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# Influencias psicosocioculturales sobre los síntomas psicopatológicos en comunidad abierta: desigualdades ecosistémicas

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#### Resumen

Los problemas de salud mental en la población general tienden a estar relacionados con determinantes sociales que también influyen en la inequidad sanitaria. Sin embargo, estos determinantes suelen tenerse en cuenta solo en la población clínica y pasan inadvertidos en el ámbito comunitario. Teniendo esto en cuenta, el propósito del presente estudio fue identificar los factores psicosocioculturales que influyen en la presencia de los síntomas psicopatológicos en población abierta. Para esto, participaron 229 mujeres y hombres, adultos, mexicanos, a quienes se les aplicaron dos instrumentos de autorreporte para evaluar sus síntomas psicopatológicos, el SCL 90-R y el Cuestionario de Factores Asociados a la Salud. Los resultados muestran diferencias entre hombres y mujeres tanto en los síntomas como en los factores evaluados, en donde las mujeres resultaron ser las más desfavorecidas. Los modelos predictivos señalan que en las mujeres los factores que predicen la sintomatología son los pensamientos conflictivos, la violencia intrafamiliar, la falta de confianza en sus capacidades y la discriminación de género; mientras que en los hombres fueron la violencia intrafamiliar, la pobreza y un menor bienestar. Se concluye que los modelos psicosociales y ecosistémicos permiten comprender que los factores psicosocioculturales influyen sobre los síntomas incipientes de población comunitaria, con vías diferentes tanto para las mujeres como para los hombres. Con esto se demuestra que el contexto imprime un impacto diferencial en la salud mental. *Palabras clave:* salud mental, determinantes sociales, género, violencia intrafamiliar.

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# Psycho-sociocultural influences on psychopathological symptoms in the open community: ecosystemic inequalities

#### Abstract

Mental health problems in the general population tend to be related to social determinants which also influence health inequity. However, these determinants are usually taken into account only for clinical populations and often go unnoticed at the community level. The purpose of the present study was to identify the psycho-socio-cultural factors that influence the presence of psychopathological symptoms in the open population. In this study, 229 women and men, Mexican adults, participated. Two self-report instruments were used: the SCL 90-R to evaluate psychopathological symptoms, and the Questionnaire of Factors Associated with Health. The results show differences between men and women, both in the symptoms and in the factors evaluated, where women are more disadvantaged. Predictive models indicate that in women the factors predicting the symptomatology are: conflicting thoughts, domestic violence, lack of confidence in their abilities and gender discrimination; while in men they were: family violence, poverty and lower well-being. It is concluded that psychosocial and ecosystemic models enable to understand that psycho-socio-cultural factors influence the presence of incipient symptoms in the community population, following different paths for women and men, showing that the context has a differential impact on mental health. *Key words*: mental health, social determinants, gender, intra-family violence.

# Introduction

Currently, in the field of health, it is recognized that the health-disease process is dynamic and integral, so it is not enough to attend to physical health, but mental health must be included. The latter is understood as the state of well-being and adaptation that allows the person to develop, solve their problems and contribute to society (Rodríguez, 2009), which is associated with psychological well-being and refers to the perception of satisfaction, as well as happiness and quality of life (Alvarado, Barquero, Garita, Hernández, Leandro ... et al., 2013); whereas psychological unease manifests itself in anxiety, problems, restlessness, dissatisfaction and other psychopathological symptoms, or increase until reaching the clinical criteria of mental disorders.

Given the multifactorial nature of the health-disease process, it is necessary to recognize that the presence of psychopathology does not occur individually or isolated from its environment, but rather influences individual, family and socio-cultural determinants of the ecosystem that favor one extreme or the other of this continuum. The World Health Organization (WHO) in 2009 points out that the unequal distribution of power, income, goods and services affect living conditions, such as health care, education, housing, work and environment. Thus, the importance of health determinants is highlighted, recognizing that morbidity and mortality are intimately linked with social structure, which in turn includes economic, political and social influences that imprint a marked health inequity.

In this way, mental health is influenced by a complex interrelation of socio-cultural conditions, which include poverty, disorderly urbanization, lack of housing, lack of education, all of them dependent on national and international government policies and economies, responsible to a large extent of the inequity and injustice of the distribution of resources, which favor the presence of mental disorders in the general population (WHO, 2003, WHO, 2013, Pan American Health Organization, PAHO, 2018b).

In this sense, in the international field it is recognized that mental disorders represent 12% of the global burden of diseases; in Latin America and the Caribbean, they represent 19% of the disability- adjusted life years (DALY). The main disorders identified are: depression (3.4%), anxiety (2.1%) and pain disorders (2.0%), which in turn are the ones that generate more years of life lost due to disability (LLY) (OPS, 2018a). According to the OPS (2017), the prevalence of mental disorders in adults in the last 12 months ranges between 18.7% and 24.2%, categorized mainly as anxiety disorders (9.3% to 16.1%), affective disorders (7.0 % to 8.7%) and substance abuse (3.6% and 5.3%). There are variations by gender, since women show greater depression and anxiety, while men present greater alcohol consumption (Kohn et al., 2005). In the case of major depression, its prevalence in women ranges from 4.0% -10.3%, while in men it ranges from 2.8% to 6.9%, maintaining this bias in old age (Luppa et al., 2012).

In the region of the Americas, characterized by inequality among its inhabitants, Mexico occupies an intermediate position in terms of the burden of mental disorders, presenting 16% of DALY and 33% of LLY (OPS, 2018b). A mandatory reference is the *Encuesta Nacional de Epidemiología Psiquiátrica* ENEP, 2003 [National Survey of Psychiatric Epidemiology] that reports the presence of mental disorders

in the open population with 28.6% throughout life, 13.9% in the last year and 5.8% in the recent month, highlighting anxious and depressive disorders in women and substance use in men (Medina-Mora et al., 2003).

However, when considering the psychopathological symptoms in the open population, a prevalence has been found in adults, which ranges between 14.1% and 16.3% in women and from 6.7% to 14.4% in men (Ruiz, González, González, Aguilar, & Torres, 2018). Some studies indicate that women obtain higher scores in all dimensions of SCL-90-R, except in psychoticism (Alvarado, Sandín, Valdez-Medina, González-Arratia, & Rivera, 2012, Ruiz, et al., 2018), whereas in other studies women only obtain higher scores in somatization, depression and interpersonal sensitivity (Cruz et al., 2005). This inconsistency is also found in younger populations, where differences are reported only in somatization, depression, obsessivecompulsive disorder, total symptomatology and positive symptoms (Rivera, Caballero, Pérez & Montero, 2013). However, other studies found no differences in any of the symptoms (SCL-90-R) in young men and women aged 16 to 19 years (Kröninger & Grevenstein, 2013). It should be noted that prevalence data in the open population are usually lower than those presented in populations that use health services for medical or psychiatric care and that it is also important to consider the instrument used, since, for example, Espinosa, Orozco and Ybarra (2015), using the Goldberg scale in men who requested medical attention, found the presence of 57% of anxious symptoms and 51% of depressive symptoms.

As noted, the factors that influence the presence of psychopathology range from demographic aspects such as gender, to macro-social aspects such as politics and economics. International literature indicates that these problems are accentuated in the female population, with low incomes and belonging to indigenous people (Kisely, et al., 2017, OPS, 2018 a), Bearing this in mind, the Mexican population would have an important level of vulnerability, since they are exposed to stressful events, gender violence (Medina-Mora, Borges, Fleiz, Lara, Zambrano, Ramos, 2005), early age of psychopathology initiation, low income, separate marital status / widower / divorced (Medina-Mora, Borges, Lara, Benjet, Blanco, Fleiz, Villatoro, Rojas & Zambrano, 2005), migration (Breslau, Aguilar-Gaxiola, Borges, Castilla-Puentes, Kendler, Medina-Mora, Su & Kessler, 2007), unfinished education (Lee et al., 2009), high levels of abuse and family dysfunction (Benjet, Borges, & Medina-Mora, 2010).

On the other hand, regarding the economic aspect, the lack of financial resources is associated with greater severity of mental disorders (Medina-Mora, Borges, Lara, Benjet, Blanco, Fleiz, Villatoro, Rojas, & Zambrano, 2005). Economic recessions, unemployment and low income are associated with mental health problems like anxiety, which is accentuated in women (Dagher, Chen & Thomas, 2015). Also, unfinished education is related to substance abuse, anxiety, mood disorders and impulse control deficit (Lee et al., 2009). With respect to marital status, being separated, divorced or widowed increases the risk of mental disorders (Scott et al., 2009). Finally, another aspect to be considered is violence, since it has been found that women who experience conjugal violence have symptoms of somatization, depression, interpersonal sensitivity and psychoticism, which can be reflected in lower quality of life, physical illness and frequent use of health services. (Vieyra, Gurrola, Balcázar, Bonilla & Virseda, 2009).

However, despite advances in health and recognition of social determinants, there is neglect in the attention given to mental health and the factors that lead to the appearance of incipient symptoms, especially when it comes to community population, (non-clinical), since the latter has been used mainly as a comparison group for those people who have a mental disorder. Leaving aside the importance of the symptoms and their determinants in the open population means underestimating the fundamental basis to generate promotion, prevention and early detection interventions which are scarce, especially in developing countries (Berenzon, Lara, Robles & Medina-Mora, 2013). Therefore, the objective of this study was to identify the psycho-socio-cultural factors that influence the presence of psychopathological symptoms in the open population, considering adults of both sexes from Zumpango's health jurisdiction, State of Mexico.

# Method

Design

A quantitative, non-experimental, cross-sectional study with an explanatory scope was carried out, aiming to show the factors that affect the presence of psychopathological symptoms of the open population through the development of predictive models (Herrnández, Fernández & Baptista, 2014).

**Participants** 

The study worked with a convenience sample of voluntary participants from the open population, formed by 229 people of both sexes, 68.1% women and 31.9% men, adults aged 18 to 81 years (M= 35.15, SD = 13.22), mostly married (40%) and single (31%), with secondary

educational level. They were inhabitants of the Zumpango region, State of Mexico, comprising the municipalities of Apaxco, Huehuetoca, Hueypoxtla, Nextlalpan, Tequixquiac and Zumpango, which, on the grounds of belonging to the same geo-demographic area, share resources, economic activities and socio-cultural elements.

This region is located northeast of the State of Mexico, a state characterized by being the most populated in the country, complex and heterogeneous, with an accelerated, disorganized and unequal modernization process. In particular, the region where this study was carried out is located between the metropolitan areas of the Valley of Mexico and the State of Hidalgo (Government of the State of Mexico, COPLADEM, 2012), where a process of deterritorialization is experienced, since the territory has been overtaken by profound changes due to the strong socio-demographic pressure. Also, its population has increased almost twice in the last decades, it has moved from the rural to the urban, and from the agricultural to the commercial, thus generating a growing demand for resources and services to cover the needs of the population (Sánchez, 2013).

In addition to this, the region has a mainly urban population (75%) and original (72%); with 28% of immigration (mainly from Mexico City, where people move to work and return only to sleep); it has low levels of marginalization, 10.4% of food poverty and 33.4% of property poverty (Consejo Nacional de Evaluación de la Política de Desarrollo Social - CONEVAL, 2016) [National Evaluation Council of the Social Development Policy, CONEVAL, for its Spanish acronym]. Although the human development index has improved in the region, since it has mortality rates lower than the state, life expectancy of 76.81 years, primary care coverage (76%) and average schooling of 9 years, the characteristics indicated are unequally distributed, and the remote areas of the municipal centers are being disfavored (Government of the State of Mexico, [COPLADEM, for its Spanish acronym], 2012).

# Instruments

Scale of factors associated with health. This instrument was used to collect, on the one hand, sociodemographic data (sex, age, schooling, marital status) and the other hand, psycho-socio-cultural factors associated with health, including psychological, socio-cultural and health aspects related to the health- disease process, such as: health status, medical safety, perception of well-being, problematic thoughts and behaviors, family, violence, unemployment, poverty, insecurity, discrimination, migration and the environment.

Specifically, the scale consists of 26 items that are answered by a five-point Likert scale ("never", "almost never", "sometimes", "almost always" and "always"); where a higher score indicates greater presence of the evaluated condition. It is important to mention that this instrument was elaborated *ex-profeso* for the project from where the presented data emanate, that the section dedicated to sociodemographic data has been previously used (Ornelas & Ruiz, 2017), and that the section on psycho-socio-cultural factors obtained an explained variance of 52% and an adequate reliability index with an  $\alpha = 0.74$  for this sample.

Symptom Check List-90-R (SCL-90-R). This check-list, elaborated by Derogatis (2002) is a self-report instrument that assesses the presence of psychopathological symptoms in the population studied. It is formed by 90 reagents, with a scale of five response options ("nothing", "very little", "little", "enough", "a lot") and the participant indicates those symptoms that have worried or bothered him during the last seven days. For results interpretation, the higher the score, the more symptomatology the scale indicates. Both the total score (Global Severity Index - GSI) and its dimensions (Somatization, obsessions and compulsions, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism) were used.

For this study, the version used was validated in Mexico by Cruz et al., (2005), who report adequate national and international psychometric properties (between  $\alpha = 0.60$  and  $\alpha = .85$ ). In addition, the validity (64% variance explained) and reliability (= $\alpha$  0.98) were verified.

### **Procedure**

Once the project was approved and registered before the institutional authorities, the selection process of the trained applicators was carried out. They came from the same data collection areas, which facilitated contact with the community. Subsequently, this process was followed by a period of familiarization, to make the applicators visible to the residents and thus generate confidence, provide security for the research team and facilitate data collection.

The applicators approached the participants in public spaces (hospital, churches, markets, schools, etc.) and private spaces (home, shops, etc.). For this purpose, first, they introduced themselves, explained the research objective and requested their voluntary participation. Participants who accepted, signed the informed consent, based on the Declaration of Helsinki and the APA ethical guidelines. Immediately thereafter, they answered the questionnaires individually. At the end, the complete filling of the instruments was verified and their participation was thanked.

Data analysis

Initially, the descriptive analysis (M, SD) was performed. Then, the Kolmogorov-Smirnov-Lilliefors normality test and the Levene test were used to verify the variance homogeneity. Later, a comparative analysis between women and men was performed (Student's t). Due to the fact that significant differences were found by sex  $(p \le .05)$ , the rest of the analyses were performed separately for women and men. Subsequently, bivariate correlations between each of the symptoms and the evaluated factors were calculated. Finally, multivariate linear regression was used, step by step, to generate predictive models for each sex. The program SPSS version 22 was used during the whole data analysis process.

# **Results**

This section presents the results of the study, starting with the demographic and health data, followed by the comparison of psychopathological symptoms and psycho-sociocultural factors between sexes, as well as the relationship between symptoms and factors, and lastly, the development of predictive models for women and men is put forward.

Regarding demographic data, no differences were found in age and marital status, only differences were found in schooling, being higher the level in men than in women (M² = 18.20, sig. = .003). With reference to health, users of *Seguro Popular* [Popular insurance] predominate (31.0%), followed by those who do not have this type of service (29.3%) and by the beneficiaries of labor insurance (IMSS, 25%); 17.9% indicated that they are currently sick; 14.0% were receiving treatment; and 18.82% were taking medication. In these data, women reported higher percentages than men, although in a non-significant manner.

With reference to mental health problems, once the normality of the variables and the homogeneity of variances were verified - respecting the significance level at .05 -, some

important gender differences were found through Student's *t* test. Women presented greater psychopathological symptoms than men: 15.4% of them obtained high scores in SCL 90-R, against 5.5% of men, showing significant differences in seven of the nine dimensions evaluated. Particularly, in the case of women, the highest scores were found in: Paranoid ideation, Obsessive-Compulsive, Depression and Somatization. In the case of men, they were ranked in the following order: Obsessive-compulsive, Interpersonal sensitivity, Somatization and Hostility (see Table 1).

Table 1.

Comparison of psychopathological symptoms between women and men

	Women	Men	4	
Symptoms	n = 156	n = 73	t	
	M(SD)	M(SD)	Student	
Somatization	.74 (.69)	.40 (.48)	4.35 ***	
Obsessive-Compulsive	.75 (.74)	.61 (.64)	1.48	
Interpersonal sensitivity	.67 (.68)	.45 (.50)	2.76**	
Depression	.74 (.78)	.37 (.53)	4.20***	
Anxiety	.64 (.72)	.39 (.53)	2.71**	
Hostility	.54(.59)	.40 (.47)	2.04	
Phobic Anxiety	.51 (.65)	.25 (.46)	3.47**	
Paranoid Ideation	.76 (.77)	.50 (.65)	2.62*	
Psychoticism	.45 (.59)	.25 (.42)	2.84**	
Global Severity Index	.65 (.60)	.48 (.57)	3.43***	

*Note.M*=mean,*SD*=standard deviation,\*p<.05,\*\*p<.01,\*\*\*p<.001. Source: authors' own elaboration

Regarding psycho-socio-cultural factors associated with health, some differences were found between women and men. Table 2 presents a summary of these comparisons. Women indicated higher frequency of emotional problems, family disintegration, low income / poverty and perceived more insecurity in the community. On the other hand, men presented greater physical activity, well-being and actions addressed to the community.

Table 2 Comparison of psycho-socio-cultural factors between women and men

Variable	Women(n=156)	Men( n=73)	t	
	M(SD)	M(SD)	student	
Physical Activity	1.58 (1.2)	2.33 (1.1)	4.27 ***	
Well-being	2.80 (1.0)	3.19 (0.9)	2.66 **	
Actions by the community	1.43 (1.1)	1.83 (1.4)	2.07*	
Emotional problems	1.11 (1.2)	.79 (.99)	2.09*	
Family breakup	.89 (1.4)	.50 (1.1)	2.12*	
Poverty	1.34 (1.1)	.91 (.85)	3.18 **	
Insecurity in the community	2.77 (1.2)	2.33(1.2)	2.48 **	

*Note.* mean, SD = standard deviation, \*p < .05, \*\* p < .01, \*\*\* p < .001. Source: authors' own elaboration.

Following the recommendations of Grande, Newmeyer, Underwood and Williams, (2014), the global symptomatology score (GSI) was used as a stable measure that concentrates the psychopathological symptoms. Subsequently, correlations were calculated between the total of psychopathological symptoms (GSI) and the psycho-socio-cultural factors. Table 3 summarizes those correlations with r > .30 are summarized.

Significant correlations between psycho-socio-cultural factors and total psychopathology (GSI) were found for both sexes, although the female sex has a greater number of correlations and with higher intensity, which considering the size of the sample, indicates that they are important correlations. This relationship between variables shows that there are various psychological, family and social aspects associated with the symptomatology and that in women, individual and family issues have a greater importance than in men.

The psycho-socio-cultural factors that obtained significant correlations were used as predictive variables on the psychopathological symptoms to generate explanatory models through multiple regressions, step by step, which led to choosing the model that presented the best fit. Thus, the female model identified four variables that explain 48% of the variance; whereas the male model was composed of three predictor variables, explaining 38% of the variance,

one of them with inverse effect, indicating that lower wellbeing predicts symptomatology. Although the two models are significant, the female model presented better quality of fit and predictive value than the male one (see Table 4). The variables contained in both models are different, except for domestic violence that influences both sexes as the strongest predictor.

# Discussion

With the aim of identifying the different factors that affect mental health problems in adults of open population, the present study sought to relate psycho-sociocultural factors with psychopathological symptoms in a sample of 229 participants. To carry out this analysis, it began with the comparison of the variables of interest between women and men. Given that significant differences were found, distinction by sex was maintained throughout the study until explanatory models were generated.

In general, the results on psychopathological symptoms in the present study tend to be higher than those reported in other studies, mainly for women (Cruz et al., 2005, Lara, Espinosa, Cárdenas, Fócil & Cavazos, 2005), an issue that constitutes an increased risk, as is often the case in urbanized areas where modernization is unplanned and rural

Table 3 *Relationship between psycho-socio-cultural factors and psychopathological symptoms.* 

Variable	Global Severity Index			
	Women(n= 156)	Men (n= 73)		
Your way of thinking generates problems	0.48***	0.44***		
Emotional problems	0.47***	0.34**		
Your way of acting generates problems	0.41***	0.41***		
Confidence in your abilities	-0.41***			
Feeling of productivity	-0.38***	-0.39**		
You face and solve your problems	-0.38***			
Well-being	-0.37***	-0.41***		
Balanced diet	-0.34***			
Domestic violence	0.47***	0.45***		
Family problems	0.44***	0.38**		
Family communication	-0.43***			
Affection and family acceptance	-0.43***			
Family support	-0.37***			
Family disintegration	0.31***	0.38**		
Gender discrimination in the community	0.38***			
Poverty / low income		0.38*		
Access to health services		-0.37*		
Pleasant interpersonal relationships		-0.34**		

*Note.* r = Pearson correlation, p \* < .05, \*\* p < .01, \*\*\* p < .001. Source: authors' own elaboration.

Table 4

Predictive models of psycho-socio-cultural factors on psychopathological symptoms in women and men.

WOMEN(n=156)	Global Severity Index					
Predictor Variables	В	T	Sig	R <sup>2</sup>	F	Sig.
Thoughts that generate problems	.29	4.61	.000		35.60	.000
Domestic violence	.31	4.90	.000	10		
Confidence in their abilities	30	-5.05	.000	.48		
Gender discrimination	.21	3.36	.001			
MEN (n=73)						
Domestic violence	.40	4.14	.000			
Well-being	29	-2.93	.005	.38	14.99	.000
Poverty / low income	.28	2.91	.005			

Note. B = Beta, standardized regression coefficient, T value (T, sig.),  $R^2 = adjusted$  coefficient of determination, ANOVA (F, sig.). Source: authors' own elaboration.

areas are deprived of their resources (PAHO, 2018b). It is possible that this responds to the process of accelerated urbanization experienced by the participants of this study, since it has been little planned and disorganized, thus leading the inhabitants to be in a process of constant adaptation to stressors typical of urban areas, and more specifically of dormitory areas, where services and employment opportunities are lacking. Therefore, people are constantly searching for alternatives that entail redoubled efforts and long distances to cover their needs. Of course, these data are subject to the sample used (intentional and voluntary). In future research, representative samples covering different levels of urbanization are required.

Likewise, women in this study presented greater symptoms than men in most dimensions of the SCL 90-R, which confirms that they have a lower perceived mental health (Gagne et al., 2014). This trend is consistent with studies reporting that women presented greater psychopathology in almost all the dimensions evaluated (Alvarado et al., 2012; Ruiz, et al., 2018). Nevertheless, these results distance themselves from those of authors who mention little or no differences (Cruz et al., 2005; Kröninger & Grevenstein, 2013).

The present study shows that the greatest differences occurred in the dimension of somatization, depression, phobic anxiety and total symptomatology, which appear consistently in the literature, especially depression and anxiety (Luppa et al., 2012). Also, it has been reported that women present slightly more relapses than men (Bertschy, Velten, & Weibel, 2016). These findings about symptomatology could be interpreted as an individual characteristic, but if they are left at that point, there is the risk of presenting an individualistic, even psychologizing vision, by suggesting that these symptoms would be isolated individual characteristics. Consequently, it was necessary to broaden the scope

to contemplate other levels of the ecosystem that account for the contextual elements that affect mental health.

Thus, when comparing the psycho-socio-cultural factors associated with health in women and men, it was found that women perceive themselves with less well-being and participation in community actions. They also present more emotional problems, family disintegration, poverty and insecurity in the community, compared to men. Some of the aspects found such as low income, lack of education and insecurity within their environment have been mentioned previously as influential in health inequity (WHO, 2009, PAHO, 2018a) and in the presence of mental disorders (WHO, 2013). However, in the present study, carried out in a region that has transited from the rural to the urban, this is manifested mainly in women.

On the other hand, upon studying the relationship between the variables of interest through bivariate correlational analysis, the association between psychological, family, socio-cultural factors and the presence of recent psychopathological symptoms was reaffirmed, as previously shown in affectations throughout life (Benjet et al., 2010). Specifically, the variables that showed the closest relationships with the total symptomatology in both sexes were: a) *psychological factors*, such as perceiving that their way of thinking and acting generates problems, emotional affectations; b) *family factors*, such as domestic violence, conflicts and family disintegration. It should be noted that the associations were of greater magnitude for women and that in the sociocultural factors there were no coincidences.

Moreover, other relationships with the symptomatology were presented, which were only established for one of the sexes, for example, that women showed reduced confidence in their abilities, coping skills, and communication, affection and family support; whereas for men, poverty, less services and interpersonal relationships, were relevant aspects. This

would show that the participants of the open population manage to identify that the cognitive-behavioral, emotional and family aspects generate problems for them; while the reduction of positive aspects such as feeling good and useful, generates discomfort for them. In this way, the results obtained on individual symptoms and factors would account for the *ontosystem*; the family factors, for the microsystem, and the socio-cultural factors, for the *macrosystem*, thus interweaving complex relationships with psychopathology. Thus, it is clear that the factors associated with psychological distress cross the different ecosystem levels.

In this way, the multiple relationships between psychological factors and psychopathological symptoms are reaffirmed, some coinciding while others depend on the sex of the participants. The coincidences indicate that the presence of cognitive, behavioral and emotional problems, as well as feeling less productive and with less well-being, are associated with psychopathological symptoms, highlighting the relevance of psychological well-being on mental health (Alvarado et al., 2013). In women, the lack of confidence in their abilities and the limited capacity to cope with their problems were related to the total symptomatology, whereas these variables were not significant for men. This partially agrees with other studies that indicate the negative relationship between self-efficacy and symptomatology (Gull, 2016, Kröninger & Grevenstein, 2013), although in the present study, only applies to women.

As for coping, other studies have detailed that some strategies such as self-blame or depersonalization are related to mental health problems such as depression. Likewise, gender differences are identified, as the fact that women use active coping, emotional and instrumental support, problem solving, worry and spirituality. In contrast, men turn to substance consumption and ignore the problem (Fantin, Florentino & Correché, 2005, Ito & Matsushima, 2017). The present study is limited in terms of the approach to coping strategies, hence it is necessary to deepen on this topic through the use of instruments to assess this variable.

Likewise, relationships between family factors and symptomatology were found; some are coincident for both sexes, but of greater magnitude in women than in men. For example, it was found that the more domestic violence, conflicts and family disintegration, the higher the increase in mental health problems in both sexes. This coincides with other studies that point to family problems as the main stressor for the presence of mental health problems, detailing a wide range of aspects such as: bad relationships, infidelity, violence, abandonment, abuse and problems with the partner and children, which is perceived both by the users who request attention and by the psychologists

who attend to the first level of care (Ornelas & Ruíz, 2016; Saavedra & Uchofen, 2016).

It is important to highlight that in the case of women, some inverse relationships were also added, which indicate that the less communication, affection and family support they have, the more mental health problems they present. However, these variables were not relevant for the male sex, possibly due to the fact that the female figure is more associated with support and emotional communication (Garcés & Palacio, 2010).

Although family is important for both sexes, it does not manifest in the same way, and not all aspects acquire the same importance for women and men. In the case of women, there is psychological distress when family problems increase and when the positive aspects of family functioning diminish. But in men, this relationship is only established when the problem increases. Possibly, women's mental health is more linked to their family relationships, because the home, the domestic space, has been assigned to women in a historical way, as part of the traditional feminine role. They are identified as procreators, caretakers of others, responsible for the affective role, where the maternal figure acquires primacy as a selfless and sacrificed figure. On the contrary, in men, the recognition of their affections and their emotional expression is denied; in addition, independence is favored and the public is recognized as their development space (Rabell, 2009). Perhaps what has been found in the present study has to do with the denied tenderness and the search for support as a synonym of weakness (Espinosa et al., 2015), meanings instilled in men as part of the patriarchal culture.

Regarding socio-cultural factors, more correlations with psychopathological symptoms were found in men than in women and the associated variables were different for both sexes. In women, gender discrimination was the only socio-cultural variable related to total symptomatology, thus reiterating that inequity, inequality and subordination affect women more. (Ruiz, 2011). In contrast, for men, the perception of poverty, less social relationships and lack of access to health services were related to the presence of psychopathological symptoms, thus showing the relevance of the economic aspect and the public sphere in male mental health. In this regard, the previous literature indicates that the unequal distribution of income and services has an impact on health and on the attention received by the general population, favoring the presence of mental health problems (Medina-Mora, Borges, Lara, Benjet, Blanco, Fleiz, Villatoro, Rojas, & Zambrano, 2005), although the present study shows that these factors of social exclusion are resented by men but not by women.

As a final part of the analysis, the models that allowed integrating the psychological, family and socio-cultural factors with greater predictive value on the psychopathological symptoms were elaborated, showing that these factors follow different ways of influence depending on the sex of the participants. The only variable that coincided in both models was domestic violence, thus showing the impact it has on the mental health of the population. In this regard, literature has emphasized that conjugal violence in women is associated with psychopathology (Vieyra et al., 2009), as well as the psychological malaise and beliefs that accompany the violent acts committed by men (Bolaños, 2014). Specifically, it has been documented that intimate partner violence, expressed through threats and physical abuse, alters mental health, as well as the quality of sleep in both men and women (Lalley et al., 2017). This finding accounts for the fact that domestic violence affects all those involved in the family system.

In the female model, the predictive variables of psychopathological symptoms were domestic violence, lack of confidence in their abilities, problematic thoughts and gender discrimination, which shows that women are affected by these individual and family characteristics, as well as by gender discrimination in their community, but the same does not happen with men. This coincides partially with the proposal by Kucharska (2017), who presents the interrelation between contextual variables and mental health problems, mediated by individual variables.

On the other hand, in the male model, the predictor variables were domestic violence, diminished well-being and poverty. It is important to remember that in this study men showed greater well-being and lower poverty than women, but despite that more favorable condition, these variables acquire such an importance in men that predict global psychopathology. This could be associated with the search for individual satisfaction, the impact of the violence exercised and the relevance of the economic aspect on men, which could coincide with the discomfort associated with the traditional male role (Fleiz, Ito, Medina-Mora & Ramos, 2008).

Consequently, it is considered that these contributions reinforce the argument that psychopathological manifestations need to be understood from theoretical positions that go beyond the individual and the biomedical matters, because the symptoms do not occur in isolation and the factors found for women and men are interwoven in complex interrelations. This shows the need to use psychosocial and ecosystemic models that allow to account for the multiple factors involved in the incipient symptoms that are already present in the open population but that are overlooked by

the common people and health workers on the first contact with users. These symptoms should be detected in a timely manner, without waiting for them to become clinical cases with the complications and costs that this entails.

Likewise, it is important to point out that the results of this study should be considered from the theoretical and methodological limitations of a quantitative, cross-sectional research based on self-reports. Therefore, it is recommended for future work to use representative samples and various comparison groups in terms of the symptomatology (open and clinical population) and urbanization (rural, semi-urban and urban), as well as to deepen the content from the psychosocial perspectives and participatory methodologies.

The broadening of the theoretical and methodological panorama would enrich the basis for the elaboration of mental health promotion programs and for preventing the main symptoms found. This would transcend a psychologizing vision, and therefore, the present results would be understood from a wider perspective that would allow to explore and recognize the social determinants and capacities of the community to generate better conditions associated with health. In this respect, the relevance of ethnographic studies and the proposals generated from the perspective of participatory action research to work on sociocultural aspects is acknowledged (Rodríguez-Mancilla & Boada, 2016).

In this way, the results of this research may be useful to show that in a society with a disorganized modernization, such as ours, which is permeated by violence, gender inequity and economic inequality, psychopathological discomfort is generated both in women and men. Hence, mental health problems are linked to social inequality, which emphasizes gender and economic differences and become the social normativity delineating the development of individuals, who in turn replicate these models in their daily lives, despite the distress they generate to themselves at the same time.

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