Health and Well-Being of Cisgender, Transgender and Non-Binary Young People

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Abstract

Purpose:

Young transgender and non-binary are exposed to situations of discrimination and have a greater risk of violence. The purpose of this study is to analyze which protective, violence and health and well-being factors have more influence on transgender and non-binary people compared to cisgender people.

Method:

The sample comprised 856 people between 14 and 25 years old. A survey including questions about sociodemographic information and protective, violence and health and well-being factors was designed ad hoc for this study.

Results:

The results show non-binary group received the least support from family and friends, higher risk of suffering cyberbullying and a higher feel isolated and unhappy. Non-binary and transgender have suffered more verbal attacks both inside and outside their school and physical attacks at school than cisgender young.

Conclusions:

These results are important and may contribute to promote public policies and clinical interventions to favor the integration of non-binary and transgender people in our society.

Key words: Transgender, non-binary gender identity, adolescence, health, well-being, gender nonconforming

2

Introduction

The legal situation of transgender people in Spain has improved over the last few decades, but it is still complex today. The Law 3/2007 on the rectification of the mention of the sex of the people (Law 3/2007, of 15 March, Regulatory Registration Rectification of the Mention Relative to the Sex of the People, BOE n°65) stablished the public regulation of the Legal Gender Recognition (LGR). This law represented an important step in the legal framework in Spain since it established the necessary requirements for civil registration of the LGR based on the principle of the right to privacy and guaranteed to trans people the possibility of exercising all the rights inherent in their new legal condition, allowing, therefore, the change of the name and in the mention to the gender, without the mandatory existence of genital surgery nor the forced sterilization (previously required). However, a psychiatric diagnosis is still mandatory and the law forces trans people to certify two years of medical treatment although not all trans people need it or want it, which can be cause of pathologies development in these people.

Even with the existence of some legislation recognising transgender people rights and advocating for more social tolerance, there is also abundant evidence that Spanish society still exhibits prejudice and discrimination. For example, in a study published by the Federation of Lesbians, Gays, Transsexuals and Bisexuals (State Federation of Lesbians, Gays, Transsexuals and Bisexuals; ¹, it was found that 30% of young LGBT people had suffered bullying due to their sexual orientation frequently, and among them, 43% had thought about suicide, 35% had planned it and 17% had attempted it on various occasions. In addition, between 11% and 18% of young Spanish people consider it right to treat people with contempt because of their gender identity ¹.

Social support has been considered a moderating variable of the negative effects of discrimination on health and well-being. Social support refers to the set of contributions

of an emotional, material, informational or company type that people perceives or receives from different members of his or her social network ². Feeling of being appreciated by other people and belonging to a social network can influence on well-being and health, either directly or through other psychological processes. Social support is especially important in a moment of stress generated by situations of discrimination, influencing in a positive way for the well-being and for coping with stressful situations ³.

Studies with adolescents find a relationship between perceived social support and adjustment ^{4,5}, as well as between social support and informed health problems, although in this case relationships are usually low ^{6,7}. Specifically in transgender people, studies indicate that social support and acceptance are positively related to mental health ^{8,9}. Among transgender population, family rejection has been related to a number of risk factors, as homelessness, sex work and suicidality ^{8,10}.

Social support for the transgender collective is a particularly relevant factor to speak out about political concerns and use social networks ¹¹. Studies indicate that transgender individuals show lower scores in social support than cisgender ¹². Transgender perceived less social support from their family members than cisgender siblings ¹³. Despite these results that indicate that social support is a variable that reduces distress, in transgender people it is not clear what kind of social support (e.g., family, friends, romantic) is related to decreases in suffering ¹⁴. In a recent meta-analysis of the relationships between multiple forms of perceived discrimination and both mental and physical health outcomes in discriminated groups, results showed that protective effects depend on several variables, such as level of perceived discrimination, type of well-being evaluated and the kind of social support ¹⁵.

Transgender people are particularly vulnerable to mental health concerns and psychological distress ¹⁶⁻¹⁹, elevated risk of depression ^{20,21}, high rates of prevalence in anxiety ^{22,23}, and less self-esteem ²⁴. The experiences of discrimination and transphobia have been closely linked to attempted suicide and non-suicidal self-harm ^{25,26}. So, the rates of victimization and intimidation experienced by these people increase the risk of depression, anxiety and other risk factors for suicidal ideation ²⁷.

Some studies showed that transgender people were less likely to be engaged in regular physical activity and reported significantly poorer physical health than cisgender people ²⁸. Health behaviours that are likely to affect transgender health include higher rates of smoking ²⁹, alcohol ^{30,31} and drugs ³².

Research in transgender adults analysing relationships between social support and physical and psychological health, had indicate that transgender people show lower levels of social support than cisgender adults, although their network social is greater. Regarding transgender group, social support is associated with better physical health, less likelihood of discomfort and lower scores of depressive symptoms and stress ²⁸.

Adolescents and transgender youth population is especially exposed to situations with risk of violence ³³. Despite this, few studies have focused specifically on this population. In most studies that combine LGB adolescents with transgender youth samples, differences between social support and risk of violence between both groups have been found. Results indicate that transgender adolescents show an increased risk of mistreatment, self-harm, depression ³⁴ and suicide ³⁵. Social support of parents operates as protector against depressive symptoms; the perceived burden of being transgender is associated with greater life satisfaction ³⁶.

Other study analysed a sample of New Zealanders transgender and cisgender adolescents in relation to protective factors, health and psychological well-being ³⁷, most of the transgender adolescents surveyed report that they had at least one parent who cared for them, that they felt safe in their school and neighbourhood, and that they were not suicidal and did not have significant depressive symptoms.

Young transgender people are exposed to situations of discrimination and have a greater risk of violence, despite this, there are very few studies that analyse the health and well-being of transgender youth. The purpose of this study is to analyse which protective, violence and health and well-being factors have more influence on transgender and non-binary people compared to cisgender people. Since previous studies indicate that the transition to young adulthood produces important changes in people's lives, it is important to consider the age variable when carrying out data analysis, since previous studies have identified that parental support may be important in contributing to increase the risk of depression, suicide, and substance abuse during this critical developmental transition ³⁸.

Method

Participants

Participation in the study was offered to 856 young people between 14 and 25 years old and 782 respond the survey (91.35% response rate). The mean age of participants was 20.36 years (SD=3.12). Of the total sample 532 were identified as cisgender (68%), 180 as transgender (23%) and 70 as non-binaries (9%). 73% of the sample (n = 574) indicated to be atheist, 15% (n = 120) Catholic, 6% (n = 46) agnostic and 5% (n = 42) reported having another religion (see Table 1).

Table 1. Demographic characteristics of students by gender group

	Gender subgroup			
	Transgender, n (%)	Non-binary, n (%)	Cisgender, n (%)	
Sexual Orientation				
Heterosexual	83 (47,2)	2 (2,9)	181 (34,2)	
Gay	5 (2,8)	3 (4,4)	91 (17,2)	
Lesbian	4 (2,3)	10 (14,7)	93 (17,6)	
Bisexual	21 (11,9)	10 (14,7)	99 (18,7)	
Pansexual	55 (31,3)	32 (47,1)	46 (8,7)	
Other	4 (2,3)	10 (14,7)	14 (2,6)	
Missing	4 (2,3)	1 (1,3)	5 (0,9)	
Religion				
Catholic	32 (17,8)	2 (2,9)	86 (16,2)	
Atheist or agnostic	117 (65)	55 (78,6)	402 (75,6)	
Other	13 (7,2)	10 (14,3)	23 (4,3)	
Missing	18 (10)	3 (4,3)	21 (3,9)	
Area				
Rural	35 (5,7)	4 (5,7)	60 (11,3)	
Urban	143 (79,4)	65 (92,9)	470 (88,3)	

Procedure

Participants were recruited through websites, twitter and different associations (Daniela Foundation, FELGTB and COGAM) in Spain. First, we contacted the organization and explained the goals of the research and the method. The questionnaire was included in an

online survey (GoogleDocs). The organization then provided the link through its own website, twitter or Facebook, so that any person who accessed the site could complete the questionnaire, regardless of if they were members of these associations. Participants read a brief instruction describing the research and agreed to participate before answering the questionnaire. Participation in the research was anonymous and voluntary and we asked about "consent to participate".

Instrument

A survey including questions about sociodemographic information and protective, violence and health and well-being factors was designed ad hoc for this study.

The first part of the survey included questions about gender, age, residence and religion. Whether a participant was transgender was measured by the question, "Do you consider yourself?" (with response options of "male", "female", "transman", "transwoman" or "non-binary"). Participants were categorized into one of three gender groups: cisgender (male and female), transgender (transman and transwoman) or non-binary. The type of residence area of the participant where people living were measured with the question "Would you describe the area in which you live?" (with response options of "rural" or "urban"). The religion with which they identified was measured as the question "What is your religion?" (with the response options "Catholic", "Jewish", "Muslim", "Evangelist", "Other", "Atheist", "Agnostic" or "I prefer not to answer").

To assess social integration and participation, harassment and /or exclusion, social support, self-esteem and general health, a questionnaire of 24 dichotomous response items (SI / NO) was designed with three indicators: *Protective factors* with 9 items (e.g., "I have support from my family"), Violence or Personal safety with 7 items (e.g., "I have been verbally harassed at school") and Health and Well-being with 8 items (e.g., "Once

I have thought about suicide"). To obtain an additional mental health indicator the GHQ-12 questionnaire was included at the end of the survey. The 12-Item General Health Questionnaire (GHQ-12) (Goldberg & Williams, 1988) has demonstrated adequate reliability and validity to detect mental health problems and assess psychological distress in Spanish population (Sánchez-López & Dresch, 2008).

Data Analysis

Associations between gender and protective, violence and health and well-being factors were analysed by logistic regression using SPSS 22.0 version. Participant's age, residence and religion were included as covariates in the logistic regression models to control a possible moderating effect. Cisgender was included in all analysis as the reference group.

Results

All protective factor considered in the study result significant. Non-binary group received the least support from family and friends and was the one that least participated in the different activities that take place in their social environment (Table 2).

Table 2. Associations between gender group and protective factors.

	n (%)	Odds ratio	p
		(95%	
		confidence	
		interval)	
Involvement in extracurricular activities			.018
in school			
Cisgender $(n = 517)$	181 (35.0%)	1.0	
Transgender (n = 166)	46 (27.7%)	0.47 (0.27-0.80)	

Non-binary (n= 67)	16 (23.9%)	0.52 (0.23-1.19)	
Practice of a sport in school or outside it			.000
Cisgender $(n = 532)$	248 (46.6%)	1.0	
Transgender ($n = 180$)	89 (49.4%)	0.12 (0.03-0.52)	
Non-binary $(n = 70)$	19 (27.1%)	0.07 (0.01-0.47)	
Go out with friends			.000
Cisgender ($n = 532$)	456 (85.7%)	1.0	
Transgender ($n = 180$)	133 (73.9%)	0.19 (0.02-2.30)	
Non-binary $(n = 70)$	44 (62.9%)	0.09 (0.01-1.50)	
Take part in LGBT associations			.000
Cisgender $(n = 344)$	84 (24.4%)	1.0	
Transgender $(n = 175)$	75 (42.9%)	1.58 (0.83-3.00)	
Non-binary $(n = 66)$	19 (28.8%)	0.57 (0.26-1.28)	
Take part in online LGTB groups			.000
Cisgender $(n = 341)$	102 (29.9%)	1.0	
Transgender (n = 174)	78 (44.8%)	0.32 (0.08-1.30)	
Non-binary $(n = 66)$	43 (65.2%)	0.55 (0.10-3.04)	
Family support			.000
Cisgender $(n = 317)$	186 (58.7%)	1.0	
Transgender $(n = 168)$	86 (51.2%)	0.84 (0.56-1.27)	
Non-binary $(n = 53)$	14 (26.4%)	0.26 (0.13-0.51)	
Adult support outside the family			.015
Cisgender $(n = 292)$	169 (57.9%)	1.0	
Transgender $(n = 168)$	98 (58.3%)	1.23 (0.80-1.88)	
Non-binary $(n = 59)$	25 (42.4%)	0.48 (0.26-0.88)	

Friends support			.000
Cisgender ($n = 325$)	312 (96.0%)	1.0	
Transgender $(n = 174)$	153 (87.9%)	0.31 (0.14-0.70)	
Non-binary $(n = 64)$	54 (84.4%)	0.22 (0.08-0.57)	
Have a remunerated job			.000
Cisgender ($n = 532$)	126 (23.7%)	1.0	
Transgender ($n = 180$)	23 (12.8%)	0.87 (0.50-1.51)	
Non-binary (n = 70)	6 (8.6%)	0.31 (0.11-0.90)	

Transgender and non-binary people were at increased risk of violence and employment discrimination. For example, between 40 and 50 % approximately of transgender and non-binary people have suffered verbal attacks both inside and outside their school and physical attacks at school are significantly more frequent for these groups than for cisgender people. Non-binary group shows higher risk of suffering cyberbullying (Table 3).

Table 3. Associations between gender group and violence or personal safety.

	n (%)	Odds ratio (95%	p
		confidence	
		interval)	
Excluded by your peer group at some time			.167
Cisgender ($n = 526$)	128 (24.3%)	1.00	
Transgender ($n = 120$)	22 (18.3%)	0.63 (0.37-1.08)	
Non-binary $(n = 41)$	8 (19.5%)	0.67 (0.28-1.58)	
Verbal attacks at school			.000

$\frac{\text{Cisgender (n = 524)}}{\text{Cisgender (n = 524)}}$	132 (25.2%)	1.0	
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Transgender ($n = 165$)	71 (43.0%)	1.74 (1.16-2.61)	
Non-binary $(n = 68)$	29 (42.6%)	1.99 (1.14-3.45)	
Verbal attacks out of school			.000
Cisgender ($n = 527$)	155 (29.4%)	1.0	
Transgender ($n = 173$)	76 (43.9%)	1.87 (1.28-2.76)	
Non-binary $(n = 68)$	38 (55.9%)	3.17 (1.84-5.45)	
Physical attacks at school			.000
Cisgender ($n = 527$)	43 (8.2%)	1.0	
Transgender ($n = 170$)	38 (22.4%)	2.72 (1.59-4.63)	
Non-binary $(n = 66)$	9 (13.6%)	1.94 (0.88-4.29)	
Physical attacks out of school			.018
Cisgender $(n = 340)$	82 (24.1%)	1.0	
Transgender $(n = 173)$	27 (15.6%)	0.60 (0.37-0.99)	
Non-binary $(n = 65)$	8 (12.3%)	0.46 (0.21-1.02)	
Cyberbullying			.000
Cisgender $(n = 479)$	144 (30.1%)	1.0	
Transgender $(n = 177)$	37 (20.9%)	0.46 (0.29-0.73)	
Non-binary $(n = 70)$	29 (41.4%)	1.49 (0.87-2.57)	
Discrimination when looking for a job			.000
Cisgender $(n = 462)$	95 (20.6%)	1.0	
Transgender $(n = 133)$	71 (53.4%)	6.81 (4.18-11.09)	
Non-binary $(n = 49)$	27 (55.1%)	6.56 (3.31-13.00)	

In terms of health indicators, no differences were found between the groups in drug use or in smoking, and transgender and non-binary people consume less alcohol than cisgender. However, in comparison with cisgender group, people in the other groups had increased psychological health and well-being needs. Transgender and non-binary show a higher percentage of people who feel isolated and unhappy, have more psychological health problems according to the GHQ-12 questionnaire, and seven in ten have ever thought about suicide (Table 4).

Table 4. Associations between gender group and health or well-being indicators.

	n (%)	Odds ratio (95%	p
		confidence	
		interval)	
Feeling isolated			.000
Cisgender ($n = 355$)	103 (29.0%)	1.0	
Transgender (n = 176)	71 (40.3%)	1.35 (0.90-2.04)	
Non-binary $(n = 70)$	38 (54.3%)	2.61 (1.50-4.52)	
Ever think about suicide			.000
Cisgender ($n = 520$)	211 (40.6%)	1.0	
Transgender (n = 172)	121 (70.3%)	2.82 (1.89-4.20)	
Non-binary $(n = 68)$	53 (77.9%)	4.43 (2.40-8.18)	
Tried drugs and alcohol			.365
Cisgender ($n = 521$)	308 (59.1%)	1.0	
Transgender ($n = 176$)	85 (48.3%)	0.81 (0.55-1.18)	
Non-binary $(n = 68)$	36 (52.9%)	0.74 (0.43-1.27)	
Psychological health problems			.000

Cisgender (n = 529)	203 (38.4%)	1.00	
Transgender ($n = 176$)	92 (52.3%)	1.56 (1.07-2.26)	
Non-binary $(n = 70)$	39 (55.7%)	1.76 (1.04-2.99)	
Smoke			0.655
Cisgender ($n = 531$)	133 (25.0%)	1.0	
Transgender ($n = 180$)	45 (25.0%)	1.04 (0.68-1.59)	
Non-binary $(n = 70)$	15 (21.4%)	0.76 (0.40-1.45)	
Drank alcohol			.009
Cisgender ($n = 532$)	342 (64.3%)	1.0	
Transgender $(n = 179)$	76 (42.5%)	0.55 (0.38-0.81)	
Non-binary $(n = 70)$	40 (57.1%)	0.75 (0.44-1.29)	
Drug use			.992
Cisgender ($n = 531$)	146 (27.5%)	1.0	
Transgender $(n = 179)$	43 (24.0%)	1.02 (0.67-1.55)	
Non-binary $(n = 70)$	20 (28.6%)	1.03 (0.57-1.85)	
Happy or very happy			.000
Cisgender (n =492)	411 (83.5%)	1.0	
Transgender $(n = 165)$	109 (66.1%)	0.49 (0.32-0.76)	
Non-binary (n= 57)	35 (61.4%)	0.38 (0.21-0.70)	

Discussion

In this research, we analysed gender groups and associations with protective factors, violence or personal safety variables, and health and well-being indicators in three different groups (cisgender, transgender and non-binary) of young people in Spain.

In terms of protective factors, non-binary people received the least support from family and friends. This is in line with previous research showing that gender nonconforming young people feel less support than other sexual minorities ^{37,39} and report experiences with family rejection ^{10,40,41}. Non-binary people was the one that least participated in the different activities in their social environment. This result has found previously in Australian, non-binary people participated less than cisgender people in the LGBT community ⁴².

Regarding the factors of violence or personal safety, transgender and non-binary people were at increased risk of violence ^{21,22} and non-binary group shows higher risk of suffering cyberbullying, it is consistent with previous studies with LGBT population ⁴³. Like previous research ⁴⁴, transgender and non-binary people have felt discriminated when looking for a job.

In terms of health and well-being indicators, transgender and non-binary people consume less alcohol than cisgender. That is a positive result of our research that it is different than the obtained in other countries. Studies across North America suggest that drug (including nicotine) and alcohol use is common among transgender individuals ^{20,30,31}, but these research has not been done with young people. Also, our young transgender and non-binary people show more psychological health problems and have ever thought about suicide more frequently than cisgender people. Estimates of suicidal ideation and suicide attempts in transgender people vary widely; in fact, since 2000 there have been rates ranging from 11% to 43% in suicidal attempts and from 7% to 89% for suicidal ideation ⁴⁵. From some studies it arises that the most vulnerable groups to attempted suicide where the young people between 16 and 24 years (19%), especially those who experienced transphobic, physical or sexual violence (28.8%), and those who have only just begun a medical transition (26.6%) ²⁵. A long history of suppression of transgender feelings may

have resulted in isolation, loneliness, and feelings of hopelessness; the fear of disclosing this secret to partners, family, friends, and co-workers –risking rejection and employment discrimination- can provoke a great deal of anxiety ¹⁶. Our transgender and non-binary groups show a higher percentage of people who feel isolated and unhappy.

Our study has some limitations that should be overcome in future studies. First, despite number of participants, the sample should be expanded to improve the generalizability of the results. We must not forget that the information was obtained through the collaboration of LGTB association (although not alone) and this could bias the results, leaving out of the study people that have no Internet access or who are not involved in the associative sector. Second, as the survey contained many sensitive topics, young people could choose not to answer a question. This could be the reason of there was a small percentage of missing data. Finally, due to our study is quantitative, some questions have not been resolved, for example, why non-binary people are the least involved in social activities. It would be interesting to analyse in future studies the reasons why they do not participate as much as the other groups through a qualitative study.

The present study is one of the first studies in Spain to analyse the health and well-being of transgender, and especially non-binary young people. Our results are consistent with previous studies when pointing out the positive effects of social support in sexual minorities ⁴⁶. These results justify the need to promote public policies to favour the integration of transgender people in our society. It is therefore necessary that, as soon as possible, a new law should be passed (modifying the current LGR pathologizing state law) establishing a fair and equitable process for all transgender people in Spain. A single framework that regulates rights and obligations for transgender people is needed. Finally, greater acceptance among the general population and understanding of the experiences of

transgender communities may help to reduce the occurrence of transphobic events, as indicated by previous studies ⁴⁷.

- 1. FELGTB/COGAM. Acoso escolar y riesgo de suicidio por orientación sexual e identidad de género: Fracaso del sistema educativo [bullying and suicide risk because of sexual orientation and gender identity: The failure of the educational system]. . 2012.
- 2. Gracia E, Herrero J, Musitu G. *Análisis e intervención social. evaluación de recursos* y estresores psicosociales en la comunidad. Madrid: Síntesis; 2002.
- 3. Barra Almagia E. Apoyo social, estres y salud. *Psicologia y Salud*. 2004;14(2):237-243.
- 4. Malecki CK, Demaray MK. What type of support do they need? investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *School Psychology Quarterly*. 2003;18(3):231-252. https://search.proquest.com/docview/195490388. doi: 10.1521/scpq.18.3.231.22576.
- 5. Musitu G, Cava MJ. El rol del apoyo social en el ajuste de los adolescentes. Intervención Psicosocial. 2002;12:179-192.
- 6. Geckova A, van Dijk JP, Stewart R, Groothoff JW, Post D. Influence of social support on health among gender and socio-economic groups of adolescents. *European Journal of Public Health*. 2003;13(1):44-50.

http://www.narcis.nl/publication/RecordID/oai:pure.rug.nl:publications%2F764fff93-2a58-4572-8518-26d76cfe3eb2. doi: 10.1093/eurpub/13.1.44.

- 7. Torsheim T, Wold B. School-related stress, school support, and somatic complaints.

 Journal of Adolescent Research. 2001;16(3):293-303.

 http://journals.sagepub.com/doi/full/10.1177/0743558401163003. doi:

 10.1177/0743558401163003.
- 8. Ryan C, Russell ST, Huebner D, Diaz R, Sanchez J. Family acceptance in adolescence and the health of LGBT young adults. *Journal of Child and Adolescent Psychiatric Nursing*. 2010;23(4):205-213. http://onlinelibrary.wiley.com/doi/10.1111/j.1744-6171.2010.00246.x/abstract. doi: 10.1111/j.1744-6171.2010.00246.x.
- 9. Murdock TB, Bolch MB. Risk and protective factors for poor school adjustment in lesbian, gay, and bisexual (LGB) high school youth: Variable and person-centered analyses. *Psychology in the Schools*. 2005;42(2):159-172. http://onlinelibrary.wiley.com/doi/10.1002/pits.20054/abstract. doi: 10.1002/pits.20054.
- 10. Grant JM, Mottet LA, Tanis J, Harrison J, Herman JL, Keisling M. Transgender students; "injustice at every turn: A report of the national transgender discrimination survey". *Education Week*. 2011;30(20):5. https://search.proquest.com/docview/852927096.
- 11. Pinto RM, Melendez RM, Spector AY. Male-to-female transgender individuals building social support and capital from within a gender-focused network. *Journal of Gay & Lesbian Social Services*. 2008;20(3):203-220. http://www.tandfonline.com/doi/abs/10.1080/10538720802235179. doi:

10.1080/10538720802235179.

- 12. Budge SL, Katz-Wise SL, Tebbe EN, Howard KAS, Schneider CL, Rodriguez A. Transgender emotional and coping processes. *The Counseling Psychologist*. 2013;41(4):601-647. http://journals.sagepub.com/doi/full/10.1177/0011000011432753. doi: 10.1177/0011000011432753.
- 13. Factor RJ, Rothblum ED. A study of transgender adults and their non-transgender siblings on demographic characteristics, social support, and experiences of violence.

 Journal of LGBT Health Research. 2008;3(3):11-30.

 http://www.tandfonline.com/doi/abs/10.1080/15574090802092879. doi:
 10.1080/15574090802092879.
- 14. Budge SL, Adelson JL, Howard KAS. Anxiety and depression in transgender individuals: The roles of transition status, loss, social support, and coping. *Journal of consulting and clinical psychology*. 2013;81(3):545-557. http://www.ncbi.nlm.nih.gov/pubmed/23398495. doi: 10.1037/a0031774.
- 15. Pascoe EA, Richman LS. Perceived discrimination and health. *Psychological Bulletin*. 2009;135(4):531-554. http://www.ncbi.nlm.nih.gov/pubmed/19586161. doi: 10.1037/a0016059.
- 16. Bockting W, Knudson G, Goldberg JM. Counseling and mental health care for transgender adults and loved ones. *International Journal of Transgenderism*. 2006;9(3-4):35-82. http://www.tandfonline.com/doi/abs/10.1300/J485v09n03_03. doi: 10.1300/J485v09n03_03.
- 17. Nuttbrock L, Hwahng S, Bockting W, et al. Psychiatric impact of gender-related abuse across the life course of male-to-female transgender persons. *Journal of Sex Research*. 2010;47(1):12-23.

http://www.tandfonline.com/doi/abs/10.1080/00224490903062258. doi: 10.1080/00224490903062258.

- 18. Gómez-Gil E, Trilla A, Salamero M, Godás T, Valdés M. Sociodemographic, clinical, and psychiatric characteristics of transsexuals from spain. *Arch Sex Behav*. 2009;38(3):378-392. http://www.ncbi.nlm.nih.gov/pubmed/18288600. doi: 10.1007/s10508-007-9307-8.
- 19. Murad MH, Elamin MB, Garcia MZ, et al. Hormonal therapy and sex reassignment: A systematic review and meta-analysis of quality of life and psychosocial outcomes.

 Clinical Endocrinology. 2010;72(2):214-231.

 http://www.ingentaconnect.com/content/bsc/cend/2010/00000072/00000002/art00012.

 doi: 10.1111/j.1365-2265.2009.03625.x.
- 20. Clements-Nolle K, Marx R, Guzman R, Katz M. HIV prevalence, risk behaviors, health care use, and mental health status of transgender persons: Implications for public health intervention. *American Journal of Public Health*. 2001;91(6):915-921. http://ajph.aphapublications.org/cgi/content/abstract/91/6/915. doi: 10.2105/AJPH.91.6.915.
- 21. Toomey RB, Ryan C, Diaz RM, Card NA, Russell ST. Gender-nonconforming lesbian, gay, bisexual, and transgender youth: School victimization and young adult psychosocial adjustment. *Dev Psychol*. 2010;46(6):1580-1589.
- 22. Carver P, Yunger J, Perry D. Gender identity and adjustment in middle childhood. *Sex Roles*. 2003;49(3):95-109. http://search.proquest.com/docview/225367219. doi: 1024423012063.

- 23. Landolt M, Bartholomew K, Saffrey C, Oram D, Perlman D. Gender nonconformity, childhood rejection, and adult attachment: A study of gay men. *Arch Sex Behav*. 2004;33(2):117-128. http://www.ncbi.nlm.nih.gov/pubmed/15146144. doi: ASEB.0000014326.64934.50.
- 24. Beard AJ, Bakeman R. Boyhood gender nonconformity: Reported parental behavior and the development of narcissistic issues. *J Gay Lesbian Psychother*. 2000;4(2):81-97.
- 25. Bauer GR, Scheim AI, Pyne J, Travers R, Hammond R. Intervenable factors associated with suicide risk in transgender persons: A respondent driven sampling study in ontario, canada. *BMC public health*. 2015;15(1):525. http://www.ncbi.nlm.nih.gov/pubmed/26032733. doi: 10.1186/s12889-015-1867-2.
- 26. Liu RT, Mustanski B. Suicidal ideation and self-harm in lesbian, gay, bisexual, and transgender youth. *Am J Prev Med*. 2012;42(3):221-228.
- 27. Oost KM, Livingston NA, Gleason HA, Cochran BN. Gender performance stress and risk for psychopathology: Looking beyond sexual orientation. *Journal of LGBT Youth*. 2016;13(3):231-248.
- 28. Fredriksen-Goldsen KI, Cook-Daniels L, Kim H, et al. Physical and mental health of transgender older adults: An at-risk and underserved population. *GERONT*. 2014;54(3):488-500. http://www.ncbi.nlm.nih.gov/pubmed/23535500. doi: 10.1093/geront/gnt021.
- 29. Conron KJ, Scott G, Stowell GS, Landers SJ. Transgender health in massachusetts: Results from a household probability sample of adults. *American journal of public*

health. 2012;102(1):118-122. http://www.ncbi.nlm.nih.gov/pubmed/22095354. doi: 10.2105/AJPH.2011.300315.

- 30. Bockting W, Huang C, Ding H, Robinson B, Rosser BRS. Are transgender persons at higher risk for HIV than other sexual minorities? A comparison of HIV prevalence and risks. *International Journal of Transgenderism*. 2005;8(2-3):123-131. http://www.tandfonline.com/doi/abs/10.1300/J485v08n02_11. doi: 10.1300/J485v08n02_11.
- 31. Operario D, Nemoto T, Iwamoto M, Moore T. Risk for HIV and unprotected sexual behavior in male primary partners of transgender women. *Arch Sex Behav*. 2011;40(6):1255-1261. http://www.ncbi.nlm.nih.gov/pubmed/21604064. doi: 10.1007/s10508-011-9781-x.
- 32. Horvath KJ, Iantaffi A, Swinburne-Romine R, Bockting W. A comparison of mental health, substance use, and sexual risk behaviors between rural and non-rural transgender persons. *Journal of homosexuality*. 2014;61(8):1117-1130. http://www.ncbi.nlm.nih.gov/pubmed/24380580. doi: 10.1080/00918369.2014.872502.
- 33. Ryan C, Rivers I. Lesbian, gay, bisexual and transgender youth: Victimization and its correlates in the USA and UK. *Culture, Health & Sexuality*. 2003;5(2):103-119. http://www.tandfonline.com/doi/abs/10.1080/1369105011000012883. doi: 10.1080/1369105011000012883.
- 34. Almeida J, Johnson RM, Corliss HL, Molnar BE, Azrael D. Emotional distress among LGBT youth: The influence of perceived discrimination based on sexual orientation. *Journal of youth and adolescence*. 2009;38(7):1001-1014. http://www.ncbi.nlm.nih.gov/pubmed/19636742. doi: 10.1007/s10964-009-9397-9.

- 35. Grossman AH, D'Augelli AR. Transgender youth and life-threatening behaviors. *Suicide and Life-Threatening Behavior*. 2007;37(5):527-537. http://www.ncbi.nlm.nih.gov/pubmed/17967119. doi: 10.1521/suli.2007.37.5.527.
- 36. Simons L, Schrager SM, Clark LF, Belzer M, Olson J. Parental support and mental health among transgender adolescents. *The Journal of adolescent health: official publication of the Society for Adolescent Medicine*. 2013;53(6):791. http://www.ncbi.nlm.nih.gov/pubmed/24012067. doi: 10.1016/j.jadohealth.2013.07.019.
- 37. Clark TC, Lucassen MFG, Bullen P, et al. The health and well-being of transgender high school students: Results from the new zealand adolescent health survey (youth'12). *The Journal of adolescent health: official publication of the Society for Adolescent Medicine*. 2014;55(1):93-99. http://www.ncbi.nlm.nih.gov/pubmed/24438852. doi: 10.1016/j.jadohealth.2013.11.008.
- 38. Needham BL, Austin EL. Sexual orientation, parental support, and health during the transition to young adulthood. *Journal of youth and adolescence*. 2010;39(10):1189-1198. http://www.ncbi.nlm.nih.gov/pubmed/20383570. doi: 10.1007/s10964-010-9533-6.
- 39. D'Augelli AR, Grossman AH, Starks MT. Childhood gender atypicality, victimization, and PTSD among lesbian, gay, and bisexual youth. *Journal of Interpersonal Violence*. 2006;21(11):1462-1482. http://journals.sagepub.com/doi/full/10.1177/0886260506293482. doi: 10.1177/0886260506293482.
- 40. Motmans J, De Biolley I, Debunne S. Being transgender in belgium: Mapping the social and legal situation of transgender people. . 2010.

- 41. Van Schuylenbergh J, Motmans J, Coene G. Transgender and non-binary persons and sexual risk: A critical review of 10 years of research from a feminist intersectional perspective. *Critical Social Policy*. 2018;38(1):121-142. http://journals.sagepub.com/doi/full/10.1177/0261018317732478. doi: 10.1177/0261018317732478.
- 42. Demant D, Hides L, White KM, Kavanagh DJ. Effects of participation in and connectedness to the lgbt community on substance use involvement of sexual minority young people. *Addict Behav*. 2018:No Pagination Specified. http://o-search.proquest.com.cisne.sim.ucm.es/docview/1994019541?accountid=14514. doi: //dx.doi.org/10.1016/j.addbeh.2018.01.028.
- 43. Wiederhold BK. Cyberbullying and LGBTQ youth: A deadly combination. *Cyberpsychology, Behavior, and Social Networking*. 2014;17(9):569-570. http://o-search.proquest.com.cisne.sim.ucm.es/docview/1636811966?accountid=14514. doi: //dx.doi.org/10.1089/cyber.2014.1521.
- 44. Motmans J, Ponnet K, De Cuypere G. Sociodemographic characteristics of trans persons in belgium: A secondary data analysis of medical, state, and social data. *Arch Sex Behav*. 2015;44(5):1289-1299. http://www.ncbi.nlm.nih.gov/pubmed/25300904. doi: 10.1007/s10508-014-0411-2.
- 45. Adams N. Accounting for variations in estimates of transgender suicidality over the past 12 years. World Professional Association for Transgender Health (WPATH) symposium, Book of abstracts. 2014.

- 46. Molero F, Silván-Ferrero P, Fuster-Ruiz MJ, Nouvilas-Pallejá E, Pérez-Garín D. Subtle and blatant perceived discrimination and well-being in lesbians and gay men in spain: The role of social support. *Psicothema*. 2017;29:475-481.
- 47. Rotondi NK, Bauer GR, Travers R, Travers A, Scanlon K, Kaay M. Depression in male-to-female transgender ontarians: Results from the trans PULSE project. *Canadian Journal of Community Mental Health*. 2011;30(2):113-133.

https://search.proquest.com/docview/963345089. doi: 10.7870/cjcmh-2011-0020.