1 2 9 0

UNIVERSIDADE Ð COIMBRA

Inês Pereira Lopes

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM): A validation study in a sample of Portuguese LGBTQ+ individuals

Setembro 2023

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM): Um estudo de validação numa amostra de individuos LGBTQ+ Portugueses

Resumo: O desenvolvimento de uma identidade LGBTQ+ positiva e a sua influência no bem-estar e na saúde mental de pessoas de minorias sexuais e de género têm sido tópicos de investigação com crescente interesse. É relevante compreender como estas minorias constroem uma visão positiva da sua identidade LGBTQ+, bem como identificar quais os fatores que contribuem para o seu desenvolvimento. O principal objetivo deste estudo é validar a versão portuguesa da *Lesbian, Gay and Bisexual Positive Identity Measure* (LGB-PIM), numa amostra de pessoas de minorias sexuais e de género portuguesas, com idade superior a 18 anos. A amostra do estudo constituída por 185 indivíduos LGBTQ+ foi recolhida através do preenchimento de um protocolo *online*. Os resultados relativos à fiabilidade do LGB-PIM demonstraram excelentes valores para a escala completa (α = .92), bem como para a subescala Comunidade (α = .91). Todas as outras subescalas demonstraram bons valores de consistência interna (.80 < α < .88), com exceção da subescala Autenticidade, que demonstrou um valor mais baixo mas aceitável (α = .78). Em relação à validade convergente, as subescalas do instrumento correlacionaram-se de forma positiva, moderada e forte com o *Outness Inventory* e a *Connectedness to the LGBT Community Scale*. Quando avaliada a validade divergente com os intrumentos *Depression, Anxiety and Stress Scales-21* e a *Internalized Homophobia Scale,* apenas se destacaram correlações negativas significativas com a subsescala Autenticidade. Tanto quanto foi possível verificar, esta é a primeira escala traduzida e validada em Portugal para avaliar a identidade positiva de pessoas de minorias sexuais e de género, tendo os resultados revelado que a versão portuguesa do instrumento demonstrou robustez e confiabilidade. Através deste estudo, espera-se contribuir para o avanço do estudo da identidade positiva da comunidade LGBTQ+ portuguesa.

Palavras chave: LGBTQ+; LGB-PIM; Identidade Positiva; Estudo psicométrico

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM): A validation study in a sample of Portuguese LGBTQ+ individuals

Abstract: The development of a positive LGBTQ+ identity and its influence on the well-being and mental health of Sexual and Gender Minority (SGM) individuals has been a rising topic of interest in research. It is relevant to understand how these minorities build a positive view of their identity as LGBTQ+ individuals, as well as identifying the factors that contribute to its development. The main purpose of this study is to validate the Portuguese version of the Lesbian, Gay, and Bisexual Positive Identity Measure (LGB-PIM), in a sample of SGM individuals with ages over 18 years old. The sample of this study is composed of 185 LGBTQ+ individuals and was collected through an online survey. The reliability results demonstrated excellent values for the total scale (α = .92), as well as for its Community subscale (α = .91). All the subscales displayed good values for the internal consistency (.80 < α < .88), with the exception of the Authenticity subscale that scored lower, with an acceptable significant result (α = .78). For the convergent validity, the subscales of the instrument where positively correlated scoring moderate and strong magnitudes, with the Outness Inventory and the Connectedness to the LGBT Community Scale. To our knowledge, this is the first scale validated and translated in Portugal to evaluate the positive sexual and gender minority identity, the results revealing that the Portuguese version of the instrument showed good validity and reliability. Through this study, we hope to contribute to the advancement of the study of the positive identity of the Portuguese LGBTQ+ community.

Key words: LGBTQ+; LGB-PIM; Positive identity; Psychometric study

Index

Introduction

Societies are increasingly composed of an ever-growing and recognized collective of sexual and gender minority identities. The level of acceptance and visibility of these sexual and gender minority communities has tended to grow, as an effect of an expanding globalization movement of politics and pro-acceptance views of minority groups' rights (Baunach, 2012; Stychin, 2004; Woodcock, 2004). The LGBTQ+ community, an acronym that stands for lesbian, gay, bisexual, trans and queer individuals has thus gained wider visibility (in which the + sign refers to all other gender and sexual identities not represented in the first four letters; The center, 2018). However, even with this newfound notoriety and support, the LGBTQ+ community remains vulnerable to possible prejudice and discrimination (FRA, 2014, 2020; Subhrajit, 2014).

While new developments in public and academic views, like the removal of homosexuality from the DSM-III in 1973, may show the shift in cultural attitudes in society (Baunach, 2012; Mongelli et al., 2019), prejudice and hatred have lingered. As an after-effect of this exposition to a higher level of criticism, stress, and hateful speech (Meyer, 2003; Meyer & Frost, 2013; Mongelli et al., 2019; Ștefăniță & Buf, 2021), LGBTQ+ individuals have mostly been the target of studies that focus on the negative impact of these problems, with little to no focus on the positive aspects that construct and nourish their minority identities (Riggle et al., 2008; Riggle & Rostosky, 2012). It is of the utmost importance to explore the strengths that allow these sexual and gender minority groups to develop and consider the positive aspects of their identities as LGBTQ+ individuals, reframing the typical tendency to focus on the negative (Riggle & Rostosky, 2012). The concept of an LGBTQ+ positive identity was coined to answer this need. It refers to how LGBTQ+ individual regards their sexual and gender identity, in

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

association with positive emotions and experiences (Riggle et al., 2014). Developed by Riggle et al. (2014), the Lesbian, Gay, and Bisexual Positive Identity Measure (LGB-PIM) is currently one of the very few instruments to measure a sexual minority individual's sense of positive identity.

I. Conceptual Framework

The LGBTQ+ community is a large group of individuals that comprises smaller subgroups based on their distinct gender and sexual identities. There is a multitude of concepts that surround this community, the most relevant being sex, gender identity, gender expression, and sexual identity.

Sex is determined when a person is born, primarily through the observation of their genitalia and/or reproductive systems, being therefore primarily associated with physical/biological attributes (APA, 2021; Canadian Institutes of Health Research, 2023; Saleiro et al., 2022). One might be defined as being a female when observing women's genitalia, or a male when presenting men's genitalia. There are, however, some cases in which the newborn might present both reproductive systems. These individuals are defined as intersex (Saleiro et al., 2022; Topp, 2013). When analysing the female and male sex beyond their medical and biological value, one might find them to also represent a cultural and societal phenomenon. These social views are what define gender. In this way, being a male or a female is not only about reproductive systems; It involves a collection of norms and characteristics established through socially pre-determined rules (APA, 2021; Canadian Institutes of Health Research; 2023; Saleiro et al., 2022).

Recent studies have put into perspective many of the views held by the major public regarding gender identity and expression, allowing society to start moving beyond the concept of the gender binary (Thorne

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

et al., 2019). It is now increasingly accepted that gender is a somewhat fluid concept, possibly changing over time, may it be in terms of expression, identity, or both (Katz-Wise, 2020). There is, nevertheless, a difference between gender identity and gender expression. Gender identity refers to a person's individual experiences of self-awareness and acceptance of their gender, thus embracing a diverse and ever-growing complex family of identities that provide a basis for their daily interactions with other individuals (Ontario Human Rights Commission, 2014; Steensma et al., 2013). When an individual identifies with the gender that was attributed to them at birth, they might be labelled as cisgender. By opposition, transgender refers to someone who identifies with the opposite or simply a different gender to the one that was defined for them when they were born. Non-binary is the label adopted by people who simply do not see themselves as exclusively a man or a woman, not fitting inside the gender binary (APA, 2021; Human Rights Campaign, 2023). They might identify as both previously stated genders, in between them or outside these categories altogether (Human Rights Campaign, 2023).

Gender expression refers to the way a person will manifest their gender identity, including their pronouns (e.g., a non-binary person using they/them pronouns), appearance (e.g., clothes), behaviour, interests, among other elements (Human Rights Campaign, 2023; Ontario Human Rights Commission, 2014). This expression might sometimes be attached to a societal view on gender roles, creating expectations that, for example, a transgender woman, will fit inside "the box" of what a certain culture has defined to be a woman (APA, 2021).

An individual's sexual orientation can be defined as an enduring emotional and/or sexual attraction that one feels towards another person (APA, 2021; Saleiro et al., 2022). Heterosexuality is the label used by individuals who only feel attraction to the opposite gender to their own. On the counter side, homosexuality describes people who feel attracted

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

to the same gender, such as lesbians and gays, but also orientations like bisexuality, pansexuality and others (APA, 2021). Some individuals might express attraction to more than one gender. Plurisexual or multisexual sexual orientations comprise bisexuality or pansexuality (that encompasses attraction to both known genders and more). Bisexuality itself can be defined as romantic or sexual attraction to both females and males, or more than one gender (APA, 2021a; Saleiro et al., 2022).

Having a positive LGBTQ+ is associated with improved psychological well-being, allowing for higher self-esteem and life satisfaction (Almario et al., 2013; Luhtanen, 2012; Riggle et al., 2014; Riggle & Rostosky, 2012; Rostosky et al., 2018).

Riggle and Rostosky (2012) identified, from preliminary studies, eight positive themes that help develop a positive identity that later would be used as a basis for the creation of the LGB-PIM. These include, (i) living an authentic life; (ii) having increased self-awareness and insight; (iii)) feeling free to create flexible rules for what gender means and how it is expressed; (iv) experiencing strong emotional connections with others and creating supportive families of choice; (v) exploring expressions of sexuality and creating intimate relationships with "new rules"; (vi) having a unique perspective on life with empathy and compassion for others; (vii) being a positive role model, mentor, and activist working for social justice; and (viii) belonging to an LGBTQ+ community (Riggle and Rostosky, 2012 p.4).

1.1 LGB positive identity: Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM)

The Lesbian, Gay, and Bisexual Positive Identity Measure (LGB-PIM) is a 25-item scale developed in the United States of America in 2014, with the prospect of expanding the limited data on the components that comprehend a positive LGB identity (Riggle et al.,

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

2014). Built upon previous studies that reported the existence of a multidimensional structure that composed these identities (Riggle et al. 2014; Riggle & Rostosky, 2012), the LGB-PIM was finalized with a 5-factor structure. The factors are 1) Self-awareness (e.g., "*My LGBT identity leads me to important insights about myself*"), 2) Authenticity (e.g., "*I feel I can be honest and share my LGBT identity with others*"), 3) Community (e.g., "*I feel supported by the LGBT community*"), 4) Intimacy (e.g., "*My LGBT identity allows me to understand my sexual partner better*") and 5) Social Justice (e.g., "*As an LGBT person, it is important to act as an advocate for LGBT rights*") (Riggle et al., 2014).

Self-awareness refers to the processes that allow the individual to understand their emotions, and how they will impact their daily life performance (Killian, 2012; Riggle et al., 2014). According to a systematic review conducted by Carden et al. (2022), it was concluded that the best definition of self-awareness is one that acknowledges the many components that partake in developing the concept, as well as the processes that help this same development: focus, evaluation, and feedback. Applying this concept to one's LGBTQ+ identity, Self-awareness relates to the way an individual feels and perceives their emotions about how they identify, may it be in terms of gender or sexuality. These perceived feelings will impact their view of the world and themselves, leaving space for important self-reflections that will impact their decision-making (Riggle et al., 2014).

Authenticity can be defined as an individual's ability to express who they are, in a way they can act and convey their beliefs in their thoughts and actions, not only to themselves but in their daily interactions with the world. It is hypothesised that if an LGBTQ+ individual feels out of touch with what they consider to be their authentic self, they will be more likely to self-alienate from themselves and the community and be more propitious to external societal influences (Riggle et al., 2014)

The Community factor refers not only to the feelings of

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

connection and belonging but also to the sense of involvement with the LGBTQ+ community (Riggle et al., 2014). These have been proven to be a positive factor in the development and maintenance of an LGBTQ+ individual's psychological well-being. It takes on an especially important role when dealing with specific LGBTQ+ stressors, with the person having the possibility of relying on the support and resources the community might offer (Fingerhut et al., 2010; Meyer, 2003; Meyer & Frost, 2013).

The factor Intimacy theorises that one's gender and sexual minority identity, when perceived positively, will allow an individual to feel more connected and capable of expressing intimacy and sexual freedom (Riggle et al., 2014). According to a study conducted by Formby (2022), the ability to display any type of physical intimacy is linked to a sense of safety, especially observed in LGBTQ+ environments experienced as safe for their freedom of expression.

Finally, Social justice refers to the way one's positive LGBTQ+ identity might increase their concern and involvement in activism for all different forms of oppression and inequality (Riggle et al., 2014). A positive identity might contribute to creating awareness of inequalities, not only of the person's specific community but also of the many other harmful practices and policies that target and oppress different groups in society (Harding et al., 2012; Kizer, 2011). Therefore, it might encourage an individual to develop compassion for others, aiming to be a positive role model and work towards social justice (Riggle et al., 2014).

After being created in 2014, few studies were found that used the LGB-PIM as an instrument for research. Of these investigations, two explored the instrument psychometric characteristics, in German and Italian samples. Each study determined the instrument to be reliable, being a valid measure for use in each country (Baiocco et al., 2018; Siegel et al., 2022). The present work aims to validate the LGB-PIM

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Portuguese version in a sample of LGBTQ+ individuals.

1.2 Sexual and gender minority identities: Shifting perspectives

While the positive aspects of an identity are not dependent on the absence of possible negative aspects, like homophobia (Mayfield, 2001; Riggle et al., 2014), as both can coexist, it is important to acknowledge how both these characteristics influence one another. For example, an SGM individual can have a strong positive sense of identity even within a society filled with strong homonegative views. However, daily interaction with these negative views might directly affect an individual sense of belonging, making the achievement of a positive identity harder, possibly even furthering the development of internalized homophobia in LGBTQ+ youth (Alessi & Martin, 2017; Eguchi, 2006). From a scientific perspective, it is thus important to study the negative aspects that impact a sexual and gender minority (SGM) community, with the prospect of developing measures to prevent possible adverse situations (e.g., prejudice, violence) and educate the population about these problems (Medina-Martínez et al., 2021; Snapp et al., 2015).

1.2.1 The impact of stressors

According to Meyer (2003), sexual minority individuals are predisposed not only to the normal stressors any person must deal with as part of their daily lives (e.g., work) but also additional ones specifically related to their minority status (e.g., homophobia). Meyer (2003) classifies stressor events as any problem, may it be at an individual or societal level, that will cause change and require adaptation. These might incite the development of mental and physical health problems by exceeding a person's capacity for endurance positioning them in a fragile state (Dohrenwend, 2000). Diverse studies have shown that, as a consequence of these different stressors,

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

LGBTQ+ individuals have a higher predisposition to mental and physical health disorders such as severe depression, substance abuse, generalized anxiety, post traumatic stress disorder, and generally low psychological well-being (Alessi & Martin, 2017; Meyer, 2003; Meyer & Frost, 2013; Mongelli, 2019; Ștefăniță & Buf, 2021). Additionally, there is a higher risk of suicide attempt or suicide ideation, that surrounds individuals in elevated psychological distress, normally belonging to especially alienating and homophobic/transphobic environments (Meyer, 2003; Meyer & Frost, 2013; Ștefăniță & Buf, 2021).

It is a fact that LGBTQ+ minorities face the challenge of developing a positive identity, especially when faced with social stigma (Mohr & Kendra, 2011). When the dominant culture and societal norms seem to not support the minority group, stigmatizing their existence, LGBTQ+ individuals may develop more internal conflicts with themselves that might result in negative psychological outcomes (Boppana & Gross, 2019; Meyer, 2003). Human beings learn and develop with feedback from the environment. So, if the information society provides to the minority group creates incongruences with their respective experience (Moss, 1973 as cited in Meyer, 2003), this might create adverse psychological outcomes, such as the internalization of negative values about their identity (Mayfield, 2001). In other words, stigmatization, marginalization, and prejudice towards minority groups, such as the LGBTQ+ community, will create a stressful unhealthy environment that will challenge the creation of a positive identity (Meyer, 2003; Meyer & Frost, 2013; Mohr & Fassinger, 2006; Mohr & Kendra, 2011). Therefore, it is especially important to address homonegativity at an early age, as it has been proven that LGB youth are more likely than adults to be victimized by prejudiced events, by being exposed to minority stress (Meyer, 2003; Alessi & Martin, 2017).

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

1.2.2 The reinforcement of a positive perspective

While the development of a positive SGM identity might be impaired by an environment that provides a negative and limited view of this community, there still are opportunities for the LGBTQ+ person to develop skills and attitudes of resilience that allow for the reinforcement of a positive view of their minority identities (Riggle et al., 2014). As a matter of fact, a study by Almario et al. (2003) discovered that, even in contexts of stigmatization, SGM individuals can find ways to meet their psychological needs and achieve these experiences of well-being. Empirical evidence shows that the roles of community connectedness and social and family support are some of the most important factors for the development of a positive SGM identity (Boppana & Gross, 2019; Fingerhut et al., 2010; Mongelli, 2019; Morris et al., 2001, Peel et al., 2006; Peel et al., 2022; Riggle et al., 2014; Tabaac et al., 2015). These dimensions are seen as a positive resource, mitigating the impact of specific minority stressors (Fingerhut et al., 2010; Meyer, 2003; Meyer & Frost, 2013). According to research, social acceptance and support, especially from family, are positively associated with wellness and better mental health among LGBTQ+ individuals (Boppana & Gross, 2019; Tabaac et al., 2015).

A study conducted by Goshorn et al. (2022) explored how the meaning of life and self-compassion influence LGBTQ+ identities and outness levels and discovered that positive identity development in SGM people is connected to well-being and connection to the community. Likewise, having a strong connection to this community can also be a contributor to a positive LGBTQ+ identity. This experience can also be observed in religious LGBTQ+ individuals. Studies highlighted that having a supportive community was associated with SGM individuals being more likely to attend services, creating less anxious and depressed individuals with higher self-esteem and recognized social support (Hamblin & Gross, 2013; Boppana & Gross,

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

2019). Social support of an individual's SGM identity is also related to a decrease in internalized homophobia and a higher sense of belonging to the LGBTQ+ community (Bruce et al., 2015; Herek et al., 1998).

As stated by Peel et al. (2022), individuals report that social support and acceptance, especially by family or friends, have a high impact on the maintenance of positive mental health. These positive relationships created an environment perceived as accepting and safe, allowing for the sharing of sensitive topics. Furthermore, there's a correlation between community support and the mitigation of the impact of stressors (Mongelli, 2019). Therefore, the LGBTQ+ community itself seems to be a positive anchor, providing resources and support for individuals who might not otherwise have them (Fingerhut et al., 2010; Meyer, 2003; Meyer & Frost, 2013).

The experience of living true to oneself identity (authenticity), is also highlighted in literature for its role in creating a healthy LGBTQ+ identity. In a study conducted by Rostosky et al. (2018), the associations between the LGB-PIM and the Psychological Well-being Scale (PWB; Ryff, 1989) were examined. The results highlighted the role of authenticity as an important factor, with its subscale being associated with all of the PWB domains (Purpose in Life, Autonomy, Personal Growth, Environmental Mastery, Positively Relationships, and Self-Acceptance; Ryff, 1989). Furthermore, some studies explore the relationship between authenticity and internalized sexual stigma, showing a negative correlation between these constructs (Petrocchi et al., 2019; Riggle et al., 2014). In fact, lower internalized stigma seems to be associated with a higher LGB positive identity (Salvati et al., 2023). The self-awareness, authenticity, community, and intimacy LGB-PIM dimensions have also been shown to have positive correlations with self-reassurance (i.e., relating to one's ability for self-compassion) and social safeness (i.e., the experience of the social world as safe) (Petrocchi et al., 2019). These findings expose the importance

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

of self-acceptance and embracing one's LGBTQ+ identity as being essential to an SGM's individual well-being and positive identity development.

II. Objectives

The main goal of this research was to analyze and validate the translated Portuguese version of the original LGB-PIM (Riggle et al., 2014). To delve into this analysis, the research included the following specific objectives:

2.1 To establish the construct validity through the computing of an Exploratory Factor Analysis (EFA) of the LGB-PIM's internal structure.

2.2 To analyze the reliability of the LGB-PIM through the Cronbach's alpha values of the total scale and each subscale;

2.3 To examine the convergent validity of the LGB-PIM by analyzing its association with (i) the Outness Inventory (Mohr & Fassinger, 2000) and (ii) the Connectedness to the LGBT Community Scale (Frost & Meyer, 2012).

2.4 To examine the divergent validity of the LGB-PIM by analyzing its association with (i) Depression, Anxiety and Stress Scale (DASS-21; Lovibond & Lovibond, 1995) and (ii) the Internalized Homophobia (IHP-R; Martin & Dean, 1987).

III. Methodology

3.1 Participants

The sample comprises 185 LGBTQ+ individuals between the ages of 18 and 69 years old ($M = 32.31$; $SD = 11.32$), from which 43.8% identified as male ($n = 81$), 36.8% as female ($n = 68$) and 19.5% as non-binary ($n = 36$). The large majority of the participants identified as male, cisgender, and gay. The majority were attending university or had completed a higher education degree. Finally, slightly more than half

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

were currently in a relationship (cf. Table 1).

Table 1
Sample demographic characteristics

		N	%
Gender	Female	68	36.8
	Male	81	43.8
	Non-Binary	36	19.5
Sexual Orientation	Gay	69	37.3
	Lesbian	30	16.2
	Bisexual	43	23.2
	Pansexual	22	11.9
	Queer	13	7
	Demisexual	2	1.1
	Asexual	2	1.1
	Other	2	1.1
	Heterosexual	2	1.1
Education	12th grade	30	16.2
	Higher Education	13	7
	Vocational technical training course	8	4.3
	Some years in college	7	3.8
	Finished college degree	59	31.9
	Doctorate or a master's degree	68	36.8
	University student	70	37.8
Currently in a relationship	Yes	107	57.8
	No	78	42.2

3.2 Research and sample collection procedure

The data and sample used in this analysis are part of a cross-cultural project denominated "Sexual and Gender Minorities and Intimate Relationships", and coordinated by Professor Ashley Randall of Arizona State University, USA. Currently, the project involves 18 countries, including Portugal. Our team is led by Professor Ana Paula Relvas of the University of Coimbra and is composed of a team of three main researchers: Professor Luciana Sotero (University of Coimbra), Professor Jorge Gato (University of Porto) and Professor Alda Portugal (University of Madeira).

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

The *online* questionnaire protocol, created using the platform *Qualtrics,* was composed of 14 different scales to evaluate the individual and relational well-being of Portuguese LGBTQ+ people. The protocol criteria of sample selection included: (1) being at least 18 years of age; (2) identifying as a sexual and/or gender minority and (3) being a resident of Portugal. Right before the start of the *online* questionnaire, there was also an informed consent that explained the objective of the study and the confidentiality of the data to the participants. The data collection process occurred between June 2021 and November 2022, and the questionnaire was shared using social media platforms such as *Facebook* and *Instagram*. The study was also divulged by non-profit organizations focused on LGBTQ+ rights.

3.3 Instruments

3.3.1 Lesbian, Gay, and Bisexual Positive Identity Measure (LGB-PIM)

The LGB-PIM (Riggle et al., 2014) consists of 25 self-statement items related to a positive LGB identity. For each item, participants were asked to rate each statement on a 7-point Likert scale (from 1 *"Strongly Disagree"* to 7 *"Strongly Agree"*). The overall instrument is composed of the following five subscales: 1) Self-Awareness (items 1, 2, 3, 4, 5); 2) Authenticity (items 6, 7, 8, 9, 10); 3) Community (items 11,12, 13, 14, 15); 4) Intimacy (items 16, 17, 18, 19, 20) and 5) Social Justice (items 21, 22, 23, 24, 25). The subscale scores are computed by the averaging of the items ratings of each subscale.

LGB-PIM scores reflect the way one perceives their LGB identity. The higher the score, the more probable it will be that a person reflects on their identity as a lesbian, gay or bisexual individual as being positive. The original validation study of the instrument showed excellent internal consistency (α = .90), as well as good and excellent internal consistency for each of its subscales (Self-Awareness, α = .89;

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Authenticity, α = .88; Community, α = .91; Intimacy, α = .90; and Social Justice, α = .87).

In the current study, it was decided that besides including the lesbian, gay and bisexual individuals, as per the original instrument study, other SGM participants would be encompassed, namely: transgender, non-binary, asexual, demisexual, pansexual and queer identities.

3.3.2 Outness Inventory (OI)

Developed by Mohr and Fassinger (2000), this inventory composed of 11 items is used to assess the extent to which an SGM individual might disclose their sexual orientation. The overall instrument is composed of the following three subscales: 1) Out to Family (items 1 and 4), 2) Out to World (items 5, 6, 7 and 10) and 3) Out to Religion (items 8 and 9). The items were scored in a 7-point Likert scale (from 1 *"Person definitely does NOT know about your sexual orientation status"* to 7 "*Person definitely knows about your sexual orientation status, and it is OPENLY talked about*"). Higher scores mean greater degrees of outness (Mohr & Fassinger, 2000). For each item, the participants are asked to answer on a 4-point Likert scale in which 1 represented "*strongly disagree*" and 4 "*strongly agree*". The original study scored, for each of its subscales, acceptable reliability (Out to Family subscale, α = .74 and Out to the World subscale, α = .79), with exception of the Out to Religion subscale, that displayed an excellent score (α = .97)

In the present study, good reliability values were obtained for the total score of the scale (α = .82), as well as for its three subscales: Out to Family (α = .74), Out to the World (α = .79) and Out to Religion (α =.93). For parsimony reasons, only the total score will be used in this study.

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

3.3.3 Connectedness to the LGBT Community Scale (COMCON)

The Connectedness to the LGBT Community Scale is an 8-item scale created by Frost and Meyer (2012), used to measure the extent to which one SGM individual feels connected to the LGBTQ+ community. Different types and ways of connection to the community are assessed: items 1 and 3 explore how close one feels to the community; items 2 and 4 assess if the connections are positive; items 5, 6 and 7 measure the extent to which one feels that the connections are rewarding, and item 8 is used to explore the feelings of closeness with other community members. For each item, the participants were asked to answer a 4-point Likert scale, that ranged from (1) "*Disagree Strongly*" to (4) "*Agree Strongly*". The results were calculated by the averaging of the item values. The higher values represented a higher connection to the LGBTQ+ community.

The original scale scored an alpha of .81 with good convergent and discriminant validity (Frost & Meyer, 2012). The current study also reported strong alpha scores for the overall scale, with an alpha of .88.

3.3.4 Depression, Anxiety and Stress Scale (DASS-21)

Created by Lovibond and Lovibond (1995), DASS-21 is an instrument composed of three self-report scales used to measure states of depression, anxiety, and stress. The DASS-21 is a short version questionnaire with a distribution of 7 items per scale. The questionnaire used a 4-point Likert scale, starting from 0 ("*Nothing was applied to me*") to 3 ("*Aplied to me most of the time*"). Higher scores are representative of higher levels of depression, anxiety and/or stress.

A validation study of the Portuguese version of DASS-21, made by Pais-Ribeiro et al. (2014), reported good internal consistency for all scales of depression (α = .89), anxiety (α = .83) and stress (α = .81). In the present study the instrument revealed a good internal consistency

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

coefficient for the total score (α = .98), as well as for its scales (Depression, α = .90; Anxiety, α = .88; Stress, α = .91). For parsimony reasons, only the total score will be used in this study.

3.3.5 Internalized Homophobia (IHP-R)

The IHP (adapted from the Ego-Dystonic Homosexuality Scale, from Martin & Dean, 1987), is a 9-item scale that was later revised by Herek et al. (2009), making it a shorter 5 item-scale (IHP-R). The items are scored on a 5-point Likert scale, ranging from 1 ("St*rongly disagree*") to 5 ("*Strongly agree*"). The goal of the scale is to measure an individual attitude towards their sexual orientation (e.g., item 2 - "*If someone offered me the chance to be completely heterosexual, I would accept the chance*."). In the current study, the IHP-R revealed an acceptable internal reliability (α = .71).

3.4 Data Analysis Procedures

Descriptive statistics were conducted using SPSS version 27.0 (Statistical Package for Social Sciences, IBM Corp, Armonk, NY, USA). To further ensure the consistency of the data, the non-answers that represented missing values were replaced by the median of nearby points. Before conducting Exploratory Factor Analysis, the Kaiser-Meyer Olkin measure was used to explore the sample adequacy, as well as Bartlett's test of sphericity. On a follow-up, a Principal Components Analysis (PCA) was used to access the internal structure of the LGB-PIM. Cronbach's alpha (α) was computed to evaluate the internal consistency of the scale, and the relationship between each item and each subscale. It was not possible to perform a test-retest, normally done on psychometric analysis, as the proper requirements (having the questionnaire retaken by the same population at a later time) were not met. Convergent and divergent validity were measured using Pearson's correlations.

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

IV.   Results

4.1 Descriptive analysis of the study variables

Preliminary descriptive analyses were performed for all the instruments used in the study. The mean, standard deviation, minimum and maximum values, kurtosis, skewness, and the Kolmogorov-Smirnov in the study are displayed in table 2. All the considered scales had a non-normal distribution according to the Kolmogorov-Smirnov test. However, all the values for the kurtosis and the skewness were within the normal range, therefore the violation of the assumption of normality is not problematic, and we will proceed with parametric tests (Kim, 2013).

Table 2

Descriptive Statistics of LGB-PIM, OI, ComCon, DASS-21, and IHP Instruments

	M	*SD*	Min.	Max.	Ku	Sk	K-S
LGB-PIM	5.65	0.82	2.48	7	1.44	-1.98	$p = .007$
LGB-PIM: Authenticity	6.04	0.86	2.60	7	2.47	-1.45	$p < .001$
LGB-PIM: Self-Awareness	5.75	1.10	1.40	7	1.97	-1.27	$p < .001$
LGB-PIM: Community	4.97	1.42	1	7	0.30	-0.80	$p < .001$
LGB-PIM: Intimacy	5.46	1.14	1.20	7	0.16	-0.56	$p = .001$
LGB-PIM: Social Justice	6.03	0.98	2.40	7	2.02	-1.43	$p < .001$
Outness Inventory	3.18	1.16	0.64	6.74	0.46	0.39	$p < .001$
Connectedness to the LGBT community scale	3.16	0.53	1	4	1.15	-0.64	$p < .001$
DASS-21	0.74	0.75	0.00	3	0.57	0.86	$p < .001$
Internalized Homophobia Scale	1.47	0.80	1	5	2.90	1.77	$p < .001$

4.3 Construct Validity: Exploratory Factor Analysis (EFA)

The values of the Kaiser-Meyer Olkin measure of sample

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

adequacy (KMO = .88) and Bartlett's Test of Sphericity ($\chi2 = 2756.915$; $p = < .001$) were examined. It was concluded that the values presented are considered meritorious (Kaiser, 1974), suggesting the sample is factorable. The commonalities were all above .50 confirming the shared common variance between all items is acceptable. Small coefficients below .40 were suppressed.

Table 3

Exploratory factor analysis: Factor Loadings of the LGB-PIM

Items	Factors						
	1	2	3	4	5	6	7
1.SA		.76					
2.SA		.86					
3.SA		.71					
4.SA		.79					
5.SA		.52					
6.AU			.55				.42
7.AU			.75				
8.AU			.81				
9.AU			.79				
10.AU			.82				
11.COM	.74						
12.COM	.77						
13.COM	.87						
14.COM	.71						
15.COM	.82						
16.INT				.86			
17.INT				.84			
18.INT							.66
19.INT							.77
20.INT				.74			
21.SJ					.83		
22.SJ					.72		
23.SJ					.76		
24.SJ						.89	
25.SJ						.77	
% explained variance	35.37	10.76	7.38	7.05	4.85	4.81	4.06
eigenvalue	8.84	2.69	1.84	1.76	1.21	1.20	1..02

Note. SA = Self-Awareness; AU = Authenticity; COM = Community; INT = Intimacy; SJ = Social Justice

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

An EFA was performed using a Principal Component Analysis (PCA). Only factors with eigenvalues greater than 1 were retained, in accordance with the Kaiser criterion for factor extraction (Pallant, 2005). The Varimax rotation revealed a factor structure of seven factors, that explained 74.28% of the total variance.

Table 4
Exploratory factor analysis: Five Dixed Factor Loadings

Items	Factors				
	1	2	3	4	5
1.SA	.61				
2.SA	.79				
3.SA	.71				
4.SA	.71				
5.SA	.62				
6.AU				.56	
7.AU				.77	
8.AU				.80	
9.AU				.76	
10.AU				.82	
11.COM		.73			
12.COM		.77			
13.COM		.85			
14.COM		.70			
15.COM		.78			
16.INT			.80		
17.INT			.80		
18.INT			.59		
19.INT			.64		
20.INT			.82		
21.SJ					.81
22.SJ					.72
23.SJ					.70
24.SJ	.67				
25.SJ	.63				
% explained variance	35.37	10.76	7.38	7.05	4.85
eigenvalue	8.84	2.69	1.84	1.76	1.21

Note. SA = Self-Awareness; AU = Authenticity; COM = Community; INT = Intimacy; SJ = Social Justice

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

However, upon further analysis, a cross-loading was detected on item 6, as it simultaneously loaded in factor 2 and factor 7 (cf. Table 3). In addition, one factor loaded less than 3 items (factor 6), which is not recommended in literature (Centre for Academic Success, 2017; Costello & Osborne 2005 as cited in Taherdoost et al., 2020; Hair et al., 2010). It was therefore decided to perform a new Varimax rotation with five fixed factors, considering the structure proposed by the original authors of the LGB-PIM (Riggle et al., 2014).

The suggested extraction of five factors accounted for 65.41 % of the variance. This solution yielded solid loadings above .50, with no cross-loadings (cf. Table 4). Most of the factors coincide with the structure of the original instrument, factor 2 (items 11, 12, 13, 14 and 15) corresponding with the Community subscale, factor 3 (items 16, 17, 18, 19 and 20) with the Intimacy subscale and factor 4 (items 6, 7, 8, 9 and 10) with the Authenticity subscale. However, factor 1 scored items related with the Self-Awareness subscale (items 1, 2, 3, 4 and 5), as well as two items (items 24 and 25) that related to themes of justice, originally found in the Social Justice subscale, loading in total 7 items. In contrast, factor 5 scored three items (items 21, 22 and 23) originally from the Social Justice subscale (cf. Table 4). Items 24 (“*I am more sensitive to prejudice and discrimination against others because of my LGBT identity*”) and 25 (“*I have a greater respect for people who are different from society's expectations because of my LGBT identity*”) share themes of discrimination towards others, having been previously grouped alone together in the first 7-factor structure. However, it doesn't seem to have themes in common with the original Self-Awareness subscale (e.g., item 1, “*My LGBT identity leads me to important insights about myself*”). Nevertheless, this new structure was accepted and the new 5-factor structure for the Portuguese LGB-PIM is composed of the following factors: factor 1- Self-Awareness (items 1,

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

2, 3, 4, 5, 24 and 25); factor 2 – Community (items 11, 12, 13, 14 and 15); factor 3 – Intimacy (16, 17, 18, 19 and 20); factor 4 – Authenticity (items 6, 7, 8, 9 and 10) and factor 5 – Social Justice (items 21, 22 and 23).

4.4 Reliability of the LGB-PIM (Five factor structure – Portuguese version)

The alpha of the new 5-factor structure was calculated, in order to further analyze and establish the reliability of the instrument (cf. Table 5). The results yielded excellent results for the internal consistency of the total scale ($\alpha = .92$) according to Cronbach's rule of thumb (George & Mallery, 2003). Examining the results for each subscale, it was observed that all yielded good significant Cronbach's alpha values. In both the Self-Awareness subscale and the Intimacy subscale, the results showed a coefficient alpha that reported a good internal consistency for the items (cf. Table 5). Similarly, the Community subscale presented an excellent internal consistency ($\alpha = .91$).

Table 5

Reliability of the LGB-PIM (α Cronbach)

	Original Structure (Riggle et al., 2014)	5-factor structure (Portuguese version)
Total Score	.90	.92
Self-awareness	.89	.86
Authenticity	.88	.78
Community	.91	.91
Intimacy	.90	.83
Social Justice	.87	.84

Only the Authenticity subscale scored an alpha bellow .80, displaying an acceptable internal consistency. However, when the item-total score correlations where analyzed, the results showed that if item 6 was excluded, the score of the Cronbach's alpha would increase from

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

.78 to .82, elevating the consistency of the scale to good according to Cronbach's rule of thumb (George & Mallery, 2003). No other subscale shows such a significant increase by excluding an item. Upon further analyzes, item 6 appears to be displaying the weakest scores with a correlation .29. Nonetheless, being that for an item to indicate good discrimination it must be scored between .20 and .39, item 6 can and should be maintained, as these results are not significant enough to justify its elimination.

4.5 Convergent Validity (Pearson's correlations)

An analysis of the convergent validity was conducted between the LGB-PIM subscales and the Outness Inventory (Mohr & Fassinger, 2000) and the Connectedness to the LGBT Community Scale (Frost & Meyer, 2012) (cf. Table 6). Results showed a significant moderate positive correlation between the Outness Inventory and the Authenticity subscale, with weak positive correlations to the other four remaining subscales.

Table 6

Correlations between the LGB-PIM and the Outness Inventory and the Connectedness to the LGBT Community Scale

	Outness Inventory	Connectedness to the LGBT Community Scale
Self-Awareness	.17*	.52**
Authenticity	.47**	.30**
Community	.26**	.66**
Intimacy	.25**	.37**
Social Justice	.03	.59**
LGB-PIM	.33**	.68**

*. correlation is significant at .05 (2-tailed)
**. correlation is significant at .01 (2-tailed)

In contrast, the Community Connectedness Scale yielded strong positive correlations to the Community subscale and a moderate

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

positive correlation to the Social Justice and the Self-Awareness subscales. From this analysis, the Social Justice subscale only showed a correlation to the Connectedness to the LGBT Community scale, not being significantly connected to the Outness Inventory.

4.6 Divergent Validity (Pearson's Correlations)

An analysis of the divergent validity was conducted between LGB-PIM subscales and DASS-21 (Lovibond & Lovibond, 1995) and IHP-R (Herek et al. 2009) (cf. Table 7). Both DASS-21 and IHP showed weak significant negative correlations to the Authenticity subscale. Additionally, the DASS-21 correlated with the Intimacy subscale, however this is considered to be a small weak effect (Cohen, 1988).

Table 7

Correlations between the LGB-PIM and the DASS-21 and the IHP

	Depression, Anxiety, Stress Scales (DASS-21)	Internalized Homophobia (IHP-R)
Self-Awareness	-.01	-.06
Authenticity	-.41**	-.37**
Community	-.11	.01
Intimacy	-.16*	-.12
Social Justice	-.01	.07
LGB-PIM	-.21**	-.08

*. correlation is significant at .05 (2-tailed)

**. correlation is significant at .01 (2-tailed)

Discussion

This study aimed to assess the psychometric properties of the Portuguese version of the LGB-PIM on a sample of LGBTQ+ individuals. It is of relevance to explore instruments such as this, as to the best of our knowledge there are no measures that assess LGBTQ+ positive identities adapted to the Portuguese population. Overall, the

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

findings reported that the LGB-PIM presents good indicators of validity and reliability for our sample.

Regarding the construct validity, the original 5-factor scale structure (Riggle et al., 2014) was not replicated in our study. While three of the main subscales (Community, Intimacy and Authenticity) were shown to maintain the structure found in the original study; the Social Justice subscale loaded only three of its expected items (items 21, 22, and 23). Additionally, items 24 and 25 loaded on the Self-Awareness subscale, making it a 7-item factor. It is hypothesized that the differences in loadings might be due to external factors, such as the low sample size. Conceptually, the contents of the items 24 (“*I am more sensitive to prejudice and discrimination against others because of my LGBT identity*”) and 25 (“*I have a greater respect for people who are different from society’s expectations because of my LGBT identity*”) also seem to have no connection with the main themes of the Self-Awareness subscale. However, we can claim there are some similarities with the item 4 of the original Self-Awareness subscale (item 4, “*Because of my LGBT identity, I am more in tune with what is happening around me.*”) which implies an interest in others besides the participants themselves, just like the themes of items 24 and 25.

Reliability was assessed, displaying excellent internal consistency for the total score of the instrument, similarly to the scores obtained in the original study by Riggle et al. (2014). The analysis of each subscale displayed similar results. The Authenticity subscale seemed to yield the lowest scored alpha. This is perhaps a consequence of the inclusion of item 6 (“*I feel I can be honest and share my LGBT identity with others*”), which was previously shown to display the lowest correlations compared to the other items in this study, even though its weak results didn’t justify its elimination. These results establish that the instrument is not only valid as a whole, but also when applying its subscales individually.

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

When analyzing the convergent validity, the results showed evidence that scales that measure similar or even the same constructs as some of the LGB-PIM subscales had high significant correlations with said subscales. The Outness Inventory, established an specially high connection with the community and intimacy subscales. These findings are, in part, in agreement with what is found in the literature. The acceptance of one's identity and the process of "coming out" is of extreme importance to an LGBTQ+ individual's well-being (Riggle et al., 2016). Studies have also shown that the perception of a safer and more supportive environment by family and peers will allow for lower levels of internalized stigma and anxiety (Boppana & Gross., 2019; Bruce et al., 2014; Herek et al., 1998). The possibility of sharing and discussing topics considered to be sensitive by SGM individuals (Peel et al., 2022), and a higher sense of belonging to the LGBTQ+ community (Bruce et al., 2014), contribute as well.

In contrast, while the disclosure of one's sexual orientation is associated with well-being, some studies point out that it does not seem to always predict relationship satisfaction (Knoble & Linville, 2012). In fact, a study conducted by Frost and Meyer (2009) concluded that there was not a significant correlation between any indicators of relationship quality and outness. However, even not being a statistically key factor in the maintenance of relationship quality, a study by Knoble and Linville (2012) did report that couples see outness as a "shared value system" in the relationship, that can influence the selection of their partners. Therefore, it is interesting to find such a highly significant correlation between the Outness Inventory and the Intimacy subscale in the Portuguese SGM population.

The results yielded by the Connectedness to the LGBT Community Scale were as expected, displaying a higher connection to the Community subscale, highlighting again the importance of the connection to family, friends, and like-minded individuals in the

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

development of a sense of safety and acceptance (Boppana & Gross., 2019; Bruce et al., 2014; Peel et al., 2022). A high correlation with the Social Justice subscale and Self-Awareness subscale was also discovered. These findings are in accordance with recent literature, as in a study conducted by Roberts and Christens (2020) where it was established that community connectedness mediates sociopolitical involvement and well-being, suggesting benefits from being involved in social justice type behaviors.

In addition, a correlation with the Self-Awareness subscale should also be highlighted. This connection is interesting, as unlike other communities (e.g., religious communities), SGM individuals will rarely grow up surrounded by other people that identify as LGBTQ+. It is therefore necessary for an LGBTQ+ individual to become aware of their identity before reaching out to a community (Riggle & Rostosky, 2012). Because of the provided support and shared interests found when discovering a community to belong to (Boppana & Gross, 2019; Fingerhut et al., 2010; Mongelli, 2019; Morris et al., 2001, Peel et al., 2006; Peel et al., 2022; Riggle et al., 2014; Riggle & Rostosky, 2012; Tabaac et al., 2015), as well as the presence of role models previously nonexistent in SGM individual's lives, it can be hypothesized that the process of self-awareness is facilitated and expedited, explaining its significant correlation with the Connectedness to the LGBT Community Scale .

The analysis of the divergent validity provided few significant results. The correlation found between the LGB-PIM and the DASS-21 is significant and negative, however the score obtained is considered weak. For the subscales, only the Authenticity obtained significant negative results with the DASS-21 and the Internalized Homophobia scale. These results mirror other studies that highlighted authenticity as an important construct, being negatively associated with internalized homophobia and correlated to high well-being and positive identity

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

(Petrocchi et al., 2019; Riggle et al., 2014; Rostosky et al., 2018; Salvati et al., 2023).

The results obtained in the current study support the use of the LGB-PIM Portuguese version. Despite the obvious growing interest in researching and understanding LGBTQ+ positive identities, there are not many studies that focus on ways to measure such a perspective (Riggle et al., 2014). It is, therefore, important that we highlight the existing instruments that compose this narrow camp of study. The therapeutic benefits of analyzing the constructs that allow for a positive SGM identity in Portugal are still in an early exploration phase. It is our belief that the use of the LGB-PIM could bring benefits to the constantly growing field of studying SGM identities in Portugal. It is therefore a fundamental instrument to be used in future studies.

Limitations and suggestions for future studies

Inevitably, this study has some limitations. The convenience sample was collected online through social media. Therefore, participants had a high education level, with a big portion of the sample still being students; this imposes limits in representativity. It is therefore recommended that in the future a more diverse sample should be collected through different means.

The sample size of 185 LGBTQ+ individuals also proved to be a limitation to the study, as it might have diminished the accuracy of the results and posed a barrier to computing certain tests such as a Confirmatory Factor Analysis. In addition, the progressive dropout of answers as the questionnaire progressed, created a barrier that might have limited the reliability of certain results for different instruments.

It is suggested that this study should be repeated at a later date with a bigger sample. Such repetition would also allow for the realization of a test-retest and the reassessment of the internal structure of the instrument.

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Conclusion

The purpose of the present study was to examine the psychometric charactristics of the Portuguese version of the LGB-PIM, contributing to future research on LGBTQ+ positive identities. This study found evidence of construct validy, with the 5-factor structure of the original LGB-PIM should be maintained, with a slight difference in the number of items per scale, and also yielded good convergent validity with community connectedness and outness. The results obtained in this study showed that the instrument is also reliable, with strong scores for the total scale and its subscales. Overall, the results obtained allow us to affirm that the Portuguese version of the LGB-PIM, tested for a sample of LGBTQ+ individuals, is a reliable and valid instrument to use in future research with SGM Portuguese populations.

References

Alessi, E. J., & Martin, J. I. (2017). Intersection of trauma and identity. Trauma, resilience, and health promotion in LGBT patients: *What every healthcare provider should know*, 3-14.

Almario, M., Riggle, E. D. B., Rostosky, S. S., & Alcalde, M. C. (2013). Positive themes in LGBT self-identities in Spanish-speaking countries. *International Perspectives in Psychology: Research, Practice, Consultation, 2*(1), 1–13. doi:10.1037/a0031055

American Psychological Association, APA Task Force on Psychological Practice with Sexual Minority Persons. (2021). *Guidelines for Psychological Practice with Sexual Minority Persons.* Retrieved from www.apa.org/about/policy/psychological-practice-sexual-minority-persons.pdf

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Baiocco, R., Salvati, M., Carone, N., Ioverno, S., Nappa, M. R., and Pistella, J. (2018). Identità positiva in persone lesbiche, gay e bisessuali: un contributo alla validazione italiana della Lesbian, Gay, and bisexual positive identity measure (LGB-PIM). [Abstarct]. *Giornale Ital. Psicol. 45*, 953–978. doi: 10.1421/93010

Baunach, D. M. (2012). Changing same-sex marriage attitudes in America from 1988 through 2010. *Public Opinion Quarterly, 76*(2), 364–378. https://doi.org/10.1093/poq/nfs022

Boppana, S., & Gross, A. M. (2019). The impact of religiosity on the psychological well-being of LGBT christians. *Journal of Gay & Lesbian Mental Health, 23*(4), 412–426. https://doi.org/10.1080/19359705.2019.1645072

Bruce, D., Harper, G. W., & Bauermeister, J. A. (2015). Minority stress, positive identity development, and depressive symptoms: Implications for resilience among sexual minority male youth. *Psychology of Sexual Orientation and Gender Diversity, 2*, 287–296. http://dx.doi.org/10 .1037/sgd0000128

Canadian Institutes of Health Research. (2023). *What is gender? what is sex?* CIHR. Accessed July 20, 2023. Retrieved from https://cihr-irsc.gc.ca/e/48642.html

Carden, J., Jones, R. J., & Passmore, J. (2021). Defining self-awareness in the context of adult development: A systematic literature review. *Journal of Management Education, 46*(1), 140-177. https://doi.org/10.1177/1052562921990065

Cohen, J. (1988*).* The Effect Size*. Statistical Power Analysis for the Behavioral Sciences*. Abingdon: Routledge, 77-83.

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Dohrenwend, B. P. (2000). The role of adversity and stress in psychopathology: Some evidence and its implications for theory and research. *Journal of health and social behavior*, 1-19.

Eguchi, S. (2006). Social and internalized homophobia as a source of conflict: How can we improve the quality of communication? *Review of Communication*, 6(4), 348–357. https://doi.org/10.1080/15358590601014646

Fingerhut, A. W., Peplau, L. A., & Gable, S. L. (2010). Identity, minority stress and psychological well-being among gay men and lesbians. *Psychology and Sexuality, 1*(2), 101–114. doi:10.1080/19419899.2010.484592

Formby, E. (2020). LGBT 'Communities' and the (self-)regulation and shaping of intimacy. *Sociological Research Online, 27*(1), 8-26. https://doi.org/10.1177/1360780420974031

FRA (European Union Agency for Fundamental Rights) (2014) *EU LGBT Survey: Main Results*. Vienna: FRA. Accessed July 20, 2023. Retrieved from http://fra.europa.eu/en/publication/2014/eu-lgbt-survey-european-union-lesbian-gay-bisexual-and-transgender-survey-main

FRA (European Union Agency for Fundamental Rights) (2020) *A Long Way to Go for LGBTI Equality*. Vienna: FRA. Accessed July 20, 2023. Retrieved from http://fra.europa.eu/en/publication/2020/eu-lgbti-survey-results

Frost, D. M., & Meyer, I. H. (2009). Internalized homophobia and relationship quality among lesbians, gay men, and bisexuals.

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Journal of Counselling Psychology, 56(1), 97–109. doi:10.1037/a00128

Frost, D. M., & Meyer, I. H. (2012). Measuring Community Connectedness among Diverse Sexual Minority Populations. *Journal of Sex Research, 49*(1), 36–49. https://doi.org/10.1080/00224499.2011.565427

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston, MA: Allyn & Bacon.

Goshorn, J. R., Mason, W. N., & Sperandio, K. R. (2022). Does meaning-in-Life or self-compassion influence LGBTQ+ Identity or outness? *Journal of LGBTQ Issues in Counseling*, *16*(4), 368-389. https://doi.org/10.1080/26924951.2022.2093309

Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper saddle River, New Jersey: Pearson Education International.

Hamblin, R., & Gross, A. M. (2013). Role of religious attendance and identity conflict in psychological well-being. *Journal of Religion and Health, 52*, 817-827.

Herek, G. M., Gillis, J. R., & Cogan, J. C. (2009). Internalized stigma among sexual minority adults: Insights from a social psychological perspective. *Journal of Counseling Psychology, 56*, 32-43.

Human Rights Campaign. (2023, May 31). *Glossary of terms*. accessed June 13, 2023. Retrieved from https://www.hrc.org/resources/glossary-of-terms

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Herek, G. M., Cogan, J. C., Gillis, J. R., & Glunt, E. K. (1998). Correlates of internalized homophobia in a community sample of lesbians and gay men. *Journal-Gay and Lesbian Medical Association, 2*, 17-26.

Katz-Wise, S. L. (2020, December 3). *Gender fluidity: What it means and why support matters*. Harvard Health Publishing, accessed July 31, 2023, https://www.health.harvard.edu/blog/gender-fluidity-what-it-means-and-why-support-matters-2020120321544

Killian, K. D. (2012). Development and validation of the emotional self-awareness questionnaire: A measure of emotional intelligence. *Journal* 33*of Marital and Family Therapy, 38*(3), 502-514.

Kim H. Y. (2013). Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis. *Restorative dentistry & endodontics, 38*(1), 52–54. https://doi.org/10.5395/rde.2013.38.1.52

Knoble, N. B., & Linville, D. (2012). Outness and relationship satisfaction in same-gender couples. *Journal of Marital and Family Therapy, 38*(2), 330–339. doi:10.1111/j.1752-0606.2010.00206.x

Luhtanen, R. K. (2002). Identity, Stigma Management, and Well-Being. *Journal of Lesbian Studies, 7*(1), 85–100. doi:10.1300/j155v07n01_06

Mayfield, W. (2001). The development of an internalized homonegativity inventory for gay men. *Journal of homosexuality, 41*(2), 53-76.

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Medina-Martínez, J., Saus-Ortega, C., Sánchez-Lorente, M. M., Sosa-Palanca, E. M., García-Martínez, P., & Mármol-López, M. I. (2021). Health inequities in LGBT people and nursing interventions to reduce them: A systematic review. *International Journal of Environmental Research and Public Health, 18*(22), 11801. https://doi.org/10.3390/ijerph182211801

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

Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities. In C. J. Patterson & A. R. D'Augelli (Eds.), *Handbook of psychology and sexual orientation* (pp. 252–266). Oxford University Press.

Mohr, J., & Fassinger, R. (2000). Measuring dimensions of lesbian and gay male experience. Measurement and Evaluation in Counselling and Development, 33, 66-90.

Mohr, J. J., & Fassinger, R. E. (2006). Sexual Orientation Identity and Romantic Relationship Quality in Same-Sex Couples. *Personality and Social Psychology Bulletin, 32*(8), 1085–1099. https://doi.org/10.1177/0146167206288281

Mohr, J. J., & Kendra, M. S. (2011). Revision and extension of a multidimensional measure of sexual minority identity: The Lesbian, Gay, and Bisexual Identity Scale. *Journal of Counseling Psychology, 58*(2), 234–245.

Mongelli, F., Perrone, D., Balducci, J., Sacchetti, A., Ferrari, S., Mattei, G., & Galeazzi, G. M. (2019). Minority stress and mental health

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

among LGBT populations: An update on the evidence. *Minerva Psichiatrica, 60*(1), 27–50. https://doi.org/10.23736/S0391-1772.18.01995-7

Morris, J. F., Waldo, C. R., & Rothblum, E. D. (2001). A model of predictors and outcomes of outness among lesbian and bisexual women. *American Journal of Orthopsychiatry, 71*(1), 61–71. doi:10.1037/0002-9432.71.1.61

Ontario Human Rights Commission (2014, April 14). *Policy on preventing discrimination because of gender identity and gender expression*, accessed July 19, 2023, https://www.ohrc.on.ca/en/policy-preventing-discrimination-because-gender-identity-and-gender-expression

Pais-Ribeiro, J., Honrado, A., & Leal, I. (2004). Contribuição para o Estudo da Adaptação Portuguesa das Escalas de Ansiedade, Depressão e Stress (EADS) de 21 itens de Lovibond e Lovibond. *Psicologia, Saúde & Doenças, 5* (2), 229-239.

Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows (Version 12).* Allen & Unwin.

Peel, E., Rivers, I., Tyler, A., Nodin, N., & Perez-Acevedo, C. (2022). Exploring LGBT resilience and moving beyond a deficit-model: Findings from a qualitative study in England. *Psychology & Sexuality, 14*(1), 114–126. https://doi.org/10.1080/19419899.2022.2063754

Petrocchi, N., Pistella, J., Salvati, M., Carone, N., Laghi, F., & Baiocco, R. (2019). I embrace my LGB identity: Self-reassurance, social safeness, and the distinctive relevance of authenticity to well-being in Italian lesbians, gay men, and bisexual people. *Sexuality*

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Research and Social Policy, *17*(1), 75-86. https://doi.org/10.1007/s13178-018-0373-6

Riggle, E. D. B., Mohr, J. J., Rostosky, S. S., Fingerhut, A. W., & Balsam, K. F. (2014). A multifactor Lesbian, Gay, and Bisexual Positive Identity Measure (LGB-PIM). *Psychology of Sexual Orientation and Gender Diversity, 1*(4), 398–411. https://doi.org/10.1037/sgd0000057

Riggle, E. D. B., Rostosky, S. S., Black, W. W., & Rosenkrantz, D. E. (2016). Outness, concealment, and authenticity: Associations with LGB individuals' psychological distress and well-being. *Psychology of Sexual Orientation and Gender Diversity, 4*(1), 54–62. doi:10.1037/sgd0000202

Riggle, E. D., Whitman, J. S., Olson, A., Rostosky, S. S., & Strong, S. (2008). The positive aspects of being a lesbian or gay man. *Professional psychology: Research and practice*, *39*(2), 210.

Riggle, E.D.B., Rostosky, S.S. (2012). A Positive View of Lgbtq : *Embracing Identity and Cultivating Well-Being*. United Kingdom: Rowman & Littlefield Pub Inc.

Roberts, L. M., & Christens, B. D. (2020). Pathways to Well-being among LGBT adults: Sociopolitical Involvement, Family Support, Outness, and Community Connectedness with Race/Ethnicity as a Moderator. *American Journal of Community Psychology, 67*(3-4), 405–418. doi:10.1002/ajcp.12482

Rostosky, S. S., Cardom, R. D., Hammer, J. H., & Riggle, E. D. B. (2018). LGB positive identity and psychological well-being.

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Psychology of Sexual Orientation and Gender Diversity, 5(4), 482–489. https://doi.org/10.1037/sgd0000298ca

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069

Saleiro, S., Ramalho, N., Menezes, M., & Gato, J. (2022). Estudo nacional sobre as necessidades das pessoas LGBTI e sobre a discriminação em razão da orientação sexual, identidade e expressão de género e características sexuais; Lisboa: Commission for Citizenship and Gender Equality. *Lisboa: Comissão para a Cidadania e a Igualdade de Género.*

Salvati, M., Sari, T., Pellegrini, V., & De Cristofaro, V. (2023). Gay, lesbian, and bisexual (LGB) peoples' leadership self-effectiveness: The roles of internalized sexual stigma, LGB positive identity, and traditional masculinity. *Frontiers in Sociology, 8.* https://doi.org/10.3389/fsoc.2023.1108085

Snapp, S. D., McGuire, J. K., Sinclair, K. O., Gabrion, K., & Russell, S. T. (2015). LGBTQ-inclusive curricula: Why supportive curricula matter. *Sex Education, 15*(6), 580-596.

Steensma, T. D., Kreukels, B. P. C., Vries, A. L. C., & Cohen-Kettenis, P. T. (2013). Gender identity development in adolescence. *Hormones and Behavior, 64*(2), 288–297. doi:10.1016/j.yhbeh.2013.02.020

Ștefăniță, O., & Buf, D. (2021). Hate Speech in Social Media and Its Effects on the LGBT Community: A Review of the Current Research. *Romanian Journal Of Communication And Public*

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023

Relations, 23(1), 47-55. doi:10.21018/rjcpr.2021.1.322

Stychin, C. F. (2003). Same-sex sexualities and the globalization of human rights discourse. *McGill LJ*, *49*, 951.

Tabaac, A. R., Perrin, P. B., & Trujillo, M. A. (2015). Multiple Mediational Model of Outness, Social Support, Mental Health, and Wellness Behavior in Ethnically Diverse Lesbian, Bisexual, and Queer Women. *LGBT Health, 2*(3), 243–249. doi:10.1089/lgbt.2014.0110

The Center (2018). *Defining LGBTQ.* [online] The Lesbian, Gay, Bisexual & Transgender Community Center. Available at: https://gaycenter.org/about/lgbtq/.

Thorne, N., Yip, A. K.-T., Bouman, W. P., Marshall, E., & Arcelus, J. (2019). The terminology of identities between, outside and beyond the gender binary – A systematic review. *International Journal of Transgenderism*, 1–17. doi: 10.1080/15532739.2019.164065410.1080/15532739.2019.1640654

Topp, S. S. (2013). Against the quiet revolution: The rhetorical construction of intersex individuals as disordered. *Sexualities*, *16*(1-2), 180-194.

Woodcock, S. (2004). Globalization of LGBT identities: Containment masquerading as salvation or why lesbians have less fun. *Gender and the (Post)'East'/'West'Divide*, 171-188.

Lesbian, Gay and Bisexual Positive Identity Measure (LGB-PIM):
A validation study in a sample of Portuguese LGBTQ+ individuals
Inês Pereira Lopes (Neslp5130@gmail.com) 2023