

# Cultural Dimensions of Sexual Identity Development According to Heterosexual and Non-heterosexual Men and Women from Jalisco, Mexico

# María de los Ángeles Covarrubias-Bermúdez<sup>1\*</sup>, Isabel de la Asunción Valadez-Figueroa<sup>1</sup>, Cristóbal García-Sandoval<sup>1,2</sup>, Carlos Enrique Cabrera-Pivaral<sup>1,3</sup>, Marco Antonio Zavala-González<sup>1</sup>

<sup>1</sup>Department of Public Health, Division of Disciplines for Development, Promotion and Preservation of Health, University Center of Health Sciences, University of Guadalajara, Guadalajara, Jalisco, Mexico

<sup>2</sup>Psychology, Latin America University, Guadalajara's Metropolitan Zone, Guadalajara, Jalisco, Mexico

<sup>3</sup>School of Health Sciences, Guadalajara LAMAR University, Vallarta's Campus, Guadalajara, Jalisco, Mexico

# ABSTRACT

Introduction: The sexual identity is a physical and psychological process necessary for human development, related with mental and sexual health, and influenced by social and historic individual context, what hinders its approach in medical practice.

Objective: To know the cultural dimensions of concept "sexual identity" of men and women from Jalisco, Mexico.

Materials and Methods: A cognitive anthropology's study was made during 2017 with 140 heterosexual and nonheterosexual men and women from Guadalajara's Metropolitan Area, Jalisco, Mexico, which was contacted by Facebook<sup>®</sup>. The "free lists" and "pile sort" techniques were used by mean SurveyMonkey<sup>®</sup> in each group separately. The mention frequency, average rank of key concepts' mention, Smith's index, hierarchical conglomerates and cultural consensus level were obtained using Visual Anthropac<sup>®</sup>4.0.

Results and Discussion: The sexual phenotypic characterization, self-esteem development, sense of belonging to a group or ideology, moral, and values were identified as common elements that explain how sexual identity is constructed.

Conclusions: The sexual identity is an introspection process determined by the phenotypic characterization of the people, limited by moral norms and propelled by individual need for social adaptation. These elements should be utilized in the medial practice for understand the sexual and mental education needs of patients.

**Key words:** Social construction of identity, Psychosexual development, Anthropology, Medical, Sexual health, Mental health

HOW TO CITE THIS ARTICLE: María de los Ángeles Covarrubias-Bermúdez\*, Isabel de la Asunción Valadez-Figueroa, Cristóbal García-Sandoval, Carlos Enrique Cabrera-Pivaral, Marco Antonio Zavala-González, Cultural dimensions of sexual identity development according to heterosexual and nonheterosexual men and women from Jalisco, Mexico, J Res Med Dent Sci, 2018, 6(6): 114-120

Corresponding author: María de los Ángeles Covarrubias-Bermúdez e-mail ः angelescovarrubias@hotmail.com Received: 05/11/2018 Accepted: 23/11/2018

#### INTRODUCTION

The physicians are the professionals more consulted in the Mexican health system, this means that they have the potential of making problems visible from other health areas, for example, of sexual health; however, national reports indicate that the physicians have low participation in the processes of sexual education when compared to minor than basic and high-school teachers [1]. Maybe this is due to the fact that in the last decades the sexual health promotion programs have focused almost exclusively towards the decrease of adolescent pregnancy, risky sexual practices, and gender violence [2], for what it has been proposed to study the biopsychosocial aspects of sexuality, with the intention of generating a transdisciplinary vision of the population sexual health.

About this, some Anglo-Saxon authors have developed qualitative studies for understanding the way in which individuals shape their sexual identity, assuming that this is implicated in other aspects as self-esteem and physical health. According to World Health Organization [3], the sexual identity is defined as the set of biological, psychological and social elements referents to biological sex, sexual orientation and gender that serve to people for self-defined sexuality and allows them to establish criteria to exercise their sexuality and adapt to social groups [4,5]. Some studies show that the unconformity sensation of persons with their sexual identity is related with general health status, for example, in Australia [5], Canada [6,7], United States [8], and Lebanon [9], some researches with men and women of different sexual orientation indicates perceived congruence among the elements of their sexual identity and how to express it to their social networks to experience better level of sexual and subjective wellbeing, and specifically for women. It is also a factor related with safe sexual practices and foments to experience the sexual enjoyment [6].

While in groups of men identified with homosexuality, the unconformity with sexual identity is related with unsatisfactory partner links [10], religious dilemmas [11], and high levels of internalized homophobia [12].

Finally, well-being's sensation with the sexual identity is influenced by having social networks [13,14], and on contrary way, with internalized homophobia [14], heteronormative societies [9], and hegemonic homosexuality [13].

It is then appreciated that researches about sexual identity have focus in the discrimination experiences of sexual minorities, what contributes to a partial perspective about this theme in heterosexual population. However, the sexual identity is a complex phenomenon that is related with acculturation process about "be a man or a woman" [15], and for what is necessary to understand the evolution of significance and process in persons, referents to construction of their sexual identity.

In this sense, the objective of this study was to describe the significance that Mexicans, habitants from Jalisco, Mexico, attribute to construction process of sexual identity.

#### MATERIALS AND METHODS

# Design, scenario, temporality and study unit

A cognitive cultural anthropologic study was made, that combine quantitative and qualitative methodological strategies to know concepts and ideas about cultural referents to a theme [16-18]. The university study was integrated by residents from Guadalajara's Metropolitan Area, Jalisco, Mexico, and the data recollection has been made during the second semester from 2017.

# Theory bases

Culture is a set of knowledge and ideas acquired by a group of individuals that explain their reality in a specific moment and geographical space [16]. Starting for this definition, cognitive anthropology is based on three principles:

a) Words have different meanings depending population, time and geographical space where they are used,

b) Cultural dimensions are the social categorization of meanings associated with words,

c) Cultural Competition regarding the level of knowledge that each individual has acquired about a theme, and

d) Cultural consensus is agreement level that exists between the meanings understood by a group regarding a theme [16-18].

# Sample size and sampling techniques

The "snow ball" technique was utilized [19] to collect a propositive sample whose size was determined according to consensus model for cultural anthropologic studies [16-18] that considered the cultural competence level or knowledge grade about the study theme. The answers veracity in the population was adjusted by random probability [16-18].

For this study a 0.5 minimum competence level and 95% confidence level was considered, that indicated selection of 17 participants for application of each instrument used. Also, variations by sex and sexual orientation, was explored resulting in a sample of 140 men and women divided in 8 groups.

# Eligibility criteria for participants

This study considered the men and women selection with ages between 20 and 50 years, and a minimal residence time of a one year in Guadalajara's Metropolitan Area, Jalisco, Mexico. Also, one half of participants which selfidentified as heterosexuals at the time of the study and the other half which self-identified with other sexual orientation were considered important.

# Analysis unit and study axes

The texts derived from the questionnaires were the analysis' unit, while the study's axes were sexual orientation and sex of participants.

# Information recollection, instruments and procedures

Through Facebook<sup>®</sup>, a social network, an announcement was launched to groups self-identified with homosexuality, who were found in accounts of local groups which self-denominated LGBTI (Lesbians, gays, bisexuals, transgender, transsexuals, transvestites and intersex). Also, this invitation was linked to accounts of research colleagues which facilitated the contact with an ample number of social networks of heterosexual persons.

Through this announcement the participants accessed the questionnaires through a link, since they were designed to be answered online in the SurveyMonkey<sup>®</sup> platform. Likewise, at the beginning of each questionnaire privacy statement and contact information was provided.

Two instruments were selected for data recollection. The first instrument, named "free lists" [16-18] consisted in a "free association" type questionnaire, where participants were asked to write the first five words, phrases or expression that related with term "sexual identity", and the reason why they associated such word or that word, phrase or expression with this term. Later, with base in a ponderation of these results according to their apparition

order and mentioned frequency, 20 answers were selected to elaborate the second instrument named "pile sort" [16-18], where participants were asked to group the terms according to similitude or relation perceived by them and describe briefly the association motives for each group. Also, application of these instruments were recollected in form of sociodemographic data, age of sexual orientation definition, change's perception in their sexual orientation across time, the element that confirmed their sexual orientation, and their selfidentification with any generic label to obtain the characteristics of population and items that were described in the first instrument.

# Analysis plan

We eliminated orthographical errors and we changed words in plural from singular. The analysis was applied in two phases. The first phase was a statistical treatment with the software Visual Anthropac<sup>®</sup> 4.0 to obtain mentioned frequency and average range of the mentioned order for each word related with the "sexual identity" term. Also, we calculated the Smith's index that is the average of the last two mentioned measures [16-18].

The second phase was the obtention of the cultural consensus level for data derived from "pile sort". The cultural consensus level is a measure that indicates how much coincidence was there in the group in a cognitive scheme referent to the "sexual identity" term and was obtained by means of calculation of cultural competence level and hieratical conglomerates with the method of conglomeration of nearby neighbours whose extent was the Euclidean distance without conglomerates limits. From this process we obtained dendrograms that show the graphical relation among concepts associated to the "sexual identity" term.

Also, multidimensional scaling technique was applied to obtain stress level of each dendrogram that indicates the goodness of graphic model to explain relationships between concepts associated with the "sexual identity" term, in this case 0.2 was considered as an adequate value [20]. And we ratified the statistical significance of results by factorization of principal components [16-18] that consisted in the obtention of two factors, where the score of the first must be atleast three times higher than the second, indicating homogeneity in conceptual organization of participants, referent to the "sexual identity" term [16-18].

#### Quality criteria of research

We considered four criteria [21]:

- 1. Credibility
- 2. Adequation
- 3. Auditability
- 4. Confirmability

The credibility supposedly show the phenomena as they are perceived by the participants, for which we modify the data minimally when it was necessary to modify them, and the participants were asked their motivations to write their answers, to dispel possible doubts about data obtained.

The adequation is the representation of results respect to scenario from participants, for which the authors considered different points of view about men and women of different sexual orientations.

The auditability demands congruency among research's objectives, methodological decisions and procedures that was manifested in this case when exploring cultural dimensions by mean of cognitive anthropology. Since this concept arises from this design, so there is congruency between objective and method.

Finally, the confirmability is the reduction of researchers errors based on study by Creswell [22], we considered four points: a) Omission of participants, that it was covered by including participants with heterogeneous characteristics so that they can show different perspectives about theme, b) Inclusion of expert participants, that it was covered by exploring human process about people who are an expert in their selfexperience, c) Inclusion of participants only because they are convenient, that it was covered by electing randomly the sample, and d) Participants answers and interviewer reactions, that was covered when not having interaction between participants and researchers who used online self-applied instruments.

# **Ethical considerations**

This research is part from the thesis "Phenomenological study about sexual identity development in men and women with different sexual orientation who reside in Guadalajara's Metropolitan Area, Jalisco", whose research protocol was authorized by the Ethics and Research Committee of the Doctorate Program in Sciences of Public Health, University Center of Health Sciences, University of Guadalajara. Register number was DCSP/CEI/ 190618/009 accord to the Reglamento de la Lev General de Salud en Materia de Investigación para la Salud from Mexico [23], which is based on fraction II of the article 17. The research was classified as "without risk" for their participants since study did not intervene on this fraction and applied questionnaires as recollection instruments hence no required informed consent was needed. Also, according to the Ley Federal de Protección de Datos Personales en Posesión de los Particulares from Mexico [24], the participants agree to their participation and use of their personal data, and we guarantee their anonymity excluding all identifying information.

#### RESULTS

For groups identification we assigned letters: "A" for heterosexual men, "B" for homosexual men, "C" for heterosexual women and "D" for homosexual women. The participants' age interval was 20-44 years and they were characterized as being mostly residents from Guadalajara and have heterogenous schooling. The age at which they defined their sexual identity was predominantly before 16 years-old, the majority didn't perceive changes in their sexual identity through time, the non-experimentation of curiosity about heterosexual or homosexual sexual practices was the most common way in which the participants' sexual identity was selfconfirmed, and only among heterosexual women were there unidentified participants with a generic label. The complete sociodemographic characteristics of the four groups of participants are shown in Table 1.

<b>Table 1: Participants</b>	(N=140)	sociodemographic	characteristics
------------------------------	---------	------------------	-----------------

	_	Group A (n=36)		Group B (n=35)		Group C (n=35)		Group D (n=34)	
Characteristic	cs	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentag
	Guadalajara	24	66.7%	19	54.3%	22	62.9%	17	50%
	Tlajomulco	0	0%	1	2.9%	0	0%	0	0%
	Tlaquepaque	7	19.4%	4	11.4%	3	8.6%	2	5.9%
	Tonalá	2	5.6%	3	8.6%	0	0%	0	0%
	Zapopan	3	8.3%	8	22.9%	10	28.6%	15	44.1%
Municipality of residence	Total	36	100%	35	100%	35	100%	34	100%
	High school	29	80.6%	12	34.3%	11	31.4%	3	8.8%
	Advanced technician	7	19.4%	2	5.7%	0	0%	1	2.9%
	Bachelor's degree	0	0%	18	51.4%	19	54.3%	20	58.8%
	Master's degree	0	0%	3	8.6 %	5	14.3%	10	29.4%
Scholarship Age of sexual identity definition	Total	36	100%	35	100%	35	100%	34	100%
	3 to 5 years	29	80.6%	2	5.7%	14	40%	6	17.6%
	6 to 10 years	0	0%	18	51.4%	9	25.7%	19	55.9%
	11 to 15 years	7	19.4%	6	17.1%	12	34.3%	9	26.5%
	16 to 20 years	0	0%	9	25.7%	0	0%	0	0%
	Total	36	100%	35	100%	35	100%	34	100%
	Yes	0	0%	8	22.9%	8	22.9%	11	32.4%
	No	36	100%	27	77.1%	27	77.1%	23	67.6%
Perception changes in sexual identity	Total	36	100%	35	100%	35	100%	34	100%
	Sexual experimentatio n	0	0%	8	22.9%	5	14.3%	4	11.8%
	Disinterest	29	80.6%	19	54.3%	25	71.4%	17	50%
	Sporadic attraction	0	0%	6	17.1%	5	14.3%	0	0%
	I had no reason to doubt	7	19.4%	2	5.7%	0	0%	13	38.2%
Element that confirmed sexual identity	Total	36	100%	35	100%	35	100%	34	100%
	Female	0	0%	0	0%	17	48.6%	9	26.5%
	Male	36	100%	21	60%	3	8.6%	4	11.8%
	Female and male	0	0%	14	40%	15	42.9%	11	32.4%
Identification with generic	None	0	0%	0	0%	0	0%	10	29.4%
Identification with generic label	Total	36	100%	35	100%	35	100%	34	100%

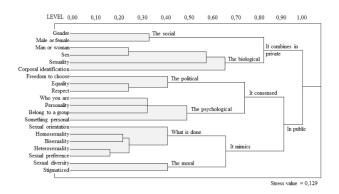


Figure 1: Dendrogram of group A: Heterosexual men

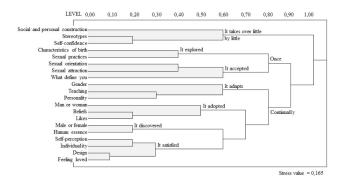


Figure 2: Dendrogram of group B: Homosexual men

#### Cultural dimensions of sexual identity

The dendrograms of groups A, B, C and D are shown in the Figures 1-4 respectively, whose stress values were 0.129, 0.165, 0.161 and 0.205 in the same order, which means that, except for D group dendrogram, the models are adequate to explain the relations between concepts related to "sexual identity" term, and result of group D was due to heterogeneity of participants' experiences, or to that some participants possibly received help to answer the questionnaire. Each dendrogram shows a semantic perspective of sexual identity, and each one approaches similar topics that explain what is, how it happens and what constitutes. First it refers to sexual phenotypic characterization as determinant of important part of sexual conduct and identification with categorize "man" or "woman", second, all describe different psychological process oriented to emotions development and sense of belonging to a group or ideology, and third,

#### Table 2: Results of cultural consensus analysis

all describe as social elements such as the morals and values; the first social element as cumulus of principles and norms generated in a collective that regulate sexual identities, and the second as beliefs derived from moral that each person or participant consider that must be applied to their self. Regarding the differences among groups, it was observed that meanings of groups A and C were centered on biological aspects and identification processes with social labels, while focus of groups B and D were emotional experiences provoked by the process of sexual identification.

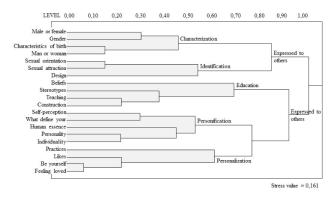


Figure 3: Dendrogram of group C: Heterosexual women

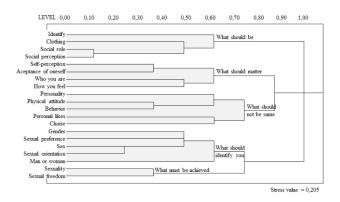


Figure 4: Dendrogram of group D: Homosexual women

#### Cultural consensus of "sexual identity" term

The statistical significance of dendrograms was ratified by mean of principal components factorization that for all groups the factor one was three times greater than factor two (Table 2).

				Mean cultural		
Group	F1	F2	F1:F2	competence*	Standard deviation	Group concordance†
А	6.411	1.057	6.065	0.547	0.239	0.299
В	6.799	1.196	5.684	0.609	0.170	0.371
С	6.376	1.115	5.718	0.557	0.255	0.310
D	2.668	0.334	7.988	0.555	0.160	0.308

\*Obtained from arithmetical mean of the group concordance individual with the average answers. †Result of cultural competence average squared. F=Factor. Source: Authors' elaboration with data collected.

#### DISCUSSION

This is the first research known by the authors that approach the sexual identity from the theoretical approach of cognitive anthropology as conceived by World Health Organization [3], and in population integrates men and women of different sexual orientation. In this sense results are not totally comparable by other authors since these have explored the sexual identity as synonymous of gender or sexual orientation, and with different methodological perspectives, mostly positivists, but we also describe some similarities with these.

Regarding the main result of this research, for our participants the sexual identity is a physical, psychological and social characteristic that derives from an introspection process that is influenced by the relation between people and their environment that is conditioned by the legal and social liberties that allow them to express their sexual identity. This is similar with the vision of World Health Organization [3], possibly by interest of regionals and internationals institutions to introduce sexual education campaigns as well as for the accessibility to communication through internet so that the message on this theme is available to more people.

Likewise, the phrases "stigmatized", "feel loved", "be yourself" and "acceptance of oneself", that were mentioned by the participants, alluded to theme of heteronormativity and the expression necessity of their sexual identity without social repercussions or fighting against this. This finding is similar with the findings of other authors [5-9] who have shown that to experiment peace or psychological serenity status toward sexual orientation and gender in spite of social tensions in environment is an important necessity for populations' mental health.

Moreover, we identified that family and nearby social networks, although mentioned in "free list", did not have an important role in resulted findings. This is different to studies described by other authors [13,14] who focuses on point that acceptation by these social resources favours well-being sensation in people with your sexual identity, which indicates that for our participants, to reveal their sexual orientation is not a taboo for their families or neither is a priority for them to divulge this information to their nearby persons. On contrary to some researches from Mexico [25,26], in heterosexual participants we don't identify words/phrases that showed rejection toward homosexuality, that could be studied in future researches regarding the subject.

These results are derived from an emic perspective, but may indicate some hypotheses that merit attention, such as not all individuals show a need for approval of their sexual identity by their families and so the revelation of sexual identity has become an increasingly unnecessary process, and that the participants showed a great openness to different generic labels and to believe that sexual preferences are flexible over time, about what should be deepened later. As to research's limitations we considered three. First, results found were for each group that limited to know participants' vision in general without distinction according to their sexual orientation. Second, applying the instruments by means of internet, although facilitated us to obtain personal and confidential information, limited our environmental control, so that we were unaware whether the participants received any influence of any type about their answers. And third, authors consider that Guadalajara's Metropolitan Area is a zone with high levels of internal migration, which is why one year of residence in this was considered an eligibility criteria, however, it is possible that experiences among participants have varied due to educational and cultural background that keep from their origin places, which would a limitation of the study.

Finally, with respect to research we considered that this allowed us a close up to cultural conception of sexual identity as study's object, which in turn permitted us glimpse of any social tensions men and women confront to shape and express their sexual identity, particularly in homosexual men, and also allowed us make visible the women's necessity to develop their self-esteem and fight against social rejection independently according to their sexual orientation.

#### CONCLUSIONS

These results shows that sexual identity development is a timeless process that is not determined by an age but by events such as being aware of phenotypical sex, and expression necessities of the gender and sexual preferences; while these elements are limited or encouraged by social norms and legal framework from context of person. Likewise, these findings show that sexual identity is a process influenced by social, legal and moral changes which can be an obstacle for approach to this by sexual and mental health professionals, so, in this sense, investigations like this should be taken as updates of the knowledge and for explaining persons', sexual conducts as a starting point to define care protocols for their sexual and mental health.

# SOURCE OF SUPPORT

Work done was supported with resources from the Consejo Nacional de Ciencia y Tecnología (CONACYT) from Mexico, scholarship no. 330699 for national postgraduate studies.

#### **CONFLICT OF INTEREST**

The authors declared no potential conflicts of interests with respect to the authorship and/or publication of this paper.

#### REFERENCES

1. Juárez F, Gayet C. Adolescent sexual and reproductive health in Mexico: A new analysis framework for the evaluation and design of policies. Papeles Poblac 2005; 11:177-219.

- 2. Rojas R, Castro FD, Villalobos A, et al. Comprehensive sexual education: Coverage, homogeneity, integrality and continuity in schools in Mexico. Salud Publica Mex 2017; 59:19-27.
- 3. World Health Organization. Promotion of sexual health: Recommendations for action. Antigua Guatemala, Guatemala, PAHO, WHO, WAS 2000.
- 4. Gabalda IC. Gender and mental health. Biblioteca Nueva 2001.
- 5. Castañeda M. The homosexual experience. Grupo Planeta Spain 2013.
- 6. Hucker A, Mussap AJ, McCabe MM. Self-concept clarity and women's sexual well-being. Can J Hum Sex 2010; 19:67-77.
- 7. Muise A, Preyde M, Maitland SB, et al. Sexual identity and sexual well-being in female heterosexual university students. Arch Sex Behav 2010; 39:915-25.
- 8. Kappler S, Hancock KA, Plante TG. Roman Catholic gay priests: Internalized homophobia, sexual identity, and psychological well-being. Pastoral Psychol 2013; 62:805-26.
- 9. Wagner GJ, Aunon FM, Kaplan RL, et al. Sexual stigma, psychological well-being and social engagement among men who have sex with men in Beirut, Lebanon. Cult Health Sex 2013; 15:570-82.
- 10. Bauermeister JA, Johns MM, Sandfort TG, et al. Relationship trajectories and psychological well-being among sexual minority youth. J Youth Adolesc 2010; 39:1148-63.
- 11. Hamblin R, Gross AM. Role of religious attendance and identity conflict in psychological well-being. J Relig Health 2013; 52:817-27.
- 12. Biss WJ, Horne SG. Sexual satisfaction as more than a gendered concept: The roles of psychological well-being and sexual orientation. J Constr Psychol 2005; 18:25-38.
- 13. Annes A, Redlin M. Coming out and coming back: Rural gay migration and the city. J Rural Stud 2012; 28:56-68.
- 14. Fingerhut AW, Peplau LA, Ghavami N. A dualidentity framework for understanding lesbian experience. Psychol Women Q 2005; 29:129-39.

- 15. Organización Mundial de la Salud. Health promotion: Glossary. Ministerio de Sanidad y Consumo 1999.
- 16. Bernard HR. Research methods in anthropologyqualitative and quantitative approaches. California: AltaMira Press 2006.
- 17. Coxon AP. Sorting data: Collection and analysis. Sage1999.
- 18. Romney AK, Weller SC, Batchelder WH. Culture as consensus: A theory of culture and informant accuracy. Am Anthropol 1986; 88:313-38.
- 19. Collins KM, Onwuegbuzie AJ, Jiao QG. A mixed methods investigation of mixed methods sampling designs in social and health science research. J Mix Methods Res 2007; 1:267-94.
- Sturrock K, Rocha J. A multidimensional scaling stress evaluation table. Field Meth 2000; 12:49-60.
- 21. Sandelowski M. The problem of rigor in qualitative research. Adv Nurs Sci 1986; 8:27-37.
- 22. Creswell JW. Standards of validation and evaluation. Qualitative inquiry and research design: Choosing among five approaches. Sage 2013; 2:201-1.
- 23. de la Salud P. Regulation of the general health law on health research. Diario Oficial de la Federación de los Estados, Unidos Mexicanos 1986.
- 24. de Diputados C. Federal Law on Protection of Personal Data in Possession of Individuals. Diario Oficial de la Federación, Distrito Federal 2010.
- 25. Moral de la Rubia J, Martínez Gómez E. Evaluation of rejection toward homosexuality in students of medicine and psychology based on three conceptually related scales. Psicología Desde el Caribe 2013; 30:526-50.
- 26. Toro Alfonso J, Varas Díaz N. The others: Prejudice and social distance towards gay men and lesbians in a sample of university-level students. Int J Clin Health Psychol 2004; 4.