

Adolescent gender identity and sexual orientation: a school-based correlational study

Identidade de gênero e orientação sexual nos adolescentes: estudo correlacional numa escola

DOI:10.34119/bjhrv6n1-230

Recebimento dos originais: 09/01/2023

Aceitação para publicação: 06/02/2023

Ana Catarina Lobo Maurício Cordeiro

Master of Medicine

Institution: Centro Hospitalar e Universitário de Coimbra, Portugal - Departamento de Pediatria

Address: Avenida, R. Dr. Afonso Romão, 3000-602, Coimbra, Portugal

E-mail: ana_catarina_cordeiro@hotmail.com

Ana João Dinis da Mota

Master of Medicine

Institution: Centro Hospitalar de Leiria

Address: Rua das Olhalvas, 2410-197, Leiria, Portugal

E-mail: anajoaodinis@gmail.com

Teresa Madalena Kraus Brincheiro Hüttel Barros

PhD in Nursing Science

Institution: Center for Innovative Care and Health Technology (ciTechcare), Polytechnic of Leiria, Leiria, Portugal

Address: Rua de Santo André, 66-68, Campus 5, Politécnico de Leiria, 2410-541, Leiria, Portugal

E-mail: teresa.kraus@ipleiria.pt

Sónia Isabel Horta Salvo Moreira de Almeida Ramalho

Doutoramento em “Psychological Intervention in Health, Education and Quality of Life”

Institution: Center for Innovative Care and Health Technology (ciTechcare), Polytechnic of Leiria, Leiria, Portugal

Address: Rua de Santo André - 66-68, Campus 5, Politécnico de Leiria, 2410-541 Leiria, Portugal

E-mail: sonia.ramalho@ipleiria.pt

Clementina Maria Gomes de Oliveira Gordo

Master of Public Health

Institution: Escola Superior de Saúde, Instituto Politécnico de Leiria

Address: Rua de Santo André, 66-68, Campus 5, Politécnico de Leiria, 2410-541 Leiria, Portugal

E-mail: cgordo@ipleiria.pt

Maria dos Anjos Coelho Rodrigues Dixe

PhD in Psychology

Institution: Escola Superior de Saúde do Instituto Politécnico de Leiria
MoradaAddress: Escola Superior de Saúde de Leiria Campus 2, Morro do Lena- Alto do Vieiro,
Apartado 4237, 2411-901 Leiria, Portugal

E-mail: maria.dixe@ipleiria.pt

Pascoal Moleiro

Master of Medicine

Institution: Centro Hospitalar de Leiria

Address: Rua das Olhalvas, 2410-197 Leiria, Portugal

E-mail: pascoal.moleiro@chleiria.min-saude.pt

ABSTRACT

Adolescents are increasingly encouraged to freely express their sexuality. The purpose of this study was to compare non-cisgender adolescents with cisgender/heterosexual adolescents and those who have an undefined gender identity and/or sexual orientation, on their future prospects, emotional state, sexuality, risk behaviors, and their perception of health care and its accessibility. Adolescents who identify as non-cisgender/heterosexual seem to have higher future aspirations, however, they have a more unstable emotional state, higher risky behaviors, and fear being prejudiced by health care professionals. The undefined group appears to be undefined about their sexuality and future aspirations, while reporting less risky behaviors.

Keywords: sexuality, adolescence, identity, orientation, health care.

ABSTRACT

Os adolescentes são cada vez mais encorajados a expressar livremente a sua sexualidade. O objectivo deste estudo foi o de comparar adolescentes não-igéneros com adolescentes cisgéneros/heterossexuais e aqueles que têm uma identidade de género e/ou orientação sexual indefinida, sobre as suas perspectivas futuras, estado emocional, sexualidade, comportamentos de risco, e a sua percepção dos cuidados de saúde e da sua acessibilidade. Os adolescentes que se identificam como não-cidadãos/heterossexuais parecem ter maiores aspirações futuras, contudo, têm um estado emocional mais instável, comportamentos de maior risco, e receiam ser prejudicados pelos profissionais de saúde. O grupo indefinido parece estar indefinido quanto à sua sexualidade e aspirações futuras, ao mesmo tempo que relata comportamentos menos arriscados.

Palavras-chave: sexualidade, adolescência, identidade, orientação, cuidados de saúde.

1 INTRODUCTION

The World Health Organization defined sexuality as a central aspect of being human throughout life that encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction (WHO, 2006). Adolescents build their identity through the integration of feelings and desires, and in this period, they begin to become aware of their sexuality (Miranda et al, 2018).

At present, adolescents are increasingly encouraged to freely express their sexuality, and it should contribute to a happy and healthy life. Unhealthy, exploitive, or risky sexual activity may lead to health and social problems. That's why adolescents should be shown how to develop a safe and positive view of sexuality (Breuner and Mattson, 2016).

Gender identity, defined as the sex to which a person thinks he or she belongs, which may be the same or different from the biological one, is usually developed in early childhood, through a dynamic process from infancy through adolescence and into adulthood. In general, gender identity developed during puberty is likely to anticipate adult gender identity (Diana and Esposito, 2022). *Sexual orientation* corresponds to whether a person's physical and emotional arousal is for people of the same or opposite sex, independent of one's gender identity, and usually emerges before or early in adolescence ("Direção Geral da Saúde", 2019; Kaufman, 2008; "Committee on Adolescence", 2013). *Cisgender* adolescents are those whose gender identity is the same as their sex assigned at birth, in contrast, adolescents whose gender identity is different from their sex assigned at birth are transgender ("Committee on Adolescence", 2013).

The acronym LGBTI+, used since the 1990s, includes lesbian, gay, bisexual, trans and intersex persons and may also include the undefined population, i.e., those who do not identify with any gender identity or sexual orientation. They are distinct groups, each with its own special health-related concerns and needs ("Institute of Medicine", 2011). In a study by the Centers for Disease Control and Prevention, it was shown that approximately 1-3% of the 9-12-year-old population identifies as gay or lesbian, 3-5% identifies as bisexual, and 1-5% is unsure about their sexual orientation (Kann, 2016).

The construction of sexuality and gender issues in adolescence are still rooted in taboos and challenges, especially in sharing knowledge and experiences with fathers, mothers, caregivers, and those in their social environment (Júnior, 2019). Although there is currently a trend toward more open expression of different gender identities and sexual orientations, adolescents who identify as LGBTQ+ continue to experience discrimination and social exclusion, both from their peers and in the health care framework. There are several references in the literature about the experience of LGBTI+ youth in school, as well as the attempt to apply measures to minimize their discrimination (Kosciw, 2018; "Associação ILGA Portugal", 2018; European Union Agency for Fundamental Rights, 2020; Earnshaw, 2016). According to the 2017 Gay, Lesbian and Straight Education Network's (GLSEN) National School Climate Survey, of a total of 23.000 students, 59.5% of LGBT students felt unsafe at school because of their sexual orientation and 44.6% because of their gender expression. In addition, the vast

majority (87.3%) have experienced harassment or assault based on personal characteristics (Kosciw, 2018). A 2019 study by the *European Union Agency for Fundamental Rights* shows that in Portugal, out of a total of 4.294 participants, 28% of LGBTI students hid that they were LGBTI at school, however, 60% said that at school there was always someone who defended and protected their rights as an LGBTI person, a higher average than in Europe (48%) (European Union Agency for Fundamental Rights, 2020). It is also described in literature that the perception of having a minority sexual orientation can increase the risk of young people being bullied (Earnshaw, 2016).

However, there is a lack of information about how these adolescents experience their sexuality, their growth as young adults and the consequences that insecurity and misinformation can bring to their future. It is therefore essential to address sexuality in such a vulnerable age group as adolescence on such crucial and relevant issues, trying to change paradigms and prevent several outcomes.

The aim of this study was to compare cisgender and heterosexual adolescents with those who have other gender identity or sexual orientation and those who are undefined, about their future prospects, emotional state, sexuality, risk behaviors, and their perception of health care and its accessibility.

2 MATERIALS AND METHODS

A cross-sectional design was applied. An anonymous and confidential questionnaire was filled in by 394 adolescent students attending elementary and high school in a central region of Portugal selected by convenience sampling. As inclusion criteria were defined: being an 8th, 9th, 10th, 11th or 12th grade student and aged 19 years or less. The recruitment was done by teachers, by interest expressed by parents and approval of the students after presentation and awareness of the project. Data were collected between April 23 and May 4, 2018. The total population was 505 adolescents and the response rate was 78%.

The sample was divided into 3 groups: **Group A:** Diverse, this is, non-cisgender/heterosexual adolescents; **Group B:** Cisgender/heterosexual adolescents; **Group C:** Adolescents with undefined gender identity and/or sexual orientation. For this, the answers to the questions *Sex* (“male”, “female”); *Gender identity* (“How do you feel? - boy, girl, don't know”) and *Sexual orientation* (“Are you attracted to - boys, girls, both sexes, neither sexes?”) were analyzed. All participants in whose responses sex was different from gender identity and/or with sexual orientation equal to their gender identity were included in group I. Participants in whose responses sex was the same as their gender identity and/or with a sexual

orientation different from their gender identity were included in group II. All participants who answered “I don't know” in gender identity and/or “neither sexes” in sexual orientation were included in group III.

The questionnaire consisted of 41 items, divided into 7 groups: Group I: Demographic data (age, sex, level of education, future aspirations, tobacco and alcohol consumption, emotional state); Group II: Sexuality (information and doubts); Group III: Giving pleasure to oneself; Group IV: Affective and sexual relationships (gender identity, sexual orientation, abusive relationships); Group V: Contraception, sexually transmitted infections and pregnancy (risk behaviors related to sexuality); Group VI: Health care service (what it means, accessibility, frequency of appointments, usefulness and satisfaction, knowledge and information, relationship with health professionals, limiting factors in communication); Group VII: Sexual education (significance).

The study was approved by the National Data Protection Commission (authorization no. 10421/2017 of 12/09/2017).

Statistical analysis was performed using *IBM® SPSS-Statistics® v.26* and a p value $<0,05$ was considered significant. Descriptive statistics, measures of central tendency and measures of dispersion were determined. Since the sample did not have a normal distribution, the nonparametric techniques tested the association between the many variables in the study. For direct response questions (“yes”, “no”, “I don't know”) comparison was done using chi-square test. For questions with Likert-type responses (“Strongly disagree”; “Disagree”; “Do not agree or disagree”; “Agree”; and “Strongly agree”) non-parametric tests such as the Mann-Whitney test (for 2 independent samples) and the Kruskal-Wallis test (more than 2 independent samples) were used. Since the sample did not have a normal distribution, the nonparametric techniques tested the association between the many variables in the study.

3 RESULTS

3.1 DEMOGRAPHIC CHARACTERIZATION AND GROUP DISTRIBUTION

A total of 394 questionnaires were obtained, with a mean age of 14.9 ± 1.4 years, with 53.3% female and the most representative group being those attending the 9th grade (44.4%). As for gender identity, 96.2% of female participants felt as such, 2.4% did not know how they felt and 1.4% felt like a boy. Of the male participants, most (95.1%) also felt like a boy, 3.8% did not know and one felt like a girl. Regarding sexual orientation, the majority (92.4%) of the female participants, reported being attracted to boys, 3 were attracted to girls, 8 to both sexes, 2 to neither sexes and 3 did not know. Most of the boys (94.6%) were attracted to girls, 6 were

attracted to boys, 3 to both sexes and one did not know. No statistically significant differences were found between the 3 groups (Table 1).

Table 1. – Characterization and distribution by groups

	Total (n=394)	A Diverse (n=20)	B Cis/Hetero (n=359)	C Undefined (N=15)	<i>p-value</i>
Age, mean ± sd	14,99±1,42	15,15±1,6	14,97±1,4	15,13±1,6	<i>p</i> >0,803
Girls, n (%)	210 (53,3%)	11 (5,2%)	191 (91%)	8 (3,8%)	
Boys, n (%)	184 (46,7%)	9 (4,9%)	168 (91,3%)	7 (3,8%)	<i>p</i> >0,988

3.2 FUTURE PROSPECTS

In the group with adolescents with diverse gender identity and sexual orientation, 75% expect to have a higher education, in the undefined group 40% and 65.5% in group B, with no statistically significant differences between the groups (*p*=0,081).

3.3 EMOTIONAL STATE

Regarding the question "For how long have you felt in the past month...", group A answered more often "sad and down" compared to the other two groups, with statistically significant differences when comparing group A with group B (*p*=0,007, Table 2). Otherwise, it's group C who responds more often that they feel happy, but with no statistically significant differences between the groups (*p*=0,403).

Table 2. – Emotional state by group

"for how long have you felt in the past month..."*

	A Diverse (n=20)			B Cis/Hetero (n=359)			C Undefined (n=15)			<i>p</i> ^a	<i>p</i> ^b
	25	50	75	25	50	75	25	50	75		
<i>very nervous?</i>	2,25	4	5	4	4	5	4	4	5	0,439	
<i>calm and peaceful?</i>	2,25	4	5	2	3	4	2	4	4	0,083	
<i>sad and down?</i>	2,25	4	5	4	5	5	3	4	5	0,013	0,007 a vs b
<i>sad and down, so much you couldn't get excited?</i>	4	5	6	5	5	6	4	5	6	0,078	
<i>a happy person?</i>	2	3	4	2	2	4	1	2	4	0,403	

* 1: always; 2: almost always; 3: most of the time; 4: for a while; 5: hardly ever; 6: never.

^a Kruskal Wallis; ^b Mann Whitney

4 SEXUALITY

There was statistical significance when they were asked what defines sexuality. In the group of those who have diverse gender identity and sexual orientation, 60% totally agree that it “is being able to recognize who we are” with lower percentages in the other two groups, with statistically significant differences between groups A and B and groups A and C (Table 3). Group C is the one that responds least often (6.7%) who fully agrees with the statement “it’s one of the aspects of our identity”, with statistically significant differences between all groups (Table 3).

In group A, 45% strongly disagree that genitalia define someone as a boy or a girl, with statistically differences between groups A and B ($p < 0.001$). The majority of adolescents who have diverse gender identity and sexual orientation (75%) fully agree that “homosexuality is a normal sexual behavior” and so did 33,4% of those who identify as cisgender and heterosexual and 20% of undefined adolescents, with statistically significant differences (Table 3).

In group A the average age of the first sexual intercourse was higher (15.25 ± 1.5) and in group B was lower (14.49 ± 2.56). When asked “In a couple, if one person tries to push for sex and the other does not want it, the other person should:” the differences between the groups were found in the response “Maintain your position and explain that you still like the person” ($p = 0.021$), with group A agreeing more often fully with the statement. In the response “Separation” a statistical difference was also found ($p = 0.027$) with group B responding more often that they disagreed with it. We also found differences between groups in the response to the question “What would you do if your partner refused to use a condom?” with group B agreeing more often with “I tried to explain that I was not interested” ($p = 0.042$).

Table 3. – Experience of sexuality by groups

	A Diverse (n=20)			B Cis/Hetero (n=359)			C Undefined (n=15)			P ^A	P ^B	
	P	25	50	75	25	50	75	25	50			75
“what defines sexuality for you?”**												
<i>Being able to recognize who we are</i>		4	5	5	4	4	4	3	4	4	0,000	0,000 a vs b 0,003 a vs c 0,014 a vs b 0,004 a vs c 0,042 b vs c
<i>It's one of the aspects of our identity</i>		4	4,5	5	3	4	4	3	4	4	0,005	0,004 a vs c 0,042 b vs c
<i>It's built throughout life, through interaction with</i>		3,25	4	5	4	4	5	3	4	4	0,373	*

<i>Other people and with the environment</i>											
“Do you consider that:”***											
<i>Do genitals define someone as a boy or a girl?</i>	1	2	3	2	3	4	2	3	4	0,001	0,000 a vs b
<i>Does clothing define someone as a boy or a girl?</i>	1	1,5	2	1	2	3	1	2	3	0,359	*
<i>Does make up define someone as a boy or a girl?</i>	1	1,5	2	1	2	3	1	3	3	0,108	*
<i>Society defines the correct behavior to be a boy or a girl</i>	1	1	4	1	3	3	2	3	3	0,870	*
<i>Each person must identify and accept himself as a boy or girl regardless of sexual organs</i>	4	5	5	3	4	5	3	4	5	0,064	*
<i>Homosexuality is a normal sexual behavior</i>	4,25	5	5	3	4	5	3	4	4	0,006	0,004 a vs b 0,005 a vs c
<i>It's necessary to have a loving relationship to have a sexual relationship</i>	1,25	2,5	3	2	3	4	3	3	4	0,032	0,015 a vs b 0,010 a vs c
“In a couple, if one of the people tries to pressure to have sex and the other doesn't want it, this one should:”***											
<i>Refuse</i>	4	5	5	4	5	5	4	4	5	0,580	*
<i>Clearly say that you are not interested</i>	4	5	5	4	5	5	4	4	5	0,137	*
<i>Accept not to lose him/her</i>	1	1	2	1	1	2	1	2	3	0,090	*
<i>Ask a trusted adult for help</i>	3	4	5	3	4	5	3	4	4	0,537	*
<i>Ask a friend for help</i>	4	4	4	3	4	4	3	3	4	0,138	*
<i>Maintain your position and explain that you still like the person</i>	4	4,5	5	4	4	5	3	4	4	0,021	0,016 a vs c 0,010 b vs c
<i>Ask for respect for your decision</i>	4	5	5	4	5	5	4	5	5	0,601	*
<i>Breakup</i>	1,25	3	3	1	2	3	2	3	3	0,27	*
“What would you do if your partner refused to use a condom?”***											
<i>Refused to have sex</i>	3,25	4	5	3	4	5	3	3	4	0,100	-
<i>I try to explain to him that i was not interested</i>	4	4	4	3	4	4	2	3	4	0,042	0,014 b vs c
<i>Accepted it because i didn't want to lose him/her</i>	1	1,5	2	1	2	2	1	2	3	0,494	-
<i>I would put the condom on</i>	3	4	5	3	4	5	3	4	5	0,648	-

*not applicable

** 1: strongly disagree; 2: disagree; 3: neither agree nor disagree; 4: agree; 5: totally agree.

^a Kruskal Wallis; ^b Mann Whitney (applied when Kruskal Wallis test showed differences with statistical significance)

5 RISK BEHAVIORS

Observing the smoking habits, 10% of the adolescents in group A and group B smoked, in the group of undefined none did. About the consumption of alcoholic beverages, 40% in group A answered that they usually consumed alcoholic beverages, 27% in cisgender/heterosexual group and 13.3% in group C. In group A, 15% said they ever had unprotected sex, 5.3% in group B and in group C none. There were statistically significant differences when asked “Have you ever had sex with a person with a sexually transmitted infection”, between groups A and C ($p=0.046$) and groups B and C ($p<0.001$), with 20% in group A answering “Never”, in group B 18.4% and in group C no one answered (Table 4). When asked if they had ever exchanged erotic messages via cell phone, chat or social media, 20% of the adolescents in group I said yes, 10% in group B and 7% in group C. Of the respondents, 10% in group I said they considered themselves to have risky behaviors regarding their sexuality, 4% in group B and in group C none of the participants considered themselves to have risky behaviors.

Table 4. – Risk behaviors by groups

	A Diverse (n=20)		B Cis/Hetero (n=359)		C Undefined (n=15)		P^A	P^B			
	n	%	n	%	n	%					
“Do you smoke?”											
yes	2	10	36	10	0	0	**				
no	17	85	317	88,3	13	86,7					
don't want to answer	1	5	6	1,7	2	13,3					
“Do you consume alcoholic beverages?”											
yes	8	42,1	96	27,7	2	13,3	**	$p(\chi^2) = 0,232$			
no	11	57,8	251	72,3	11	73,3					
“Have you ever had unprotected sex?”											
yes	3	15	19	5,3	0	0	**				
no	1	5	48	13,4	2	13,3					
“Have you ever exchanged erotic messages, with/without photos, via mobile phone, chats or social networks?”											
yes	4	20	35	10	1	7	**				
no	0	0	27	43,5	1	50					
“Do you consider to have risk behaviors regarding your sexuality?”											
yes	2	10	13	18,8	0	0	**				
no	2	10	56	81,2	2	13,3					
“Have you ever had sex with a person:”****											
P	25	50	75	25	50	75	25	50	75		
Who uses drugs	1	1	2,5	1	1	1	1	1	1	0,705	**
Who practices prostitution	1	1	1	1	1	1	1	1	1	1	**
Who usually has sex with multiple partners	1	1	1,75	1	1	1	1	1	1	0,237	**
Of which you didn't know the sexual past	1	1	2,5	1	1	1	1	1	1	0,737	**
With hiv/aids?	1	1	1	1	1	1	1	1	1	1	-

With a sexually transmitted infection	1	1	1	1	1	1	3	3	3	0,000	0,046 A vs C 0,000 B vs C
When you were on the effect of alcohol	1	1,5	2,75	1	1	1	1	1	1	0,265	**
When you were on the effect of other drugs	1	1	2,5	1	1	1	1	1	1	0,503	**

**not applicable

*** 1: never; 2: rarely; 3: sometimes; 4: many times; 5: always.

^a Kruskal Wallis; ^b Mann Whitney (applied when Kruskal Wallis test showed differences with statistical significance)

6 INFORMATION AND ACCESS TO HEALTH CARE AND ITS ACCESSIBILITY

Most participants, regardless of the group, knew of a health service where they could get information and help regarding sexuality. Adolescents who identify as cisgender/heterosexual, attended a higher percentage (31%) of family planning and/or adolescent appointments, compared to 25% in group I and 13% in group C. Regarding sexual education, there was a significant difference in the statements “*Helps to avoid having sexually transmitted infections*” and “*Should be addressed in school*” between groups B and C ($p=0.035$ and $p=0.012$ respectively). In group A, 45% fully agree that sexual education should be addressed in school. There were no significant differences between the groups regarding the importance they place on sexual education ($p=0.687$).

Adolescents who identify with diverse gender identity and sexual orientation, more frequently (20%) chose “*fear of being misunderstood*” as a limiting factor in their communication with health professionals, compared to 10.3% in group B and 6.7% in group C, with statistical differences between all groups (Table 5).

Table 5. – Information about health care and its accessibility by groups

	A Diverse (n=20)		B Cis/Hetero (n=359)		C Undefined (n=15)		P ^A	P ^B			
	n	%	n	%	n	%					
“Do you know any health service where you can get information concerning sexuality?”											
yes	14	70	249	69,4	13	86,7	$p(\chi^2) = 0,379$				
no	6	30	107	30	2	13,3					
“Do you usually attend family planning and/or adolescent appointments?”											
yes	13	65	209	59,2	10	76,9	*				
no	5	25	112	31,7	2	15,4					
don't know	2	10	32	9,1	1	7,7					
no	2	10	56	81,2	2	13,3					
“In your opinion, sex education:”***											
P	25	50	75	25	50	75	25	50	75	0,247	**
it should be the sole responsibility of the family	2	2	2	2	2	3	2	2	3		

<i>helps you to live sexuality more responsibly</i>	4	4	4,75	4	4	5	3	4	4	0,136	**
<i>Help you to have more information</i>	4	4	5	4	4	5	3	4	5	0,305	**
<i>Clarify your doubts</i>	4	4	4,75	4	4	4	3	4	4	0,210	**
<i>Helps you not to get pregnant</i>	3	3,5	4	3	4	4	3	3	4	0,216	**
<i>Helps you not to have sexually transmitted infections</i>	3	4	4	4	4	4	3	3	4	0,020	0,035 B vs C
<i>Should be addressed in school</i>	4	4	5	4	4	5	3	3	5	0,039	0,012 B vs C
What do you consider to be the limiting factor in communication between health professionals and adolescents/young people about sexuality?											
<i>Lack of openness on the part of professionals</i>	3	4	4	3	4	4	3	3	4	0,230	**
<i>Fear of being misunderstood</i>	4	4	4	3	4	4	3	3	4	0,002	0,020 A vs B 0,001 A vs C 0,011 B vs C
<i>Fear that the professional will tell another person</i>	4	4	4	3	4	4	3	4	4	0,153	**
<i>Lack of professionals' knowledge to speak freely on the subject</i>	3	3,5	4	3	4	4	3	3	4	0,682	**

*cannot be performed because there are cells with observed % values below 5

**not applicable

***1: strongly disagree; 2: disagree; 3: neither agree nor disagree; 4: agree; 5: totally agree.

^a Kruskal Wallis; ^b Mann Whitney

7 DISCUSSION

Sexuality in adolescence is a complex experience that adolescents themselves see as particularly conflicting and difficult to understand, and despite being subject to multiple negative consequences, reality shows that it is still not properly monitored. Although currently adolescents are increasingly encouraged to express their sexuality, no data was found in the literature about the prevalence of LGBTI+ adolescents in the Portuguese population. It is therefore noteworthy that, of the total population in our sample, a significant percentage (8.9%) of the participants are included in the group of adolescents who identify themselves with diverse (non-cisgender/heterosexual) or undefined gender identity and/or sexual orientation.

The demographics are similar across the different groups, with no sex predominance, but the differences between the 3 groups analyzed are notorious.

The group who identify as non-cisgender/heterosexual has higher future aspirations, corroborating with the Portuguese study developed by ILGA in which the vast majority (83.9%) of LGBTI students wished to obtain a university degree (“Associação ILGA Portugal”, 2018).

However, they seem to have a more unstable emotional state and more risky behaviors. In fact, it has been described in the literature that adolescents who do not identify as cisgender and/or heterosexual, have fewer positive experiences in the school environment, including homophobic comments, verbal and physical aggression, integration difficulties and cyberbullying (Kann, 2015; Kosciw, 2018; Earnshaw, 2016). These negative experiences affect the emotional state of these adolescents, making them more prone to school absenteeism, psychiatric disorders and even suicidal ideation (Earnshaw, 2016; OECD, 2020). It's also known that discrimination, stigma and social exclusion can also be determinants for the health of non-cisgender/heterosexual people, particularly regarding their mental health (Russel and Fish, 2016). They also stood out with regard to risky sexual behaviors because 15% of adolescents in this group say they have already had unprotected sex, with lower percentages in the other groups, and where the group that most exchanged erotic messages in a virtual way. This is in line with several studies in the literature that have shown that LGBTQ+ youth have more risky behaviors relative to their heterosexual peers, including facing dangerous early sexual experiences, sexual intercourse with unknown partners and unprotected sex (Diana and Esposito, 2022; Kann, 2015; Poteat et al, 2019). They are also those who, despite being more open-minded, are still afraid of suffering prejudice by health professionals. Cisgender/heterosexual adolescents are the most likely to attend nightlife events by a significant percentage (41%), which may point to some exclusion of the non-cisgender/heterosexual population by their peers.

The group of undefined adolescents, in the other half, seem to have lower future aspirations, a more positive emotional state, and less risky behaviors. However, they do not seem to consider sexuality as an integral part of their identity and they are the ones who say they have more knowledge about health services, but they are also the ones who visit them the least. In the undefined population, none of the participants consider themselves to have risky behaviors.

It should be noted that even the definition of sexuality is different between the groups, with the group who identify themselves as non-cisgender/heterosexual being different from the other two groups. This highlights the misinformation that is still very evident, even between peers.

It is essential to develop actions that awaken a reflection in young people regarding values, conceptions and previous experiences, in order to transmit the necessary awareness about the care for the sexual experience (Correa, 2020). All groups of adolescents recognize the importance of sexual education. Most adolescents, regardless of group, knew of a health

care service where they could get information and help about sexuality, which is a very positive aspect.

As a limiting factor in the communication between health professionals and adolescents about sexuality, it was the fear of being misunderstood that revealed significant differences between the groups. In fact, a study conducted in Portugal in 2015 described that about 80% of health professionals assume that all patients are heterosexual (“Associação ILGA Portugal”, 2015). This emphasizes the need to train and raise awareness among all health professionals and, in particular, those who are closest to these patients, namely general practitioners. We should all keep in mind that health professionals have a vital role in promoting the well-being of all adolescents, identifying and preventing risk behaviors, offering counseling to them and their parents if necessary, and promoting healthy sexuality.

The main limitations of this study are mainly due to the fact that it is a small sample of adolescents, limited to a rural region. Also, because it is a non-probability sample. Another limitation is also the fact that the questions could be misinterpreted and also because they were not given the possibility to express other options and opinions.

8 CONCLUSION

The use of these questionnaires, which also served as a basis for the construction and subsequent validation of the Adolescent Students’ Attitude Scale for Sexuality (Barros et al, 2021), was the starting point for an innovative and different analysis of what has already been described in the literature on sexual and reproductive health promotion for Portuguese adolescents, including gender identity and sexual orientation.

In this study, as well as others in the literature, it is clearly visible that non-cisgender/heterosexual adolescents, are still afraid of discrimination and suffers from the prejudice that still exists in the general population regarding sexual minorities. We concluded that non-cisgender/heterosexual adolescents seem to have higher aspirations for the future, however, their emotional state is more unstable and they seem to have more risk behaviors. The undefined group seems to be not only undefined about their sexuality, but also about their future aspirations, yet they are the group that seems to have the least risky behaviors.

Most adolescents, regardless of group, knew of a health service where they could obtain information related to sexuality. It is essential to create support structures with graduated and experienced professionals, both in school environment and in health services, that can welcome and guide these adolescents. Properly structured programs should be promoted, in order to ensure a comprehensive sexual education, as indicated, namely, by UNESCO (UNESCO,

2018). An example of this is the *Adolescer com Sentido* project implemented in the central region of Portugal, which empowers adolescents with resources to choose values, set goals and develop attitudes that facilitate free and responsible decision-making during this period of life extending into adulthood.

REFERENCES

- Associação ILGA Portugal. Saúde em Igualdade pelo acesso a cuidados de saúde adequados e competentes para pessoas lésbicas, gays, bissexuais e trans, 2015.
- Associação ILGA Portugal. Estudo Nacional sobre o ambiente escolar em jovens LGBTI+ 2016/2017, 2018.
- Barros T et al. Adolescent students' attitudes towards sexuality: the construction and validation of a scale. *Rev Paul Pediatr.* 2021;39: e2019372
- Breuner CC, Mattson G; Committee on Adolescence; Committee on Psychosocial Aspects of Child and Family Health. Sexuality Education for Children and Adolescents. *Pediatrics.* 2016;138(2):e20161348. doi: 10.1542/peds.2016-1348. Epub 2016 Jul 18. PMID: 27432844.
- Committee on Adolescence. Office-Based Care for Lesbian, Gay, Bisexual, Transgender, and Questioning Youth. *Pediatrics* 2013;132:198–203. doi:10.1542/peds.2013-1282. PMID: 23796746.
- Correa T, Barros N, Carret M. Sexuality in adolescents from a public school in the interior of Rio Grande do Sul. *Braz. J. Hea. Rev., Curitiba, v. 3, n. 2, p. 2797-2803. 2020.* DOI:10.34119/bjhrv3n2-123
- Diana P, Esposito S. LGBTQ+ Youth Health: An Unmet Need in Pediatrics. *Children* 2022, 9, 1027. <https://doi.org/10.3390/children9071027>.
- Direção-Geral da Saúde. Estratégias de saúde para as pessoas lésbicas, gays, bissexuais, trans e intersexo – LGBTI. Lisboa, 2019.
- Earnshaw VA et al. Bullying among lesbian, gay, bisexual, and transgender youth. *Pediatr Clin North Am.* 2016 Dec;63(6):999-1010. doi: 10.1016/j.pcl.2016.07.004. PMID: 27865341.
- European Union Agency for Fundamental Rights. A long way to go for LGBTI equality. Publications Office of the European Union, 2020.
- Institute of Medicine, Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gap and Opportunities. *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding.* Washington, DC: National Academies Press; 2011.
- Júnior A, Santos M, Ribeiro F, Santos I, Felício J, Silva M. Inhabiting territories: constructions and deconstructions in health education on sexuality among adolescents. *Braz. J. Hea. Rev., Curitiba, v. 2, n. 5, p. 4710-4718 sep./out. 2019.* DOI:10.34119/bjhrv2n5-070.
- Kann L, Olsen EO, McManus T et al. Sexual Identity, Sex of Sexual Contacts, and Health-Related Behaviors Among Students in Grades 9–12 — United States and Selected Sites, 2015. *MMWR Surveill Summ,* 2016, 12;65(9):1-202. doi: 10.15585/mmwr.ss6509a1. PMID: 27513843.

Kaufman M, Canadian Paediatric Society, Adolescent Health Committee, Adolescent sexual orientation, Paediatrics & Child Health, Volume 13, Issue 7, September 2008, Pages 619–623. <https://doi.org/10.1093/pch/13.7.619>

Kosciw JG, Greytak EA, Zongrone AD, Clark CM & Truong NL. The 2017 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's schools. New York: 2018 GLSEN.

Miranda PS, Aquino JM, Monteiro RM, Dixe MA, Luz AM, Moleiro P. Sexual behaviors: study in the youth. *einstein* (São Paulo). 2018;16(3):eAO4265. <https://doi.org/10.1590/S1679-45082018AO4265>.

OECD (2020), *Over the Rainbow? The Road to LGBTI Inclusion*, OECD Publishing, Paris, <https://doi.org/10.1787/8d2fd1a8-en>.

Poteat VP, Russell S.T., Dewaele A. Sexual Health Risk Behavior Disparities Among Male and Female Adolescents Using Identity and Behavior Indicators of Sexual Orientation. *Arch. Sex Behav.* 2019, 48, 1087–1097.

Stephen T. Russell and Jessica N. Fish. Mental Health in Lesbian, Gay, Bisexual, and Transgender (LGBT) Youth. *Annu Rev Clin Psychol.* 2016 March 28; 12: 465–487.

UNESCO (2018). *International technical guidance on sexuality education: An evidence - informed approach*. Paris: UNESCO. Published in partnership with UNAIDS, UNFPA, UNICEF, UN Women and WHO.

WHO (2006) *Defining Sexual Health - Report of a Technical Consultation on Sexual Health 28-31 January 2002*, Geneva. Sexual Health Document Series, World Health Organization, Geneva.