the metric and scalar models, with  $\Delta CFI$ ,  $\Delta TLI$ ,  $\Delta RMSEA$ , and  $\Delta SRMR$  indices respecting the critical thresholds for all groups. This indicates that the intercepts of the items of the French version of the GILC scale are equivalent across groups.

Regarding strict invariance, the differences between the scalar and strict models require an equivalence constraint on the measurement errors (or residuals) between the groups. The results indicate that there is no degradation of fit across the different groups. The  $\Delta CFI$ ,  $\Delta TLI$ ,  $\Delta RMSEA$ , and  $\Delta SRMR$  indices are below the critical thresholds. They fully corroborate the strict invariance of the residuals. Overall, these results indicate that the scale is not sensitive to any given social group. Thus, the results of the factor invariance test reveal that the 7 items of the French version of the GILC scale measure the same construct—the LGBTQ+ lobby conspiracy—across gender, economic status, and socio-professional groups. It can be assumed that the differences observed after administration within these groups reflect genuine variations in the measured trait, and not a bias related to the measurement of the LGBTQ+ lobby conspiracy beliefs.

**Table 5.** Invariance test.

Model	$\chi^2$	df	p	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR	$\Delta CFI$	$\Delta TLI$	$\Delta RMSEA$	$\Delta SRMR$
<b>Gender: Men vs. Women</b>												
Configural	65.080	46	0.033	0.987	0.988	0.04	[0.01; 0.06]	0.05	-	-	-	-
Metric	47.621	28	0.012	0.986	0.979	0.05	[0.02; 0.07]	0.04	0.001	0.009	-0.01	0.01
Scalar	53.636	34	0.017	0.986	0.983	0.04	[0.02; 0.07]	0.04	0.000	-0.004	0.01	0.00
Strict	62.923	44	0.032	0.987	0.987	0.04	[0.01; 0.06]	0.04	-0.001	-0.004	0.00	0.00
<b>Economic status: Rich vs. Poor vs. Middle class</b>												
Configural	65.457	33	<0.001	0.977	0.956	0.07	[0.04; 0.10]	0.03	-	-	-	-
Metric	75.072	45	0.003	0.979	0.970	0.06	[0.03; 0.08]	0.05	-0.002	-0.014	0.01	-0.02
Scalar	102.260	57	<0.001	0.968	0.965	0.06	[0.04; 0.09]	0.05	0.011	0.005	0.00	0.00
Strict	142.408	77	<0.001	0.954	0.962	0.07	[0.05; 0.08]	0.07	0.014	0.003	-0.01	-0.02
<b>Socio-Professional status: Workers vs. Unemployed</b>												
Configural	44.777	22	0.003	0.984	0.970	0.06	[0.03; 0.09]	0.03	-	-	-	-
Metric	60.562	28	<0.001	0.977	0.966	0.06	[0.04; 0.09]	0.04	0.007	0.004	0.00	-0.01
Scalar	66.251	34	<0.001	0.977	0.972	0.06	[0.03; 0.08]	0.04	0.000	-0.006	0.00	0.00
Strict	71.881	44	0.005	0.981	0.981	0.05	[0.02; 0.07]	0.04	-0.004	-0.009	0.01	0.00

Note: CFI: Comparative Fit Index; TLI: Tucker-Lewis Index; RMSEA: Root Mean Square Error of Approximation; SRMR: Standardized Root Mean Square Residual; df: Degree of freedom.

### 3.2.3. Construct and convergent validities

**Table 6** reports that the French version of the GILC scale is positively and significantly correlated with conspiracy mentality ( $r = 0.60, p < 0.001$ ) and generic conspiracy beliefs ( $r = 0.56, p < 0.001$ ). This result supports the construct validity of the scale. Furthermore, this scale is positively and significantly correlated with perceived anomic threat ( $r = 0.55, p < 0.001$ ); perceived economic inequality ( $r = 0.50, p < 0.001$ ); ideology of survival ( $r = 0.30, p < 0.001$ ); negative emotions such as fear ( $r = 0.26, p < 0.001$ ), disgust ( $r = 0.28, p < 0.001$ ), and hate ( $r = 0.28, p < 0.001$ ); discriminatory tendencies ( $r = 0.14, p < 0.001$ ); and the intention to protest against LGBTQ+ people ( $r = 0.16, p < 0.001$ ).

**Table 6.** Descriptive statistics and Pearson’s correlations.

Variable	1	2	3	4	5	6	7	8	9	10	11
1. GILC	1										
2. MC	0.598***	1									
3. GCBS	0.559***	0.620***	1								
4. PA	0.551***	0.539***	0.71***	1							
5. PEI	0.491***	0.398***	0.52***	0.59***	1						
6. IS	0.303***	0.373***	0.32***	0.28***	0.31***	1					

**Table 6. Cont.**

Variable	1	2	3	4	5	6	7	8	9	10	11
7. FTL	0.259***	0.316***	0.24***	0.23***	0.47***	0.43***	1				
8. DTL	0.280***	0.369***	0.31***	0.28***	0.42***	0.51***	0.70***	1			
9. HTL	0.280***	0.355***	0.38***	0.32***	0.36***	0.63***	0.60***	0.74***	1		
10. DD	0.136**	0.227***	0.20***	0.05 $ns$	0.33***	0.55***	0.60***	0.63***	0.61***	1	
11. ICAAL	0.157***	0.268***	0.24***	0.08 $ns$	0.33***	0.73***	0.52***	0.61***	0.62***	0.73***	1
M	31.86	19.58	18.41	28.22	27.20	17.92	20.45	21.33	22.58	21.60	22.33
SD	±8.56	±5.19	±5.44	±8.07	±7.40	±4.17	±5.53	±5.48	±5.20	±5.86	±5.65

Note: GILC: Gender Ideology and LGBTQ+ lobby Conspiracies scale; CM: Conspiracy Mentality; GCBS: Generic Conspiracist Beliefs; PA: Perceived Anomic; PEI: Perceived Economic Inequality; IS: Ideology of Survival; DD: Daily Discrimination tendencies; ICAAL: Intention of Collective Action Against LGBTQ+ people; M: Means; SD: Standard Deviation; FTL: Fear Toward LGBTQ+; DTL: Disgust Toward LGBTQ+; HTL: Hate toward LGBTQ+; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ ;  $ns$ : non-significant relation.

**3.2.4. Predictive and criterion validities: Prediction of the links between gender ideology and LGBTQ+ lobby conspiracies beliefs and homo-negative attitudes**

The results in **Table 7** report associations between sociodemographic factors and conspiracy beliefs related to gender ideology and the LGBTQ+ lobby. They indicate that gender ( $\beta = -0.02, p > 0.05, 95\% \text{ CI} = -1.95, 1.06$ ), age ( $\beta = -0.06, p > 0.05, 95\% \text{ CI} = -0.27, 0.04$ ), and marital status ( $\beta = 0.07, p > 0.05, 95\% \text{ CI} = -0.36, 4.23$ ) are negatively and non-significantly associated with conspiracy beliefs related to gender ideology and the LGBTQ+ lobby. Specifically, it is observed that age (Under 30:  $M = 31.97, SD = 8.53$ ; Over 30:  $M = 27.92, SD = 8.88$ ) and marital status (Married:  $M = 30.16, SD = 9.81$ ; Single:  $M = 30.07, SD = 8.24$ ) do not explain conspiracy beliefs. However, a non-significant mean difference is noted between men ( $M = 32.18, SD = 8.86$ ) and women ( $M = 31.63, SD = 8.21, t = 0.66, p > 0.05$ ), with slightly higher conspiracy beliefs among men than among women. In essence, it is observed that participants' gender, age, and marital status have little influence on anti-LGBTQ+ conspiracy beliefs.

The data collected also indicate that socioeconomic status ( $\beta = 0.03, p > 0.05, 95\% \text{ CI} = -1.15, 2.80$ ) is positively and non-significantly associated with anti-LGBTQ+ conspiracy beliefs. A non-significant difference is observed between employed individuals ( $M = 31.18, SD = 8.76$ ) and unemployed individuals ( $M = 32.01, SD = 8.51$ ), despite a higher level of anti-LGBTQ+ conspiracy beliefs among the unemployed. Furthermore, participants' economic status is positively and significantly associated with their anti-LGBTQ+ conspiracy beliefs ( $\beta = 0.11, p < 0.05, 95\% \text{ CI} = 0.27, 2.15$ ). A significant difference is indeed observed between rich, poor, and middle-income participants, with higher levels of anti-LGBTQ+ conspiracy beliefs among middle-income participants ( $M = 33.29, SD = 8.09$ ), followed by rich participants ( $M = 31.05, SD = 8.77$ ), and then poor participants ( $M = 30.90, SD = 8.72$ ).

Furthermore, the results of **Table 7** indicate that perceived anomic threat ( $\beta = 0.55, p < 0.001, 95\% \text{ CI} = 0.51, 0.66$ ), perceived economic inequality ( $\beta = 0.49, p < 0.001, 95\% \text{ CI} = 0.48, 0.66$ ), and ideology of survival ( $\beta = 0.30, p < 0.001, 95\% \text{ CI} = 0.45, 0.80$ ) are positively and significantly associated with anti-LGBTQ+ conspiracy beliefs. The data in **Table 7** show that anti-LGBTQ+ conspiracy beliefs are linked to emotions

such as fear ( $\beta = 0.32, p < 0.001, 95\% \text{ CI} = 0.14; 0.27$ ), disgust ( $\beta = 0.32, p < 0.001, 95\% \text{ CI} = 0.15, 0.28$ ), and hate toward LGBTQ+ people ( $\beta = 0.28, p < 0.001, 95\% \text{ CI} = 0.12, 0.25$ ); to discriminatory tendencies toward LGBTQ+ people ( $\beta = 0.18, p < 0.001, 95\% \text{ CI} = 0.05, 0.19$ ); and to the intention to engage in anti-LGBTQ+ collective action ( $\beta = 0.21, p < 0.001, 95\% \text{ CI} = 0.08, 0.21$ ).

**Table 7.** Variation of gender ideology and LGBTQ+ lobby conspiracies beliefs and homo-negative attitudes.

Predictor	R <sup>2</sup>	ΔR <sup>2</sup>	β	95% CI lower	95% CI upper	
<i>Variation of gender ideology and LGBTQ+ lobby conspiracy beliefs</i>						
1. Gender	0.00	0.00	-0.02 <sub>ns</sub>	-1.95	1.06	
2. Age	0.00	0.00	-0.06 <sub>ns</sub>	-0.27	0.04	
3. Matrimonial status	0.00	0.00	0.07 <sub>ns</sub>	-0.36	4.23	
4. Socio-professional status	0.00	0.00	0.03 <sub>ns</sub>	-1.15	2.80	
5. Economic status	0.01	0.01	0.11*	0.27	2.15	
6. Perceived anomic threat	0.30	0.30	0.55***	0.51	0.66	
7. Perceived economic inequality	0.24	0.24	0.49***	0.48	0.66	
8. Ideology of survival	0.09	0.09	0.30***	0.45	0.80	
Variation of homo-negative attitudes						
Negative emotions (i.e., Fear, Disgust and Hate)						
	Fear	0.10	0.10	0.32***	0.14	0.27
	Disgust	0.10	0.10	0.32***	0.15	0.28
	Hate	0.08	0.08	0.28***	0.12	0.25
Daily discrimination tendencies						
		0.03	0.03	0.18***	0.05	0.19
Intention of collective action against LGBTQ+ people						
		0.04	0.04	0.21***	0.08	0.21

Note: N = 503; CI: Confidence interval; \*\*\* $p < 0.001$ ; \* $p < 0.05$ ; *ns*: non-significant relation.

#### 4. Discussion

The objective of this study was to validate the French version of the GILC scale. The results obtained from two samples surveyed in the exploratory and confirmatory studies indicate that this scale has good psychometric properties. Indeed, the EFA of the instrument's structure shows that this version of the GILC scale is a unidimensional, reliable instrument composed of 7 items. The confirmatory factor analysis of this measure, in turn, reports excellent fit indices consistent with the recommendations in the literature (see Boateng et al., 2018; Byrne, 1989; Hu and Bentler, 1999; Tucker and Lewis, 1973). These indices support the unidimensional factor structure of the GILC scale validated by Salvati et al. (2023).

The results of the invariance analysis (configural, scalar, metric, and strict) indicate that the factorial structure of the French version of the GILC scale remains constant across gender, socio-professional status, and economic status subgroups. This reveals that the retained items of this scale measure the same latent construct in each subgroup. However, we observed slight variations in the factor loadings of the items between the groups, due to the imbalance in the number of participants within these groups. But these slight variations were not sufficient to question the stability of the factorial structure of this measure. These results meet the critical thresholds of the

prescribed invariance indicators (Cheung and Rensvold, 2002; Jöreskog and Sörbom, 1993; Jovanović et al., 2023; Kline, 2016; Vandenberg and Lance, 2000). The reliability indices (Cronbach's alpha, Omega, Lambda 2, and Rho) of the validated scale are satisfactory, as they meet the recommended validity threshold (Boateng et al., 2018; Cronbach, 1951; McDonald, 1999). The Cronbach's alpha and Omega indices are close to those of the original measure (Salvati et al., 2023). These reliability indices are slightly higher than those of the other conspiracy measures administered to the participants, including the measures of conspiracy mentality (Bruder et al., 2013) and generic conspiracist beliefs (Brotherton et al., 2013). The convergent validity results are considered satisfactory, according to the AVE criterion (Fornell and Larcker, 1981). The construct validity results are also satisfactory. Indeed, the GILC scale is positively and significantly related to conspiracy mentality and generic conspiracist beliefs, with high correlation coefficients compared to results from previous studies (Salvati et al., 2023, 2024).

From an explanatory perspective on conspiracy beliefs, this study observes that conspiracy beliefs related to gender ideology and the LGBTQ+ lobby decrease with gender, age, socioeconomic status, and marital status. These results are consistent with those of Bronstein et al. (2019) and Guess et al. (2019), who report that conspiracy beliefs decrease with age, since young adults aged 18–30 (a period of critical thinking development) are generally exposed to conspiracy content on social media, which can reinforce their conspiracy beliefs. In contrast, people over 30 years old are less likely to endorse these beliefs (Imhoff and Bruder, 2014). Furthermore, the results of this research reveal that conspiracy beliefs increase among individuals who perceive a high level of anomic threat and economic inequality, as well as among those who endorse the ideology of survival.

This study observes that beliefs in conspiracy theories related to gender ideology and the LGBTQ+ lobby significantly explain anti-LGBTQ+ attitudes. These beliefs impact homophobia, particularly due to participants' fear, disgust, and hate toward LGBTQ+ people (Herek, 1994, 2007). These beliefs also explain anti-LGBTQ+ behaviors, such as discrimination and intentions to engage in anti-LGBTQ+ collective action (see Diamond et al., 2017; Dzuetso Mouafo, 2023; Morgenroth et al., 2021; Thöni et al., 2022). These results are consistent with the data reported by Salvati et al. (2024), who observe a negative link between anti-LGBTQ+ conspiracy beliefs and intention to engage in collective action in support of LGBTQ+ people.

This research has some limitations that should be considered when interpreting the results. First, the sample size is relatively small. Furthermore, the study sample consists primarily of young people aged between 20 and 30, with a very small proportion of individuals over 30; this may make the results less comparable across age groups. This imbalance must be taken into account when interpreting the results. Future studies should provide further evidence of the validity of this French version of the GILC scale in other French-speaking contexts, using more sophisticated analytical tools, so that this scale can benefit from complete validation, ensuring its psychometric robustness. To this end, cross-validation studies should be conducted with representative and diverse samples, and the external validity of the scale should be established.

## 5. Conclusion

The paradox of conspiracy theories surrounding the LGBTQ+ community lies in the fact that while they have long been shared and discussed within communities, their scientific understanding is very recent. These beliefs consist of the adherence to the idea that the LGBTQ+ community has formed a lobby that is secretly plotting to force children to adopt sexually deviant lifestyles and to dismantle the family and marriage, two cornerstones of civilized societies, among other things (Walton, 2014). To empirically account for these beliefs, the GILC scale was developed by Italian researchers (Salvati et al., 2023). This scale, which measures two conspiracies—gender ideology and the LGBTQ+ lobby—certainly has good metric parameters, but it also has some shortcomings, including the fact that it exists only in English, thus limiting its administration to non-English speakers, and its potential content and factor validity issues related to its unifactor structure, given that it measures two conspiracies. The data collected in this study confirm the unifactor structure of the original scale, but by excluding two of its items, related to the gender ideology conspiracy, which had very low factor loadings and therefore did not meet the recommended threshold. The French version of the GILC is thus a unifactor measure comprising 7 items and exclusively measuring the LGBTQ+ lobby conspiracy. It is adapted to a highly heteronormative Francophone African context, different from the Italian context in which the initial scale was validated. It thus makes it possible to achieve the objective prescribed by the literature, relating to the need to conduct studies to validate the psychometric properties of scales relating to conspiracy beliefs in various languages (Stojanov and Hannawa, 2023).

**Author contributions:** GAM: Supervision, conceptualization, writing-original draft, review and editing. MPTÀB: Conceptualization, investigation and writing-original draft. AVDM: Conceptualization, writing-original draft, review and editing. HKEN: Conceptualization and writing-original draft. SNL: Data curation, data analysis and writing-original draft. All authors have read and agreed to the published version of the manuscript.

**Funding:** The authors received no institutional funding to conduct this research.

**Institutional review board statement:** The study was conducted in accordance with the Declaration of Helsinki, and approved by the Department of Philosophy-Psychology-Sociology of the University of Dschang.

**Informed consent statement:** Informed consent was obtained from all subjects involved in the study.

**Data availability statement:** The data from this study will be made available to third parties upon request addressed to the first author.

**Conflict of interest:** The authors have no potential conflict of interest to report.

## References

- Adamczyk, A., & Pitt, C. (2009). Shaping attitudes about homosexuality: The role of religion and cultural context. *Social Science Research*, 38(2), 338–351. <https://doi.org/10.1016/j.ssresearch.2009.01.002>
- Awondo, P. (2010). The politicisation of sexuality and rise of homosexual movements in post-colonial Cameroon. *Review of African Political Economy*, 37(125), 315–328.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychology Bulletin*, 88, 588–606. <https://doi.org/10.1037/0033-2909.88.3.588>
- Bettinsoli, M. L., Napier, J. L., & Carnaghi, A. (2022). The “gay agenda:” How the myth of gay affluence impedes the progress toward equality. *European Journal of Social Psychology*, 52(2), 233–248. <https://doi.org/10.1002/ejsp.2762>
- Biddlestone, M., Green, R., Douglas, K. M., et al. (2025). Reasons to believe: A systematic review and meta-analytic synthesis of the motives associated with conspiracy beliefs. *Psychological Bulletin*, 151(1), 48–87. <https://doi.org/10.1037/bul0000463>
- Biligha Tolane, P. (2018). Homosexuality bewitched in Cameroon. *L’Homme & La Société*, 206(1), 113–136. <https://doi.org/10.3917/lhs.206.0113> (in French)
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., et al. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health*, 6, 149. <https://doi.org/10.3389/fpubh.2018.00149>
- Bourque, J., Poulin, N., & Cleaver, A. F. (2006). Evaluation of the use and presentation of the results of factor analyses and principal component analyses in education. *Revue des Sciences de l’Éducation*, 32(2), 325–344. <https://doi.org/10.7202/014411ar> (in French)
- Broc, G., & Loyal, D. (2016). Checking Validity on R. Easy Stats with R. Available online: <https://hal.science/hal-03483442/> (accessed on 23 November 2022).
- Bronstein, M. V., Pennycook, G., Bear, A., et al. (2019). Belief in fake news is associated with delusionality, dogmatism, religious fundamentalism, and reduced analytic thinking. *Journal of Applied Research in Memory and Cognition*, 8(1), 108–117. <https://doi.org/10.1037/h0101832>
- Brotherton, R., French, C. C., & Pickering, A. D. (2013). Measuring belief in conspiracy theories: The Generic Conspiracist Beliefs Scale. *Frontiers in Psychology*, 4, 279. <https://doi.org/10.3389/fpsyg.2013.00279>
- Browne, M. W., & Cudeck, R. (1992). Alternative Ways of Assessing Model Fit. *Sociological Methods & Research*, 21(2), 230–258. <https://doi.org/10.1177/0049124192021002005>
- Bruder, M., Haffke, P., Neave, N., et al. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy Mentality Questionnaire. *Frontiers in Psychology*, 4, 225. <https://doi.org/10.3389/fpsyg.2013.00225>
- Byrne, B. M. (1989). *A Primer of LISREL: Basic Applications and Programming for Confirmatory Factor Analytic Models*. New York, NY: Springer. <https://doi.org/10.1007/978-1-4613-8885-2>
- Cattell, R. B. (1966). The Scree test for the number of factors. *Multivariate Behavioral Research*, 1(2), 245–276. [https://doi.org/10.1207/s15327906mbr0102\\_10](https://doi.org/10.1207/s15327906mbr0102_10)
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 14(3), 464–504. <https://doi.org/10.1080/10705510701301834>
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 9, 233–255. [https://doi.org/10.1207/S15328007SEM0902\\_5](https://doi.org/10.1207/S15328007SEM0902_5)
- Churchill, G. A. (1979). A paradigm for developing better measures or marketing constructs. *Journal of Marketing Research*, 16(1), 64–73. <https://doi.org/10.1177/002224377901600110>
- Corbière, M. (2014). Exploratory and confirmatory factor analyses: Illustration using data collected on self-esteem as a worker. In: Corbière, M., Larivière, N. (editors). *Qualitative, Quantitative and Mixed Methods*, 2nd Edition: In Research in the Humanities, Social Sciences and Health. Les Presses de l’Université du Québec. pp. 643–674. (in French)
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, 1(1), 16–29.

- Davis, R. E., Johnson, T. P., Lee, S., et al. (2019). Why do Latino Survey Respondents Acquiesce? Respondent and Interviewer Characteristics as Determinants of Cultural Patterns of Acquiescence among Latino Survey Respondents. *Cross-Cultural Research*, 53(1), 87–115. <https://doi.org/10.1177/1069397118774504>
- De Cristofaro, V., Costacurta, M., Pellegrini, V., et al. (2025). LGBTQ+ conspiracy beliefs and collective actions: Factors and processes that (de)motivate support for LGBTQ+ equality. *Analyses of Social Issues and Public Policy*, 25(1), e70001. <https://doi.org/10.1111/asap.70001>
- Diamond, L. M., Dickenson, J. A., & Blair, K. L. (2017). Stability of sexual attraction across different timescales: The role of bisexuality and gender. *Archives of Sexual Behavior*, 46(1), 193–204. <https://doi.org/10.1007/s10508-016-0860-x>
- Douglas, K. M., & Sutton, R. M. (2025). Chapter One—The social psychology of conspiracy theories: Key insights and future challenges. *Advances in Experimental Social Psychology*, 71, 1–68. <https://doi.org/10.1016/bs.aesp.2024.10.004>
- Douglas, K. M., Sutton, R. M., Biddlestone, M., et al. (2024). Engaging with conspiracy believers. *Review of Philosophy and Psychology*. <https://doi.org/10.1007/s13164-024-00741-0>
- Douglas, K. M., Uscinski, J. E., Sutton, R. M., et al. (2019). Understanding conspiracy theories. *Political Psychology*, 40(1), 3–35. <https://doi.org/10.1111/pops.12568>
- Dzuetso Mouafo, A. V. (2023). The denial of homosexual identity as a mediator of the link between beliefs in a gay conspiracy and hostile intentions toward LGBTQ people in a highly heteronormative context: The case of Cameroon. *International Journal of Psychology and Behavioral Sciences*, 13(2), 29–37.
- Dzuetso Mouafo, A. V., Ekango Nzekaih, H. K., & Messanga, G. A. (2023). Perceived anomic threat, beliefs in LGBTQ conspiracy theories and support for violence against LGBTQ minorities in a highly heteronormative context: The case of Cameroon. *Current Research in Psychology*, 10(1), 10–23. <https://doi.org/10.3844/crpsp.2023.10.23>
- 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>
- Friedersdorf, C. (2012). A peek at conservatism’s anti-gay conspiracy-theorist fringe. Available online: <https://www.theatlantic.com/politics/archive/2012/01/a-peek-at-conservatisms-anti-gay-conspiracy-theorist-fringe/250959/> (accessed on 15 January 2024).
- Geschiere, P. (2024). Witchcraft logics and the biometric citizen. Available online: <https://wiser.wits.ac.za/content/witchcraft-logics-and-biometric-citizen-14202> (accessed on 11 April 2024).
- Geschiere, P., & Orock, R. (2021). Anusocratie? Freemasonry, sexual transgression and illicit enrichment in postcolonial Africa. *Africa: The Journal of the International African Institute*, 90(5), 831–851. <https://doi.org/10.1017/S0001972020000650>
- Giner-Sorolla, R., & Russell, P. S. (2019). Not just disgust: Fear and anger also relate to intergroup dehumanization. *Collabra: Psychology*, 5(1), 56. <https://doi.org/10.1525/collabra.211>
- Gkinopoulos, T., Teresi, M., Ballone, C., et al. (2024). Religiosity and social distance from LGBTQI+ people: The mediating role of gender and LGBTQI+ conspiracy beliefs. *Sexuality Research and Social Policy*, 21, 912–920. <https://doi.org/10.1007/s13178-024-00962-z>
- Gökalp, A., Üztemur, S., Huang, P.C., et al. (2025). Pandemic or “plandemic”? The mediating role of epistemic justification strategies in the relationships between COVID-19 conspiracy beliefs and COVID-19 vaccine conspiracy beliefs. *Brain and Behavior*, 15(1), e70275. <https://doi.org/10.1002/brb3.70275>
- Gulevich, O. A., Osin, E N., Isaenko, N. A., et al. (2018). Scrutinizing homophobia: A model of perception of homosexuals in Russia. *Journal of Homosexuality*, 65(13), 1838–1866. <https://doi.org/10.1080/00918369.2017.1391017>
- Guess, A., Nagler, J., & Tucker, J. (2019). Less than you think: Prevalence and predictors of fake news dissemination on Facebook. *Science advances*, 5(1). <https://doi.org/10.1126/sciadv.aau4586>
- Hambleton, R. K., & Rovinelli, R. J. (1986). Assessing the dimensionality of a set of test items. *Applied Psychological Measurement*, 10(3), 287–302. <https://doi.org/10.1177/014662168601000307>
- Hambleton, R. K., Swaminathan, H., & Rogers, H. J. (1991). *Fundamentals of Item Response Theory*. Newbury Park, CA: Sage Publications.
- Hendriks, T. (2024). The rule of the anus? Queer imaginaries of power in central Africa. *Ethnography*, 25(4), 505–522. <https://doi.org/10.1177/14661381241263848>
- Herek, G. M. (1994). Assessing attitudes toward lesbians and gay men: A review of empirical research with the ATLG scale. In: Greene, B., Herek, G. M. (editors). *Lesbian and Gay Psychology*. Sage. pp. 206–228.
- Herek, G. M. (2007). Confronting sexual stigma and prejudice: Theory and practice. *Journal of Social Issues*, 63(4),

905–925.

- Hodson, G., Choma, B. L., Boisvert, J., et al. (2013). The role of intergroup disgust in predicting negative outgroup evaluations. *Journal of Experimental Social Psychology*, 49(2), 195–205. <https://doi.org/10.1016/j.jesp.2012.11.002>
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*. Thousand Oaks, CA: Sage Publications.
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, 30(2), 179–185. <https://doi.org/10.1007/BF02289447>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55.
- Imhoff, R., & Bruder, M. (2014). Speaking (un-) truth to power: Conspiracy mentality as a generalised political attitude. *European Journal of Personality*, 28(1), 25–43. <https://doi.org/10.1002/per.1930>
- International Test Commission. (2017). *ITC Guidelines for Translating and adapting Tests*, 2<sup>nd</sup> ed. Available online: [https://www.intestcom.org/files/guideline\\_test\\_adaptation\\_2ed.pdf](https://www.intestcom.org/files/guideline_test_adaptation_2ed.pdf) (accessed on 15 January 2024).
- Jackson, D. L., Gillaspay, J. A., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological Methods*, 14(1), 6–23. <https://doi.org/10.1037/a0014694>
- Jaśkiewicz, M. (2024). Acceptance of gay and lesbian people among Polish teachers: The roles of intergroup contact and belief in LGBT conspiracy ideology. *Teachers and Teaching*, 31(3), 471–486. <https://doi.org/10.1080/13540602.2024.2308903>
- Jolley, D., Paterson, J. L., Deric, D., et al. (2024). Exploring how parasocial intergroup contact with transgender influencers on TikTok reduces transgender conspiracy beliefs. *Journal of Community and Applied Social Psychology*, 35(1), e70020.
- Johnson, T., Kulesa, P., Cho, Y. I., et al. (2005). The relation between culture and response styles: Evidence from 19 countries. *Journal of Cross-Cultural Psychology*, 36, 264–277.
- Jovanović, V., Lazić, M., Gavrilov-Jerković, V., et al. (2023). Vaccine Conspiracy Beliefs scale: Validation and measurement invariance in a youth sample. *Evaluation and the Health Professions*, 46(4), 362–370. <https://doi.org/10.1177/01632787231170237>
- Jöreskog, K. G., & Sörbom, D. (1993). *Lisrel 8: Structural Equation Modeling With the Simplis Command Language*. Hove: Psychology Press.
- Juhel, J. (1999). Étude de la dimensionnalité d'un test de raisonnement à l'aide des Modèles de Réponse à l'Item. *Psychologie et Psychométrie*, 20(2/3), 85–111.
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling*. New York, NY: The Guilford Press.
- Lado, L. (2011). Popular homophobia in Cameroon. *Cahiers d'Études Africaines*, 204, 921–944. <https://doi.org/10.4000/etudesafriaines.16895> (in French)
- Lamontagne, E., Leroy, V., Howell, S., et al. (2025). Homophobia, economic precarity and the well-being of sexual and gender diverse people in a 153-country survey. *Nature Human Behaviour*, 1–17. <https://doi.org/10.1038/s41562-025-02361-9>
- Lautenschlager, G. J. (1989). A comparison of alternatives to conducting Monte Carlo analyses for determining parallel analysis criteria. *Multivariate Behavioral Research*, 24(3), 365–395.
- Loyal, D. (2016). Exploratory and confirmatory factor analyses. In: Broc, G., Carlsberg, M., Cazauvieilh, C., et al. (editors). *Easy Stats with R. De Boeck Supérieur*. pp. 337–352. Available online: [https://www.researchgate.net/publication/330684386\\_Analyses\\_factorielles\\_exploratoire\\_et\\_confirmatoire](https://www.researchgate.net/publication/330684386_Analyses_factorielles_exploratoire_et_confirmatoire) (in French)
- Machikou N. The list of 'homosexuals of the Republic': Chronicle of an outrageous depacification of political life in Cameroon. Available online: <http://www.afsp.info/archives/congres/congres2009/sectionsthematiques/st44/st44machikou.pdf> (15 January 2024). (in French)
- McDonald, R. P. (1999). *Test Theory: A Unified Treatment*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Menguele Menyengue, A. M. (2014). *Occult Forces, Religion and Politics in Cameroon: Preface by Ibrahim Mouiche*. London: Presses Académiques Francophones. (in French)
- Menguele Menyengue, A. M. (2016). Religious discourse and homosexuality in Cameroon. *Journal des Anthropologues*, 146–147, 67–86. <https://doi.org/10.4000/jda.6494> (in French)
- Morgenroth, T., Kirby, T. A., Cuthbert, M. J., et al. (2021). Bisexual erasure: Perceived attraction patterns of bisexual women and men. *European Journal of Social Psychology*, 52(2), 249–259. <https://doi.org/10.1002/ejsp.2773>
- Ndjio, B. (2020). Death without mourning: homosexuality, homo sacer, and bearable loss in Central Africa. *Africa*, 90(5), 852–869. <https://doi.org/10.1017/S0001972020000613>

- Nken, S. (2014). *Louis-Paul Aujoulat's Suspicious Influence on Modern-day Cameroon*. Paris: Editions Masso ma Toum K2Oteurs. (in French)
- Nunnally, J. C. (1978). *Psychometric Theory*. New York, NY: McGraw-hill.
- Orock, R., & Geschiere, P. (2024). *Conspiracy Narratives from Postcolonial Africa: Freemasonry, Homosexuality, and Illicit Enrichment*. Chicago, IL: The University of Chicago Press.
- Osborne, J. W., & Fitzpatrick, D. C. (2012). Replication analysis in exploratory factor analysis: What it is and why it makes your analysis better. *Practical Assessment, Research & Evaluation*, 17, 15.
- Panerati, S., & Salvati, M. (2025). The more positive intergroup contacts you have, the less LGBTQ+ conspiracies beliefs you will report: The role of knowledge, anxiety, and empathy. *British Journal of Social Psychology*, 64(2), e12866. <https://doi.org/10.1111/bjso.12866>
- Pigeaud, F. (2011). In *Paul Biya's Cameroon*. Paris: Karthala. (in French)
- Raykov, T., & Marcoulides, G. A. (2011). *Introduction to Psychometric Theory*. New York, NY: Routledge. <https://doi.org/10.4324/9780203841624>
- Roxburgh, S. (2019). Homosexuality, witchcraft and power: The politics of resentment in Cameroon. *African Studies Review*, 62(3), 89–111. <https://doi.org/10.1017/asr.2018.44>
- Salvati, M., & Koc, Y. (2022). Advancing research into the social psychology of sexual orientations and gender identities: Current research and future directions. *European Journal of Social Psychology*, 52(2), 225–232. <https://doi.org/10.1002/ejsp.2875>
- Salvati, M., Pellegrini, V., De Cristofaro, V., et al. (2024). Antecedent ideological profiles and negative socio-political outcomes of LGBTQ+ conspiracy beliefs. *Sexuality Research and Social Policy*, 21, 899–911. <https://doi.org/10.1007/s13178-024-00949-w>
- Salvati, M., Pellegrini, V., De Cristofaro, V., et al. (2023). What is hiding behind the rainbow plot? The Gender Ideology and LGBTQ+ lobby Conspiracies (GILC) scale. *British Journal of Social Psychology*, 63(1), 295–318. <https://doi.org/10.1111/bjso.12678>
- Schlippach, B., Bollwerk, M., & Back, M. (2021). Beliefs in conspiracy theories (CT): The role of country context. *Political Research Exchange*, 3(1). <https://doi.org/10.1080/2474736X.2021.1949358>
- Stojanov, A., & Hannawa, A. (2023). Toward French and Italian language validations of the Conspiracy Mentality Scale (CMS). *Measurement Instruments for the Social Sciences*, 5, e11429. <https://doi.org/10.5964/miss.11429>
- Tausch, N., Becker, J. C., Spears, R., et al. (2011). Explaining radical group behavior: Developing emotion and efficacy routes to normative and nonnormative collective action. *Journal of Personality and Social Psychology*, 101(1), 129–148. <https://doi.org/10.1037/a0022728>
- Teymoori, A., Jetten, J., Bastian, B., et al. (2016). Revisiting the measurement of anomie. *PloS One*, 11(7), e0158370. <https://doi.org/10.1371/journal.pone.0158370>
- Thompson, B. (2004). Book Review: *Exploratory and Confirmatory Factor Analysis: Understanding Concepts and Applications*. *Applied Psychological Measurement*, 31(03), 245–248. <https://doi.org/10.1177/0146621606290168>
- Thöni, C., Eisner, L., & Hässler, T. (2022). Not straight enough, nor queer enough: Identity denial, stigmatization, and negative affect among bisexual and pansexual people. *Psychology of Sexual Orientation and Gender Diversity*, 11(2), 237–249.
- Tonda, J. (2016). Fanon in Gabon: Dreamlike Sex and Afrodystopia. *Politique Africaine*, 143(3), 113–136. <https://doi.org/10.3917/polaf.143.0113> (in French)
- Trommsdorff, G., & Dasen, P. R. (2001). Cross-cultural study of education. In: Smelser, N. J., Baltes, P. B. (editors). *International Encyclopedia of the Social and Behavioral Sciences*. Elsevier. pp. 3003–3007. <https://doi.org/10.1016/B0-08-043076-7/02332-9>
- Tsogo À Bebouraka, M. P., Dzuetso Mouafo, A. V., Nzeuta Lontio, S., et al. (2024). “They are just LGBTQ people and nothing else!” Theorizing and measuring the “Perceived Inclusion of an Outgroup Members within Individuals’ Ingroups” (PIOMI) to evaluate inclusive social tolerance in the multiple identities perspective. *International Journal of Applied Psychology*, 14(1), 15–43.
- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38(1), 1–10. <https://doi.org/10.1007/BF02291170>
- Ulusoy, N., Nienhaus, A., & Brzoska, P. (2023). Investigating discrimination in the workplace. Translation and validation of the Everyday Discrimination Scale for nursing staff in Germany. *BMC Nursing*, 22(1), 196. <https://doi.org/10.1186/s12912-023-01367-w>
- Valsecchi, N., De Cristofaro, V., Pellegrini, V., et al. (2025). Conformity to gender norms and denial of LGBTQ+

- discrimination: The mediating role of anti-LGBTQ+ conspiracy beliefs. *Personality and Individual Differences*, 246, 113338. <https://doi.org/10.1016/j.paid.2025.113338>
- Valtorta, R. R., Vezzoli, M., Mari, S., et al. (2024). Measuring subjective inequality: Development and validation of the Perceived Economic Inequality Scale (PEIS). *The Spanish Journal of Psychology*, 27, e2. <https://doi.org/10.1017/SJP.2024.4>
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3(1), 4–70. <https://doi.org/10.1177/109442810031002>
- Walton, G. (2014). *The Gay Agenda: Claiming Space, Identity, and Justice*. New York, NY: Peter Lang Publishing, Inc. <https://doi.org/10.3726/978-1-4539-1175-4>
- White, D. R. (2002). *Cross-cultural research: An introduction for students*. Available online: <https://www.researchgate.net/publication/237129805> (accessed on 15 January 2024).