Research Article

Profiles of Heteronormativity and Subjective Well-being in a Sample of Heterosexual University Students in Chile

Ligia Orellana*[ab], Abner Silva[a], María Pía Godoy[c], Berta Schnettler[bdef], Leonor Riquelme-Segura[ai], José Sepúlveda[ab], Karol Reutter[b]

[a] Departamento de Psicología, Universidad de La Frontera, Temuco, Chile.

[b] Centro de Excelencia en Psicología Económica y del Consumo, Universidad de La Frontera, Temuco, Chile.

[c] Doctorado en Ciencias Sociales, Universidad de La Frontera, Temuco, Chile.

[d] Facultad de Ciencias Agropecuarias y Medioambiente, Universidad de La Frontera, Temuco, Chile.

[e] Scientific and Technological Bioresource Nucleus (BIOREN), Universidad de La Frontera, Temuco, Chile.

[f] Universidad Católica de Santiago de Guayaquil, Guayaquil, Ecuador.

[i] Departamento de Trabajo Social, Universidad de La Frontera, Temuco, Chile.

Abstract

Heteronormativity encompasses societal norms that uphold binary gender roles and heterosexual identities and relationships as the only acceptable manifestations of sexuality and gender. Research showed that heteronormativity has a fundamental influence on individuals' lives and identities, but its impact on the well-being of heterosexual individuals has been scarcely explored. This study addresses this gap by examining profiles of heteronormativity among heterosexual Chilean university students and their association with variables related to subjective well-being, such as life satisfaction, perceived social support, and self-reported health. Using latent profile analysis, four profiles were identified based on participants' z-scores on heteronormativity and its dimensions—Gender essentialism and Normative behavior: Non-conformist, Traditionalist, Diffused, and Essentialists. Profiles also showed significant differences by gender, life satisfaction, perceived social support, and self-reported health scores. These findings uncover the diverse manifestations and effects of heteronormativity in heterosexual individuals, and the potential influence of these norms on individuals' well-being. These findings have implications for both research and interventions seeking to improve university students' health and overall well-being.

Keywords: heteronormativity; subjective well-being; college students; latent profile analysis.

Table of Contents

Heterosexuality structures daily life beyond the realm of social relationships and identity, but it remains an elusive topic within psychology (Farvid, 2015). Most psychological theories and research have historically focused on non-heterosexual individuals, while heterosexuality has been overlooked as a sexual identity (Dillon et al., 2011). Thus, heterosexuality remains as the default expression of sexuality outside the variability of "other" sexual orientations and identities (Martinez & Smith, 2019; Morgan, 2012). In this regard, the construct of heterosexuality is both an institution and an identity, ranging from individual patterns of attraction and behavior to social practices that maintain these patterns as "normal" and "natural" in everyday life (Dean & Fischer, 2020). Society often sanctions those who deviate from these norms and rewards those who follow them (van der Toorn et al., 2020).

Given the pervasive nature of heterosexuality in psychology literature, there are scarce theoretical foundations to address it. A relevant precedent is Mohr's (2002) theoretical model of heterosexual identity that distinguishes four types of identity, based on their understanding of their own, and of others' sexual orientation (Martinez & Smith, 2019; Mohr, 2002). Even more scarce is the knowledge of within-group variations in ingroup attitudes and well-being among heteronormative people. In this regard, research has focused on comparing heterosexual individuals with their non-heterosexual counterparts. Some of these findings show that the former group tends to score higher than the latter in heteronormativity (i.e., attitudes and beliefs that sustain heterosexuality as the only natural and acceptable expression of sexuality; Habarth, 2014; Orellana et al., 2022), and in life satisfaction and other subjective well-being measures (Bartram, 2023; Powdthavee & Wooden, 2015). Less is known about the distinct patterns in which the above variables can manifest and relate to one

another within heterosexual individuals. To address this gap, this study adopts a person-centered approach (Choi et al., 2019) to distinguish profiles of heterosexual university students based on their degree of adherence to two dimensions of heteronormativity (Habarth, 2014): *Gender essentialism* and *Normative behavior*. These heteronormativity profiles are then described in terms of variables that have been linked to subjective well-being in samples of university students (Orellana et al., 2022; Orellana et al., 2022; Schnettler et al., 2017), such as social support from different sources, self-perceived health, and life satisfaction.

The role of gender in heteronormativity

The psychology literature is consistent in reporting the "silent nature" (Morgan, 2012, p. 80) of heterosexual identity and compulsory heterosexuality in the field (e.g., Dean & Fischer, 2020; Farvid, 2015). Heterosexuality refers, first and foremost, to a sexual orientation that indicates sexual and romantic attraction towards people of a different gender than one's own, assuming the existence of two genders: man and woman. Related to sexual orientation, the construct of sexual identity refers to the recognition, acceptance, and expression of diverse aspects of one's sexuality, including sexual orientation (Morgan, 2012). According to Dillon et al. (2011), a presumed heterosexual identity tends to be the starting point of sexual identity development for most individuals.

The notion of compulsory heterosexuality, proposed by Adrienne Rich (1980), is the basis of the construct of heteronormativity. Heteronormativity is a complex set of attitudes and beliefs that assume the existence of only two genders which reflect biological sex, and that only the attraction between these two "opposite but complementary" genders is normal and natural (Farvid, 2015). Through its everyday practices and institutions, heteronormativity enforces compliance with social and cultural norms that define acceptable gender roles and sexual behavior (Habarth, 2014). At the same time, it renders non-heterosexual orientations invisible, while portraying them as abnormal, unnatural, and inferior when they do become visible (Herek, 2009). Habarth (2014) has further operationalized heteronormativity as a construct with two dimensions: (1) Essentialist beliefs about binary and biologically determined categories of gender and sex, and (2) Normative behaviors for women and men in romantic or sexual relationships. Though there may be multiple definitions of heteronormativity, the underlying notions of this individual and structural phenomenon are not only based on sexual orientation, but also on gender (Seal, 2019).

Research on heterosexual identity development has shown that these cultural and societal norms are internalized through enactments of gender role prescriptions (Dillon et al., 2011).

Gender is a non-essential category that is repeatedly performed based on social norms (Lindqvist et al., 2021) regarding the shared understandings of masculinity and femininity. Dean and Fischer (2020) have furthered this gendered distinction in the realm of heterosexuality. On the one hand, heterosexual masculinity is the social construction of roles and identities typically enacted by men (Connell, 2005) to claim power, status, and authority over women and over other men—particularly those who are non-heterosexual. On the other hand, heterosexual femininities are constructed as "opposites" and "subordinates" of heterosexual men. In keeping with this distinction, research findings show that men have higher scores on heteronormativity than women (Habarth, 2014; Orellana et al., 2022).

Some studies show that men and women follow a "heterosexual script" (Scappini et al., 2023) that prescribes complementary and opposing roles, in terms of a double standard in sexual behaviors, and gender-specific courtship strategies and commitment orientation. Dillon et al. (2011) have also shown that both heterosexual men and women are prone to enact their sexual identity without conscious examination. As a result, they may adhere to idealized conceptions of romantic love (e.g., the omnipotence of love to change a partner's behavior and exerting jealousy to protect the relationship) and other expectations that derive from assuming heterosexuality—and traditional gender roles—as a norm without question (see Seal, 2019). Such idealized expectations have been shown to perpetuate gender inequality and justify gender violence (Jimenez-Picón et al., 2023).

Nevertheless, masculinity and femininity can be challenged by heterosexual individuals. For instance, Dean and Fischer (2020) state that heterosexual women in college are more open to exploring their gender and sexual identities, and to redefine their femininity (e.g., displaying "feminine traits" such as sociability rather than "masculine traits" such as competence) while still identifying as heterosexual. This openness might be key in questioning heteronormativity, as heterosexual individuals' exploration of their sexual identity has been positively associated with affirming attitudes toward sexual and gender minorities (Dillon et al., 2011). On their part, non-traditional heterosexual masculinities can also question notions of dominance, high-status and male privilege, and avoid homophobic discourses and practices. Dean and Fischer (2020) pose that these sort of questions to traditional gender notions can establish heterosexual people as "straight allies" of their non-heterosexual (and trans and non-binary) peers. Yet the focus of such allyship may be the heterosexual individual's own psychological needs rather than the needs of sexual and gender minority peers. Likewise, Dillon et al.'s (2011) model of sexual identity development suggests that individuals who do not adhere to sexual and gender norms might be in a

"diffuse" identity state, in which rather than committing to questioning these norms, they might be experiencing psychological distress.

Heteronormativity and subjective well-being

Although heteronormativity entails negative consequences, particularly for sexual and gender minorities, it can also afford benefits or protective factors to those who endorse these attitudes and beliefs, regardless of their sexual orientation or gender identity (Seal, 2019). Not surprisingly, however, studies show that those who benefit the most from adhering to heteronormativity are men and heterosexual individuals. For instance, for men who adhere to traditional masculinity ideals, heteronormativity may be a protective factor against threats to their sexual identity (Morgan, 2012). Moreover, high heteronormativity appears to coexist with higher self-perceived mental health among men and heterosexual people, compared to women and non-heterosexual individuals (Orellana et al., 2022).

On the other hand, strict adherence to heteronormative roles can also lead to negative consequences, even for heterosexual individuals (Davis-Delano et al., 2018; Habarth, 2014; Herek, 2009; Lombard, 2016). Heterosexual people also experience pressures to conform to heteronormative expectations, and they tend to engage in heterosexual-marking behaviors (i.e., stating they are heterosexual and conveying romantic or sexual interest in people of the other sex) to avoid being perceived as a sexual minority individual (Davis-Delano et al., 2018). Furthermore, adherence to heterosexual scripts and idealized romantic expectations, and related components such as notions of jealousy, soulmates, omnipotence, and control over one's partner, have been linked to negative outcomes such as lower sexual risk knowledge in women, rape myth acceptance and victim-blaming in men, and an overall higher risk of justifying or perpetrating gender and intimate partner violence (Jiménez-Picón et al., 2023; Lombard, 2016; Scappini et al., 2023).

Other studies have examined the effects of gender norms and heteronormativity on health and well-being. For instance, some studies have explored differences in life satisfaction, the cognitive component of subjective well-being (Diener et al., 1985), by sexual orientation. These findings show that heterosexual people have higher levels of life satisfaction than their non-heterosexual peers (Bartram, 2023; Orellana et al., 2022; Powdthavee & Wooden, 2015), but notably, these distinctions also rely on gender. For instance, Orellana et al. (2022) established profiles of heteronormativity using the two dimensions proposed by Habarth (2014) and subjective well-being accounting for sexual orientation and gender in a sample of university students. Findings of this latter study showed that life satisfaction differed between a profile of consistently high heteronormativity and composed by heterosexual men, and a

profile of mixed heteronormativity and composed by women and those who did not report their sexual orientation. Notably, the other two profiles, significantly composed of non-heterosexual students and those with a non-binary gender identification, showed no significant differences in life satisfaction. One possible explanation might be found in Matud et al. (2014), who reported that life satisfaction was higher in men and women who identified more with traditional notions of masculinity and femininity, respectively. These findings draw attention to gendered aspects of heteronormativity and the advantages—for some groups—of adhering to the prevalent sex and gender norms.

The role of social support has also been linked to subjective well-being in university samples, and it may also play a role in heteronormativity compliance. Following Zimet et al. (1988), three main sources of perceived social support are proposed. The first source is family. Family support is expected to provide a sense of belonging, safety, love, and protection; however, families who hold heteronormative beliefs can also become a source of conflict when they address topics of sexual and gender diversity (McDermott et al., 2021). Indeed, heterosexual scripts are learned through socialization with family and peers (Scappini et al., 2023), and two studies with university students in Southern Chile (Orellana et al., 2022; Orellana et al., 2022) have linked higher heteronormativity with higher perceived family support. These findings can be explained given that some emergent adult populations, particularly university students in Chile and other Latin American cultures, continue to depend on family support (Schnettler et al., 2017), maintain strong family bonds and remain in the family home as they attend university (Barrera-Herrera & Vinet, 2017). In this sense, the support that university students may perceive from their families may be strained or enhanced depending on their adherence to heteronormative attitudes.

Two other sources of perceived social support are friends and other significant persons, including university staff and online relationships (Orellana et al., 2022; Orellana et al., 2022). Friends are a relevant source of social support for university students in Chile (Barrera-Herrera & Vinet, 2017), but the role of heteronormativity in this type of support is unclear. Although scarcely explored, some studies suggest that heteronormativity includes gendered prescriptions about how men and women relate among their own group and with one another. For instance, men with traditional masculinity ideals may seek less emotional support from their male friends (Ríos-González et al., 2021), while they deem women as solely romantic/sexual partners (Gillespie et al., 2015) in accordance with traditional sexual scripts (Scappini et al., 2023). Among women, the link between heteronormativity and friend support is less clear, but Seal (2019) reports that female friendships following heteronormative assumptions might impose rigid expectations of loyalty and respect among women, which can ultimately deteriorate the quality of the relationship. For these reasons, it

has been hypothesized that higher heteronormativity may be linked to lower support from friends (Orellana et al., 2022), given that the priority relation from this vantage point is one's romantic partner. As for other sources of social support (e.g., members from the larger university community, other social groups outside of it), studies show that there are no differences between heterosexual and non-heterosexual students in their perception of this social support (Orellana et al., 2022; Orellana et al., 2022). Overall, the question arises of whether heterosexual university students differ in how they engage with perceived social support based on their degree of heteronormativity.

Another scarcely explored link is that of heteronormativity and self-perceived health. Some studies in this line show that adherence to masculine gender norms is linked to health-related outcomes, including higher suicide risks in both men and women (Fadoir et al., 2020). Moreover, risk factors for mental health problems increase significantly during emerging adulthood (Barrera-Herrera & Vinet, 2017; Vinet et al., 2022). For instance, a study with a Chilean university sample showed that this population has higher levels of depression and anxiety than that of the general population (Vinet et al., 2022). These health-related vulnerabilities of this population may have increased during the COVID-19 pandemic. A previous study on heteronormativity profiles was conducted in this context (Orellana et al., 2022), and its findings showed that participants reported a high number of days with mental health difficulties in the last month (i.e., from 15 to 19 days out of 30). The significant differences in number of days with mental health difficulties were marked by gender rather than sexual orientation, as it was the case with life satisfaction in the same study. That is, the profile with consistently high heteronormativity, composed by men and heterosexuals, had the lowest number of days with mental health difficulties, whereas the mixed profile of heteronormativity mostly composed by women had the highest number.

The current study

This study examined profiles of heteronormativity and subjective well-being in heterosexual Chilean university students. The literature on this population commonly conceptualizes it as emerging adults (Barrera-Herrera & Vinet, 2017). Emerging adulthood is a culturally situated developmental stage characterized by identity exploration, instability, self-focusing, possibilities, and feelings of being "in-between" adolescence and adulthood (Arnett, 2000). Arnett (2000) theorized that this developmental stage is marked by a relative independence from social roles and normative expectations. Yet heterosexual university students continue to uphold traditional norms regarding sexuality and gender (Morgan, 2012), which may reinforce prejudice and discrimination toward sexual and gender minorities. For instance, Ray and Parkhill (2020) have positively linked heteronormativity to negative emotional

reactions, such as disgust, and hostile attitudes towards gay men. At the same time, normative (i.e., heterosexual) sexual scripts become prevalent during emerging adulthood as they guide the exploration of romantic and sexual relationships (Scappini et al., 2023).

Higher Education settings also tend to reproduce heteronormativity (Seal, 2019). One source of norm maintenance and reinforcement of relevance here, considering that gender underlies heteronormativity, is the type of program in which students are enrolled. In their study about gender stereotypes in higher education in Chile, Espinoza and Albornoz (2023) showed that women tend to enroll in "feminized" programs in health and education, whereas men enroll in "masculinized" programs in Science, Technology, Engineering and Mathematics (STEM). These authors reported that students in masculinized programs attributed low grades to a lack of peer support, compared to students in neutral (i.e., with equal gender enrollment) and feminized programs.

The role of heteronormativity in the lives of heterosexual emerging adults remains relatively unexplored. Although heteronormativity has been linked to harmful gender-based attitudes and behaviors, there has been little examination on how diverging degrees of adherence to heteronormativity dimensions can be associated with subjective well-being variables among heterosexuals. Based on Habarth's (2014) two dimensions of heteronormativity, Gender essentialism and Normative behavior, and using Latent Profile Analysis (LPA), these patterns of heteronormativity and subjective well-being are explored in a sample of heterosexual university students.

Therefore, this study's aim was two-fold. The first aim was to identify heteronormativity profiles among heterosexual university students from Central and South Chile, grouping individuals by their gender essentialism and normative behavior scores. The second aim was to describe these profiles variables according to variables related to subjective well-being, as well as sociodemographic characteristics. The sociodemographic variables are gender (focusing on men and women) and university program; whereas subjective well-being variables relate to perceived mental and physical health, perceived social support from family, friends, and others, and life satisfaction.

Method

Participants

A sample of 200 Chilean university students was recruited, with ages ranging from 18 to 55 (M = 23.15, SD = 3.78). Latent Profile Analysis (LPA) studies tend to have larger sample sizes (Spurk et al., 2020; Tein et al., 2013), but power analysis for LPA may not always be available as there might not be prior work to establish parameter values for the population

under study (Spurk et al., 2020). However, this study follows Dalmaijer et al. (2022) recommendation that sample sizes should be $N = 20$ to $N = 30$ for each expected subgroup. Table 1 summarizes the sociodemographic characteristics of the sample. Half of the sample was male (50.5%), and all participants identified as heterosexual and cisgender. Most of them resided in Talca (60.5%) or Santiago (30.5%), in urban areas (84%), and lived with their parents during the year (62.5%). Most participants were either single (71%) or in a relationship (27%). The faculty and academic programs reported by participants were categorized and recoded. Hence, the sample comprised 41% of participants studying in STEM, and 59% in Social Sciences and Humanities.

Table 1.
Sociodemographic characteristics of the sample ($N = 200$).

Variable		%
Age [M (SD)]		23.15 (3.78)
Gender	Man	50.5
	Woman	49.5
City	Talca	60.5
	Santiago	30.5
	Rancagua	5
	Valparaíso	4
Area of residence	Urban	84
	Rural	16
Living with parents	All year round	62.5
	On weekends and holidays	22.5
	Independent from parents	15
Relationship status	Single	71
	In a relationship	27
	Married	2

Note: All participants identified as cisgender and heterosexual.

Instruments

Sociodemographic questions. Participants answered questions about their age; gender and whether this gender matched the sex they were assigned at birth; whether they lived with their parents throughout the year, during holidays or independently; and faculty of study.

Heteronormative Attitudes and Beliefs Scale (HABS). Habarth's (2014) HABS conceptualizes heteronormativity as the enforced compliance with culturally determined roles and assumptions that deem heterosexuality as the only "natural" or "normal" basis for sexual and gendered identities and relationships. The HABS operationalizes heteronormativity using a two-dimensional structure: Gender essentialism (e.g., "There are only two sexes: male and female") and Normative behavior (e.g., "There are particular ways that men should act and particular ways that women should act in relationships"). This scale has a 7-point Likert-type response format, from 1 = *strongly disagree* to 7 = *strongly agree*. The 16-item original scale has shown reliability coefficients of $\alpha = .92$ for the Essentialism subscale $\alpha = .78$ for the Normative Behavior subscale (Habarth, 2014). An adapted, 8-item Spanish version of the HABS was used in this study, which has shown acceptable psychometric properties in a previous sample of Chilean university students (Orellana et al., 2023). In this study, Cronbach's α values were .82 for the Essentialism subscale, and .77 for the Normative Behavior subscale.

Satisfaction with Life Scale (SWLS). The SWLS (Diener et al., 1985) is a unidimensional five-item scale that measures individuals' global cognitive evaluations of their own life (e.g., "If I could live my life over again, I would not change anything"), using a 6-point Likert-type response format, from 1 = *strongly disagree* to *6 = strongly agree*. The SWLS has shown reliability in samples of Chilean university students, with Cronbach's α values of .87 to .89 (Schnettler et al., 2017). In this study, Cronbach's α value was $\alpha = .85$.

Health-Related Quality of Life Index (HRQOL-4). The HRQOL-4 (Hennessy et al., 1994) is made up of four items that measure individuals' global self-perception of health, recent physical and mental health problems (i.e., number of days with illness or discomfort experienced in the last 30 days), and self-reported number of days with limitations in daily activities due to health problems in the last month. Two items from the Spanish version of the HRQOL-4 questionnaire (Schnettler et al., 2017) were used in this study, which asked participants for the number of days they experienced physical health problems and mental health problems, separately, in the last 30 days at the time of responding the questionnaire.

Multidimensional Scale of Perceived Social Support (MSPSS). The MSPSS (Zimet et al., 1988) is a 12-item scale that measures the support that individuals perceive from their family,

friends, and other relevant people (e.g., "I can talk about my problems with my family"). It has a 5-point Likert-type response format from 1 = *strongly disagree* to 5 = *strongly agree*. Cronbach's alpha value in a sample of university students in Southern Chile was α = .80 for the entire scale (Orellana et al., 2022). In this study, Cronbach's alpha values were α = .874 for the Family subscale, α = .936 for the Friends subscale, and α = .889 for the Relevant Others subscale. Each of these subscales contained four items.

Procedure

An online questionnaire hosted on the QuestionPro platform was distributed through universities and student groups in South-Central Chile, in the cities of Santiago, Valparaíso, Talca, and Rancagua, during the first and second academic semester of 2022. The first page of the questionnaire displayed the informed consent form, which stated the aims of the study, inclusion criteria, and assured the anonymous and confidential treatment of the data. Participants were asked to download a copy of the informed consent form and to confirm their agreement by checking a box to proceed with the questionnaire. Prior to the main study, a pilot test of the questionnaire was conducted with a sample of 24 students from another city who met the inclusion criteria. Upon the completion of the pilot, no changes were made to the data collection procedure and instruments.

This study belongs to a wider research project on sexual orientation and subjective well-being (ANID Fondecyt Postdoctoral 3210003). The Ethics Committee of the Universidad de La Frontera (Protocol 022_21) approved this study.

Data analysis

Descriptive and correlation analysis of the main variables were carried out (Table 2) using the Statistical Package for Social Sciences (SPSS) v.26. Participants who did not meet the inclusion criteria and those with incomplete questionnaires were removed. Cronbach's alpha coefficient was calculated to examine the reliability of the measures. Scores were obtained for all variables. A principal components analysis was conducted to obtain the z-scores both subscales of the HABS (Gender essentialism and Normative behavior).

Heteronormativity profiles were identified based on both dimensions of the HABS following a two-step process. First, to establish profiles of heteronormativity, latent profile analysis (LPA) was conducted for continuous variables using LatentGold v. 5.1 (Statistical Innovations Inc.). Participants were grouped based on their Gender essentialism and Normative behavior z-scores. To choose the most fitting solution, the Bayesian Information Criterion (BIC) and Consistent Akaike's Information Criterion (CAIC) values were used, including gender as a covariate. Lower BIC and CAIC values indicate a better model fit.

The second step of this analysis entailed characterizing the resulting heteronormativity profiles based on statistical differences in the following variables: Gender; type of program (STEM vs Social Sciences and Humanities); perceived social support from friends, family, and others; number of days with physical and mental difficulties; and life satisfaction. To this end, Pearson's χ^2 test was used for discrete variables, and analysis of variance (ANOVA) for continuous variables. To identify homogeneous and non-homogeneous variances in the continuous variables, Levene's statistic was used. The Tukey Multiple Comparisons test was conducted for continuous variables with homogeneous variances ($p \leq .001$), whereas for non-homogenous variables, Dunnett's T3 Multiple Comparisons test ($p < .05$) was used.

Results

Table 2 displays the means and standard deviation values for all non-categorical variables involved in the latent profile analysis. The results of the correlation analysis between these variables are also reported.

Table 2.
Descriptive statistics and correlations between heteronormativity, perceived social support, and number of days with health problems (N = 200).

Variable	M (SD)	1	2	3	4	5	6	7	8
1. HABS-Gender essentialism	15.09 (6.72)	–	.478**	.007	.035	−.184**	−.137	−.030	−.090
2. HABS-Normative behavior	10.45 (5.29)		–	.037	.112	−.024	−.070	−.045	−.143*
3. Satisfaction with life	20.02 (5.34)			–	.430**	.282**	.473**	−.126	-.401**
4. Social support – family	16.00 (3.50)				–	.378**	.492**	−,094	−.263**
5. Social support – friends	15.96 (3.85)					–	.548**	.023	−.162*
6. Social support – Others	16.43 (3.86)						–	.033	−.185
7. Days with physical health problems	5.94 (6.98)							–	.263**
8. Days with mental health problems	11.03 (9.06)								–

*$p < 0.05$. **$p < 0.01$.

An LPA was conducted to identify profiles of heterosexual university students based on their Gender essentialism and Normative behavior scores. Using the z-scores of these two dimensions, a range of 1 to 10 clusters (Table 3) was tested. The model with lowest CAIC and BIC values, meaning that with the best fit, was the three-cluster solution. However, the four-cluster model was chosen for this analysis. Spurk et al. (2020) state that choosing the model can be informed not only by fit information criteria, but by the estimated contribution that the model makes to better understanding the construct under study. Moreover, with a small sample size, the rule of thumb is that an additional profile should include at least 1.0% of the sample size (Spurk et al., 2020).

Table 3.
Summary of latent profile cluster models for heteronormativity scores.

Model	LL	BIC (LL)	CAIC (LL)	Npar	Classification error
Cluster-1	-563.570	1148.3346	1152.3346	4	0.0000
Cluster-2	-513.1768	1079.3368	1089.3368	10	0.0781
Cluster-3	-492.6063	1069.9857	1085.9857	16	0.1493
Cluster-4	-483.5472	1083.6573	1105.6573	22	0.1230
Cluster-5	-475.9554	1100.2638	1128.2638	28	0.1565
Cluster-6	-469.5312	1119.2052	1153.2052	34	0.1632
Cluster-7	-465.3335	1142.5997	1182.5997	40	0.1616
Cluster-8	-462.0673	1167.8572	1213.8572	46	0.1577
Cluster-9	-458.4207	1192.3539	1244.3539	52	0.1453
Cluster-10	-450.2018	1207.7061	1265.7061	58	0.1453

On this basis, the decision was made to work with a four-cluster solution to further the profile discrimination between those with high and with low heteronormativity. In the chosen four-cluster solution, both heteronormativity dimensions made a significant contribution to the overall model. Wald statistics for Gender essentialism was 190.40 (R^2 = 0.563), and for Normative behavior 215.90 (R^2 = 0.608), both with $p < .001$.

The four profiles differed in both Gender Essentialism ($F(3, 196)$ = 95.517, $p < .05$) and Normative Behavior ($F(3, 196)$ = 114.125, $p < .05$). Profiles differed by gender, $\chi^2(3, N = 200)$ = 27.69, $p < .05$; and by type of program, whether STEM or SCH, $\chi^2(3, N = 200)$ = 8.21, $p < .05$). These profiles did not differ in whether students lived with their parents throughout the

year, off-semester or independently (p = .17). The four profiles differed by perceived support from friends, number of days with mental health problems, and life satisfaction (p < .05). They did not differ by perceived social support from family (p = .17) nor from relevant others (p = .24), nor by number of days in which they experienced physical health problems (p = .832). These distinctions are shown in Table 4.

Profiles 1 and 3 are characterized by overall low heteronormativity, while Profiles 2 and 4 were characterized by overall high heteronormativity. Each of the four profiles was labeled based on characteristics suggested by their significant z-scores (Figure 1). These profiles are described in detail below.

Table 4.
Sociodemographic characteristics and variables with significant differences by profile.

Variable		Profile 1 Non-conformist (51%)	Profile 2 Traditionalist (21%)	Profile 3 Diffused (16%)	Profile 4 Essentialist (12%)	*p*
Gender (%)	Men	36.2	70.3	47.1	87.5	< .001
	Women	63.8	29.7	52.9	12.5	
Program (%)	STEM	40	24.3	55.9	50	.042
	Social Sciences	60	75.7	44.1	50	
Social support from friends[1]	(M [SD])	16.33 (3.40) *ab*	16.51 (3.22) *a*	15.76 (4.28) *ab*	13.71 (5.21) *b*	.017
Days with mental health problems[1]	(M [SD])	9.41 (8.26) *ab*	7.46 (9.02) *b*	13.65 (10.59) *a*	11.58 (8.87) *ab*	.021
Life satisfaction[1]	(M [SD])	21.12 (4.73) *a*	20 (5.63) *ab*	17.82 (4.82) *b*	18.33 (6.87) *ab*	.005

[1] Different letters by line indicate significant differences according to Tukey multiple comparisons test.
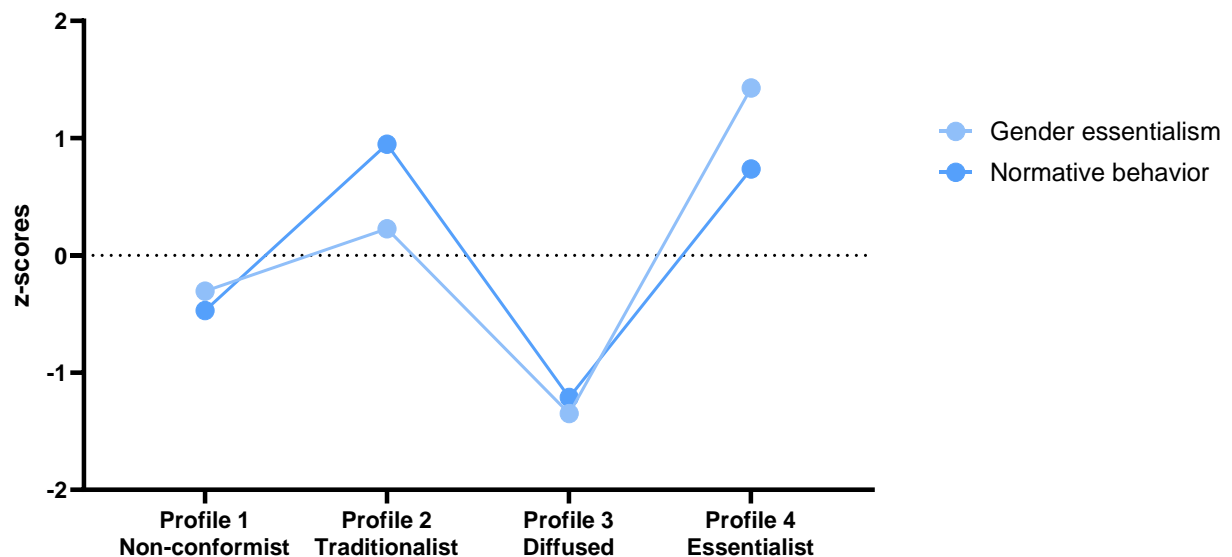
Figure 1. *Profiles of heteronormativity by gender essentialism and normative behavior scores in a sample of heterosexual university students.*

Profile 1: Non-conformist (51%). This profile showed an overall low level of heteronormativity. There were significant differences by gender in this profile, with the highest proportion of women and the lowest proportion of men of all profiles. Participants in this profile also reported significantly higher life satisfaction compared to Profile 3 (also a Low heteronormativity profile), and significantly higher support from friends compared to Profile 4 (High heteronormativity).

Profile 2: Traditionalist (21%). This second profile showed an overall high level of heteronormativity. In terms of gender, this profile had a significantly high proportion of men and a low proportion of women. This was the only profile with significant differences by type of program, as it had both a significantly higher proportion of students from Social Sciences and Humanities, and a significantly lower proportion of students from STEM programs. Participants in this profile reported the highest score on perceived support from friends, and it was significantly higher than that of Profile 4 (Higher heteronormativity profile); and they also reported significantly lower number of days with mental health problems than Profile 3 (Low heteronormativity profile).

Profile 3: Diffused (16%). This profile showed the overall lowest level of heteronormativity among the four profiles. Compared to the other profiles, participants in this profile appear to distance themselves from more heteronormative assumptions. This profile had no

significantly distinctive proportions by gender. Lastly, these participants reported a significantly higher number of days with mental health problems compared to Profile 2 (High heteronormativity), and significantly lower life satisfaction compared to Profile 1 (Low heteronormativity).

Profile 4: Essentialist (12%). Participants in this profile had the overall highest level of heteronormativity among the four profiles. There was a high proportion of men and a low proportion of women. This profile had the lowest score for friend support, significantly lower than those of Profiles 1 and 2 (Low and High heteronormativity, respectively).

Discussion

Despite the positive and negative consequences of adhering to heteronormative beliefs for individuals' well-being and identity, the impact of heteronormativity on the lives of heterosexual individuals remains largely unexplored. This study aimed to identify profiles of heteronormativity among heterosexual Chilean university students, and their association with variables related to subjective well-being. Using Latent Profile Analysis, four heteronormativity profiles were found based on Gender essentialism and Normative behavior z-scores, the two heteronormativity dimensions proposed by Habarth (2014). The first profile comprised more than half of the sample (51%) and was labeled *Non-conformist* due to participants' low level of heteronormativity, most notably attitudes and beliefs related to the acceptance of gendered normative behavior. The second profile was labeled *Traditionalist* (21%) to indicate their high level of heteronormativity, with an emphasis on gender-norm adherence. Profile 3 had the lowest levels of heteronormativity among all profiles, and it was labeled *Diffused* (16%) for their marked rejection of heteronormative precepts compared to the other profiles. Lastly, Profile 4 was labeled *Essentialist* (12%) due to these participants' high heteronormativity, which emphasizes beliefs about sex and gender as natural and intrinsic dispositions.

All four profiles were consistent in the direction of the scores for the two heteronormativity dimensions, meaning that two profiles had low scores, and the other two had high scores, on both Essentialism and Normative behavior. This finding is in contrast with those from a previous study of latent heteronormativity profiles (Orellana et al., 2022), in which there were two consistent profiles and two "mixed" profiles, that is, profiles that had a high score in one heteronormativity dimension and a low score in the other one. In this latter study, the mixed profiles had significant proportions of lesbian, gay, bisexual, and other non-heterosexual students (LGB+), both cisgender and trans/non-binary, as well as students who were women

or non-binary. This distinction between these two studies draws attention to the more consistent patterns of adherence to heteronormativity that may exist among heterosexual—and cisgender—university students compared to their LGB+ and non-binary peers. These patterns are discussed below accounting for subjective well-being indicators in each profile.

High heteronormativity and subjective well-being

The profiles with higher heteronormativity were Profiles 2 and 4, and they differed on which dimensions of this construct had the higher score. Profile 2, *Traditionalist*, had the highest score on Normative behavior, and a significantly higher proportion of men and a lower proportion of women. In comparison with the other three profiles, the traditionalist profile adheres mainly to traditional beliefs regarding men's and women's conventional roles and behaviors in romantic relationships (Habarth, 2014). Other authors (Jiménez-Picón et al., 2023) have pointed to similar constructs that encompass romantic love myths, showing that endorsement of these idealized romantic beliefs can be related to gender and intimate partner violence (e.g., remaining with one's partner, seeking to achieve ideals of romance, despite controlling and dominant dynamics within the couple). Students in a traditionalist profile may thus follow the "heterosexual script" (Scappini et al., 2023) that establishes "opposite but complementary" roles for men and women, in which men enact power and authority over others, and women (and non-heterosexual men) remain as subordinates.

There are three other significant characteristics of the traditionalist profile. First, this profile had a significantly high proportion of students from Social Sciences programs, contrary to the expectation that heteronormativity dynamics are more salient in STEM environments (Jones et al., 2023). However, it is worth noting that the fields of Social Sciences can also include programs related to "soft engineering" (e.g., architecture), and overall, each program within either field can have specific masculinized or feminized cultures (Corlett et al., 2022). Future research should further explore the Humanities and Social Sciences environments that can also foster heteronormative attitudes among its students and academics.

The other two characteristics of the Traditionalist profile are, one, its significantly higher perceived support from friends. This finding does not support the hypothesis set by Orellana et al. (2022) stating that higher heteronormativity might be associated with smaller friend networks and friend support. Nevertheless, individuals tend to choose to surround themselves with others like them, and participants in this profile might seek peers who also follow traditional sexual scripts (Seal, 2019; Scappini et al., 2023) and other heteronormative attitudes. Second, participants in this profile reported fewer number of days with mental health days difficulties compared to the diffused profile (Profile 3, low heteronormativity). This

result does align with that of Orellana et al. (2022), supporting that university students with high heteronormativity—a significant proportion of which are men—tend to report better self-perceived mental health. Although the questions asked on self-perceived health do not provide information on actual mental health indicators, this finding overall supports that compliance with social norms is associated with comparatively better psychological health for members in the normative group. This is a benefit that might make challenging heteronormativity more difficult for those members.

The second profile with higher heteronormativity, Profile 4, had a higher score on the dimension of gender essentialism. *Essentialist* students were a minority within the sample (12%), and this group was characterized by having a significant proportion of men and by reporting lower perceived support from friends. It may not be surprising that both high heteronormativity profiles are marked by the statistically significant presence of men; indeed, high heteronormativity is expected in men more than in women (Habarth, 2014; Scandurra et al., 2021). However, it is worth noting in both profiles the statistical salience of perceived friend support, whether higher or lower. Likewise, a previous study on heteronormativity profiles (Orellana et al., 2022) showed that friend support only differed between the consistent profiles, that is, those with high or low scores on both heteronormativity dimensions.

In this study, the diverging levels of friend support in these two profiles may indicate that friendships can nurture certain manifestations of heteronormativity and hinder others. Namely, traditionalists, or those who adhere to attitudes that endorse traditional gender roles and relationships between men and women, reported having more social support from friends. Normative behavior (Habarth, 2014) refers to how men and women establish sexual and romantic relationships, often following socio-cognitive scripts (Corlett et al., 2022) and based on beliefs that may not be gendered, such as loyalty among friends and the idea of a "soulmate" (Seal, 2019). On the other hand, those in the profile with high gender essentialist beliefs, by definition, may be more likely to believe that romantic attraction or sexual tension between men and women is unavoidable (Gillespie et al., 2015), and thus have a reduced friendship network (Orellana et al., 2022). Furthermore, traditional masculinity, or heterosexual masculinity (Dean & Fischer, 2020), may preclude men—who make up a significant proportion of this profile—from establishing friendships not only with women, but also with other men (Ríos-González et al., 2021). This hypothesis finds further support in a correlation in this study showing that higher gender essentialism is associated with lower social support from friends.

Low heteronormativity and subjective well-being

Profiles 1 and 3 are characterized by lower heteronormativity scores, and in both cases the z-scores for both dimensions were below zero. Given these scores, it is likely that participants in these profiles are more inclined to question traditional precepts of masculinity and femininity (Dean & Fischer, 2020) than those in the high heteronormativity profiles. Furthermore, participants in these two profiles might display less bias against non-heterosexual, trans, and non-binary people, as heteronormativity is considered a prerequisite for these types of discrimination and prejudice (Habarth, 2014).

Profile 1, the *Non-conformist* profile, had a statistically high proportion of women, and a lower proportion of men, as expected according to heteronormativity comparisons by gender (Habarth, 2014; Orellana et al., 2023). This profile also had the highest life satisfaction score. In a study examining life satisfaction and traditionally masculine and feminine gender roles in Spanish adults, Matud et al. (2014) found that women who adhered to conventionally feminine traits had higher life satisfaction. Considering heteronormativity as a proxy for adherence to traditional gender roles, the opposite can be observed in this study. Our finding is also in contrast with that of Orellana et al. (2022), as in the latter study, the one profile significantly composed by women reporting mixed heteronormativity had the lowest life satisfaction level, compared to a profile of high heteronormativity and significantly composed by men. Overall, participants in this profile might be fulfilling the expectation posed by Dean and Fischer (2020) that emerging adulthood and university life, particularly for women, can be an opportunity to explore gender and sexual identities more freely. Furthermore, as proposed by Dillon et al. (2011), heterosexual people who are open to exploring their sexual identity are more likely to move away from the assumption of compulsory heterosexuality, and towards more positive attitudes toward sexual and gender minorities.

The non-conformist profile also reported a higher perceived support from friends compared to the essentialist profile (Profile 4, High heteronormativity). In keeping with Orellana et al. (2022), it might be the case that low heteronormativity may entail a higher quality friend support, inasmuch it might allow to question essentialist ideas about same- and cross-gender friendships between men and women. Overall, this profile suggests that, for some members of the normative group (i.e., heterosexuals), most likely women, low adherence to heteronormative attitudes coexists with life satisfaction and with high friend support, two important indicators of subjective well-being (Schnettler et al., 2017).

Lastly, the second profile with low heteronormativity was labeled *Diffused.* This low heteronormativity profile is named after a sexual identity development status termed *diffusion.* Dillon et al. (2011, p. 662) explain that individuals in this stage are likely "to ignore or reject social and cultural prescriptions for sexual values, behavior and identity". At the same time, diffusion has been associated with manifestations of psychological distress (Dillon et al., 2011). Hence, low heteronormativity for a diffused profile may not necessarily entail challenging larger societal assumptions regarding sex and gender. Instead, it may reflect an individual's development of their sexual identity, a process that is expected during emerging adulthood (Arnett, 2000; Barrera-Herrera & Vinet, 2007). According to Dillon et al. (2011), the individual might resolve their diffusion status by either returning to a state of compulsory heterosexuality or moving onto active exploration of their identity.

The Diffused profile had the lowest scores in both gender essentialism and normative behavior. This is considered a "blurry" profile in terms of gender, as its composition had no significant differences between men and women. At first glance, individuals in this profile might be the most likely of the four profiles to deviate from a heterosexual script (Scappini et al., 2023) and to have low prejudice toward sexual and gender minorities (Habarth, 2014). However, Dean and Fischer (2020) advise that some individuals who question traditional gender notions, and thus might have low heteronormativity, may be more focused on their own psychological needs rather than on forming a stable allyship with sexual and gender minorities. This suggestion finds support in this profile, as its only distinction from the other three in subjective well-being indicators is self-perceived mental health. Specifically, participants in the diffused profile reported the most days with mental health problems out of the four profiles, and this number was statistically higher than for traditionalists, a high heteronormativity profile.

Limitations and future research

The limitations of this study are acknowledged. The first one is the small sample size and its non-probabilistic nature, which does not allow for generalization of results to the population of heterosexual students. Although Latent Profile Analysis does not have established sample size requirements, larger samples (at least 500 participants) are highly advised (Spurk et al., 2020). Moreover, our sample was self-selected, and the response rate in some of the cities chosen for this study was extremely low, and thus they are not properly represented. A second limitation is that our instrument recorded students' faculty but not their specific program. Participants were asked about their faculty to identify general areas of knowledge, following the focus of the literature on STEM fields, but within these areas, different programs

can present different levels of how "masculinized", "feminized" or "neutral" (Espinoza & Albornoz, 2023) they are perceived. It is recommended that future studies include a wider range of participants from different programs, guided by how masculinized or feminized they are considered. Another limitation is that the measure used to ask for self-perceived mental and physical health was only two items, one per each category (i.e., number of days in the last month in which the person experienced physical or mental health difficulties), and what counts as a health-related problem may be interpreted in different ways by participants.

On the above basis, recommendations are made for future studies. Research on heteronormativity and well-being will benefit from working with larger samples with probabilistic distributions. These samples should also include different sociodemographic characteristics such as sexual orientation, gender and gender identity, age, socioeconomic status, ethnic origin, being a parent, among others. A second recommendation for further studies is exploring the multiple social identities, groups, or communities that students ascribe to, to further expand heteronormativity profiles. For example, membership to religious or sports groups can have a bearing on how their members understand and enact sexuality and gender with their peers. One last relevant consideration is that heterosexual identity, like other sexual identities, can change throughout the lifespan, and people who identify as heterosexual in a study may identify otherwise in the future (Dillon et al., 2011). The study of heteronormativity will benefit from longitudinal approaches that account for the continuous development (i.e., commitment and exploration processes; see Morgan, 2012) of one's sexual orientation and identity over time, among both heterosexual and sexual and gender minority individuals.

Implications and conclusions

The findings of this study entail implications for research on heteronormativity and well-being. Research should continue refining the knowledge on the operationalization and multidimensionality of heteronormativity, exploring other potential dimensions of these attitudes besides gender essentialism and normative behavior. In this regard, this study draws attention to the need to further study the role of friends and peer support in the maintenance or challenging of heteronormative assumptions, marking a distinction between the effects of essentialist beliefs and those of normative behaviors. Attitudes toward the latter might be more accepted by the group of peers, as it relates not only to how men and women behave in romantic relationships but the endorsement that these dynamics receive from others (Seal, 2019) and the sexual scripts that are highly prevalent in Western societies (Scappini et al., 2023).

Although this study focuses on heterosexual students, our findings also have implications for sexual and gender minorities. For instance, heterosexual university students with low heteronormativity (i.e., Profiles 1 and 3, *Non-conformist* and *Diffused*) have the potential to build allyship (Chen et al., 2023) with sexual and gender minority individuals and groups. Indeed, Seal (2019) points out to the importance that heterosexual individuals "interrupt" heteronormativity, and such LGBTQ+ allyship could lead to the creation of spaces that are supportive and affirmative towards sexual minority individuals (Marx & Kettrey, 2016). On the other hand, high heteronormativity individuals (i.e., *Traditionalist and Essentialist* profiles) may be contributing to maintaining heteronormative precepts in their social spheres (e.g., through heterosexual marking, Davis-Delano et al., 2018), which prevents people from displaying non-normative sex-gender expressions or relationships or do so with fear or anticipation of heterosexism.

This study also poses practical implications. Higher education institutions should aim to challenge not only traditional notions of gender and sexuality (gender essentialism) but also interpersonal behaviors that reinforce these traditional notions (normative behaviors). University campaigns on diversity should also focus on challenging gender roles, showing that there are many ways to be queer, trans, and non-binary, but also many ways to be heterosexual. A second implication derives from our results regarding university students' perceived family and friend support. That is, adhering to more normative behaviors might ensure a support network that would not be available if they did not adhere to this normative behavior. Different sources of support must be explored and fostered (i.e., religious groups, social groups, sports, political, etc.), inside or outside the university, which would broaden the understanding of how support is presented and available to students. Lastly, the diffused profile requires special attention given that students with these characteristics might require psychological interventions and support to resolve this sexual identity status in a manner that allows them to grow and explore, instead of going back to compulsory heterosexuality (Dillon et al., 2011).

Making heterosexuality visible in psychology research can help counter the historical approach to heterosexuality as unmarked, unseen, and taken for granted (Dean, 2020). The four heteronormativity profiles that emerged in our study show that, among heterosexual university students, the dimensions of heteronormativity gender essentialism and normative behavior can manifest consistently in the same direction. These profiles also suggest how men and women engage with norms regarding their sexual identity (Morgan, 2012), and that

high and low heteronormativity coexists with different levels of life satisfaction, perceived social support, and self-perceived mental health. These profiles can guide further research and interventions that aim to foster healthier approaches to sexuality and gender, for both heterosexual and sexual and gender minorities.

Funding/Financial Support

Other Support/Acknowledgement

The authors have no support to report.

Competing Interests

The authors have declared that no competing interests exist.

References

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480. https://doi.org/10.1037/0003-066X.55.5.469

Barrera-Herrera, A., & Vinet, E. (2017). Adultez Emergente y características culturales de la etapa en universitarios chilenos. *Terapia Psicológica, 35*(1), 47-56. https://teps.cl/index.php/teps/article/view/152

Bartram, D. (2023). Sexual orientation and life satisfaction. *Journal of Sociology, 59*(1), 20-35. https://doi.org/10.1177/14407833211017672

Chen, J. M., Joel, S., & Castro Lingl, D. (2023). Antecedents and consequences of LGBT individuals' perceptions of straight allyship. *Journal of Personality and Social Psychology, 125*(4), 827–851. https://doi.org/10.1037/pspi0000422

Choi, A. Y., Nylund-Gibson, K., Israel, T., & Mendez, S. (2019). A latent profile analysis of bisexual identity: evidence of within-group diversity. *Archives of Sexual Behavior, 48*, 113–130. https://doi.org/10.1007/s10508-018-1325-1

Connell, R. (2005). *Masculinities* (2nd ed.). University of California Press.

Corlett, S., Di Marco, D., Munduate, L., & Arenas, A. (2023). Manifestations and Reinforcement of Heteronormativity in the Workplace: A Systematic Scoping

Review. *Journal of Homosexuality*, *70*(12), 2714–2740. https://doi.org/10.1080/00918369.2022.2074334

Davis-Delano, L., Morgan, E., Gillard, A. & Davis, C. (2018) When heterosexuality is questioned: Stifling suspicion through public displays of heterosexual identity. *Journal of Homosexuality,* *65*(13), 1683-1708. https://doi.org/10.1080/00918369.2017.1387465

Dalmaijer, E. S., Nord, C. L. & Astle, D. E. (2022). Statistical power for cluster analysis. *BMC Bioinformatics, 23*, 205. https://doi.org/10.1186/s12859-022-04675-1

Dean, J. J., & Fischer, N. (2020). Thinking straightness. An introduction to Critical Heterosexualities Studies. In J. J. Dean & N. Fischer (Eds.). *Routledge International Handbook of Heterosexualities Studies* (pp. 1 – 17). Routledge. https://www.routledgehandbooks.com/doi/10.4324/9780429440731-4

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, *49*(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

Dillon, F., Worthington, R., & Moradi, B. (2011). Sexual identity as a universal process. In S. J. Schwartz et al. (eds.), *Handbook of Identity Theory and Research* (Cap. 27). Springer.

Espinoza, A. M., & Albornoz, N. (2023). Sexismo en educación superior: ¿Cómo se reproduce la inequidad de género en el contexto universitario? *Psykhe, 32*(1), 1-37. https://doi.org/10.7764/psykhe.2021.35613

Fadoir, N. A., Kuhlman, S. T. W., & Smith, P. N. (2020). Suicide Risk and Restricted Emotions in Women: The Diverging Effects of Masculine Gender Norms and Suicide Capability. *Archives of Suicide Research*, *24*, 323–339. https://doi.org/10.1080/13811118.2019.1599480

Farvid, P. (2015). Heterosexuality. In C. Richards & M. J. Barker (Eds.), *The Palgrave Handbook of the Psychology of Sexuality and Gender* (92-108). Palgrave Macmillan.

Gillespie, B. J., Frederick, D., Harari, L., & Grov, C. (2015). Homophily, close friendship, and life satisfaction among gay, lesbian, heterosexual, and bisexual men and women. *PLoS One, 10*(6). https://doi.org/10.1371/journal.pone.0128900

Habarth, J. (2014). Development of the heteronormative attitudes and beliefs scale. *Psychology & Sexuality,* *6*(2), 166-188. https://doi.org/10.1080/19419899.2013.876444

Hennessy, C. H., Moriarty, D. G., Zack, M. M., Scherr, P. A., & Brackbill, R. (1994). Measuring health-related quality of life for public health surveillance. *Public Health Reports, 109*(5), 665–672.

Herek, G. M. (2009). Sexual Stigma and Sexual Prejudice in the United States: A Conceptual Framework. In D. A. Hope (Ed.)., *Contemporary Perspectives on Lesbian, Gay, and Bisexual identities* (pp. 65-111). Springer New York. https://doi.org/10.1007/978-0-387-09556-1

Jiménez-Picón, N., Romero-Martín, M., Romero-Castillo, R., Palomo-Lara, J.C., & Alonso-Ruíz, M. (2023). Internalization of the romantic love myths as a risk factor for gender violence: a Systematic Review and Meta-Analysis. *Sexuality Research and Social Policy 20*, 837–854. https://doi.org/10.1007/s13178-022-00747-2

Jones, M. C., Forsythe, D., Friedensen, R., Vaccaro, A., Miller, R. A., Kimball, E., & Forester, R. (2023). Disrupting cisheteronormativity in STEM through humanism. *Frontiers in Education*, *8*. https://doi.org/10.3389/feduc.2023.1154275

Lindqvist, A., Gustafsson Sendén, M., & Renström, E. (2021). What is gender, anyway: a review of the options for operationalising gender. *Psychology & Sexuality, 12*(4), 332-344, https://doi.org/10.1080/19419899.2020.1729844

Lombard, N. (2016). 'Because they're a couple she should do what he says': Young people's justifications of violence: heterosexuality, gender and adulthood. *Journal of Gender Studies, 25*(3), 241-253. https://doi.org/10.1080/09589236.2014.943699

Martinez, L. R., & Smith, N. A. (2019). Development of a scale to measure heterosexual identity. *Psychology of Sexual Orientation and Gender Diversity, 6*(2), 138–148. https://doi.org/10.1037/sgd0000313

Marx, R. A., & Kettrey, H. H. (2016). Gay-Straight Alliances are Associated with Lower Levels of School-Based Victimization of LGBTQ+ Youth: A Systematic Review and Meta-analysis. *Journal of Youth and Adolescence, 45*(7), 1269-1282. https://doi.org/10.1007/s10964-016-0501-7

Matud, P., Bethencourt, J., & Ibáñez, I. (2014). Relevance of gender roles in life satisfaction in adult people. *Personality and Individual Differences, 70*, 206-2011. https://doi.org/10.1016/j.paid.2014.06.046

McDermott, E., Gabb, J., Eastham, R., & Hanbury, A. (2021). Family trouble: Heteronormativity, emotion work and queer youth mental health. *Health, 25*(2), 177-195. https://doi.org/10.1177/1363459319860572

Mohr, J. J. (2002). Heterosexual identity and the heterosexual therapist: An identity perspective on sexual orientation dynamics in psychotherapy. *The Counseling Psychologist, 30,* 532–566. http://dx.doi.org/10.1177/ 00100002030004003

Morgan, E. M. (2012). Not always a straight path: College students' narratives of heterosexual identity development. *Sex Roles, 66,* 79–93. https://doi.org/10.1007/s11199-011-0068-4

Orellana, L. Alarcón, T., Schnettler, B., Riquelme-Segura, L., Mora, M., Adasme-Berríos, C., Lobos, G., Saracostti, M., & Oda-Montecinos, C. (2023). Propiedades psicométricas de la Escala de Actitudes y Creencias Heteronormativas (HABS) en español: dos estudios con muestras universitarias chilenas. *Revista Iberoamericana de Diagnóstico y Evaluación – e Avaliação Psicológica (RIDEP), 71*(1), 85-97. https://doi.org/10.21865/RIDEP71.1.07

Orellana, L., Alarcón, T. & Schnettler, B. (2022) Behavior without beliefs: Profiles of heteronormativity and well-being among heterosexual and non-heterosexual university students in Chile. *Frontiers in Psychology, 13,* 988054. https://doi.org/10.3389/fpsyg.2022.988054

Orellana, L., Márquez, C., Farías, P., Liempi, G., & Schnettler, B. (2022). Apoyo social, actitudes hacia la sexualidad y satisfacción vital según orientación sexual en estudiantes universitarios. *Actualidades en Psicología, 36*(132), 43-57. https://doi.org/10.15517/ap.v36i132.4703

Powdthavee, N., & Wooden, M. (2015). Life satisfaction and sexual minorities: Evidence from Australia and the United Kingdom. *Journal of Economic Behavior & Organization, 116,* 107–126. https://doi.org/10.1016/j.jebo.2015.04.012

Ray, T. N., & Parkhill, M. R. (2020). Examining disgust and emotion regulation difficulties as components of aggression toward perceived gay men. *Psychology of Violence, 10*(4), 462–471. https://doi.org/10.1037/vio0000265

Rich, A. (1980). Compulsory Heterosexuality and Lesbian Existence. *Signs, 5*(4), 631-660. http://www.jstor.org/stable/3173834

Ríos-González, O., Ramis-Salas, M., Peña-Axt, J. C., & Racionero-Plaza, S. (2021). Alternative friendships to improve men's health status. The impact of the new alternative Masculinities' approach. *International Journal of Environmental Research and Public Health, 18,* 2188. https://doi.org/10.3390/ijerph18042188

Scandurra, C., Monaco, S., Dolce, P., & Nothdurfter, U. (2021). Heteronormativity in Italy: Psychometric Characteristics of the Italian Version of the Heteronormative Attitudes and Beliefs Scale. *Sexuality Research and Social Policy*, *18*(3), 637-652. https://doi.org/10.1007/s13178-020-00487-1

Scappini, A., Donati, M.A. & Fioravanti, G. (2023). Heterosexual Script in Italian Young Adults: Measurement Across Genders. *Sexuality Research and Social Policy 20*, 1152–1167. https://doi.org/10.1007/s13178-022-00786-9

Schnettler, B., Miranda-Zapata, E., Grunert, K. G., Lobos, G., Denegri, M., Hueche, C., & Poblete, H. (2017). Life satisfaction of university students in relation to family and food in a developing country. *Frontiers in Psychology, 8*, 1522. https://doi.org/10.3389/fpsyg.2017.01522

Seal, M. (2019). *The Interruption of Heteronormativity in Higher Education. Critical Queer Pedagogies.* Palgrave Macmillan. https://doi.org/10.1007/978-3-030-19089-7

Spurk, D., Hirschi, A., Wang, M., Valero, D., & Kauffeld, S. (2020). Latent profile analysis: A review and "how to" guide of its application within vocational behavior research. *Journal of Vocational Behavior, 120*. https://doi.org/10.1016/j.jvb.2020.103445

Tein, J. Y., Coxe, S., & Cham, H. (2013). Statistical power to detect the correct number of classes in Latent Profile Analysis. *Structural Equation Modeling: A Multidisciplinary Journal, 20*(4), 640–657. https://doi.org/10.1080/10705511.2013.824781

Van der Toorn, J., Pliskin, R., & Morgenroth, T. (2020). Not quite over the rainbow: the unrelenting and insidious nature of heteronormative ideology. *Current Opinion in Behavioral Sciences, 34*, 160–165. https://doi.org/10.1016/j.cobeha.2020.03.001

Vinet, E. V., Trizano-Hermosilla, I., Saiz, J. L., & Cova, F. (2022). Development of the inventory of psychological maladjustments for Chilean university students. *Revista Iberoamericana de Diagnostico Y Evaluacion-E Avaliacao Psicologica (RIDEP), 3*(64), 93-108. https://doi.org/10.21865/RIDEP64.3.08

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52*(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2

About the Authors

Ligia Orellana is a researcher and academic at the Department of Psychology at Universidad de La Frontera, Chile. She has a background in social psychology and her

teaching and research interests focus on sexual orientation and gender identity issues, social norms and subjective well-being.

Abner Silva is a doctoral student at Universidad de La Frontera, Chile. He is currently interested in the development of sexual identity in LGB+ young adults, and its role in the relationship between minority stress and subjective well-being.

José Sepúlveda is an academic at the Department of Psychology at Universidad de La Frontera, Chile. He has a background in social psychology and his teaching and research interests focus on economic psychology, consumer's behavior and subjective well-being.

Berta Schnettler is a researcher and academic at the Department of Agricultural and Livestock Production at Universidad de La Frontera, Chile. She has a background in positive psychology, and her research interests focus on the work-family interface, eating behaviors, and subjective well-being.

Leonor Riquelme-Segura is an academic at the Department of Social Work at Universidad de La Frontera, Chile. She has postgraduate training in social sciences, psychology and human development and teaches undergraduate courses in social work intervention methodologies.

María Pía Godoy is a researcher and academic at the Department of Psychology, and a PhD student in Social Sciences at the Universidad de La Frontera, Chile. She has a background in educational psychology and social sciences. Her current research interests focus on the impact of gender and disciplinary areas in work trajectories of female and male academics.

Karol Reutter has a bachelor's degree in psychology from the University of La Frontera (Chile). She currently works as a Research Assistant on multiple projects, collaborating primarily with researchers from the Department of Psychology at the Universidad de La Frontera. Her research interests are mainly focused on gender and economic psychology.

Corresponding Author's Contact Address[TOP]

Universidad de La Frontera.
Francisco Salazar 1145, Temuco.
Código postal 478000.
Región de La Araucanía, Chile.
Email: ligia.orellana@ufrontera.cl