# Importancia del diagnóstico de equidad de género en las instituciones de educación superior: un estudio de caso 

# Importance of the diagnosis of gender equity in higher education institutions: a case study 

# Importância do diagnóstico da equidade de gênero em instituições de ensino superior: um estudo de caso 

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#### Abstract

Resumen En México, más de dos millones de estudiantes, durante su trayectoria escolar, escuchan a compañeros o maestros decir que las mujeres no deberían estudiar, esta es una de varias expresiones que impiden propiciar la equidad de género. Ante tal panorama, se ha reconocido que en las instituciones de educación superior (IES) se requieren indicadores ordenados y desagregados que contribuyan a disminuir la desigualdad y exclusión de la población femenina. El objetivo de esta investigación fue realizar un diagnóstico de equidad de género en estudiantes de una IES pública para detectar situaciones de inequidad entre hombres y mujeres. La investigación se realizó en la


Universidad Tecnológica de la Mixteca (UTM), ubicada en el estado de Oaxaca, México, una de las diez entidades más pobladas del país. Se utilizó el Sistema de indicadores para la equidad de género en instituciones de educación superior, generado por el Programa Universitario de Estudios de Género (PUEG) y el Instituto Nacional de las Mujeres (INMUJERES), el cual, además, ha sido sugerido por la Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES), ya que este sistema ofrece la posibilidad de homogeneizar criterios. La población analizada constó de 714 alumnos, $43 \%$ mujeres y $57 \%$ hombres, de tercer, cuarto y último año de las nueve carreras presenciales que ofrece la universidad ya mencionada. Se les aplicó una encuesta de 25 preguntas y sus respuestas fueron analizadas con el empleo de estadística descriptiva. Los resultados muestran que 3.3 \% de los estudiantes hombres tienen un promedio superior a 9.0. Este porcentaje es duplicado por las estudiantes mujeres, es decir, $6.6 \%$ de las alumnas tienen promedios igualmente sobresalientes; y eso a pesar de que un mayor porcentaje de estas tiene a su cargo niños o personas mayores. Además, $55 \%$ de las estudiantes eligió su carrera por vocación y ninguna lo hizo considerando cuestiones de género. También es de destacar que $14 \%$ de las estudiantes defienden sus ideas y respuestas más que los hombres, de entre quienes solo lo hacen $7 \%$. Ochenta y tres por ciento de las alumnas percibe que las profesoras respetan sus opiniones al igual que las de sus compañeros. Por otra parte, los estudiantes hombres son, en algunos casos, más agresivos, ya que $7.5 \%$ de mujeres y $4.6 \%$ de hombres recibieron cartas o mensajes de naturaleza sexual no deseados provenientes de un estudiante, mientras que solamente $1.6 \%$ de mujeres y 1.7 \% de hombres recibieron este tipo de mensajes de una estudiante. No se reportó ningún estudiante que contactara abogados o solicitara asesoría de la institución para enfrentar una situación de inequidad de género.

Se concluye que es sumamente importante la realización de diagnósticos de equidad de género en las IES, porque de no hacerlos, se pueden pasar por alto aspectos importantes que pueden ser detonadores de situaciones de riesgo para las estudiantes.

En la institución analizada no hay problemas de equidad de género. Sin embargo, se sugiere reforzar el mutuo respeto entre estudiantes y crear mecanismos formales de denuncia, y que las autoridades sancionen cualquier situación de desigualdad de género, por mínima que sea.

Palabras clave: equidad, género, mujeres, Oaxaca.


#### Abstract

In Mexico, more than two million students, during his school career, listen to classmates or teachers say that women should not study, which is not conductive to gender equity. That is why it has been recognized that universities require indicators ordered and disaggregated that contribute to decrease the inequality and exclusion of the female population. The objective of this research was to make a diagnosis of gender equity in students of a public university to detect situations of gender inequality. The research was held at the Technological University of the Mixteca, located in the state of Oaxaca, Mexico, one of the ten most populous entities in the country. It was used the Gender Equity Indicators System in Universities, generated by the University Program of Gender Studies and the National Women's Institute, which has been suggested by the National Association of Universities and Institutions of Higher Education (ANUIES), since this system allows to homogenize criteria. The population analyzed was 714 students, $43 \%$ women and $57 \%$ men, from the third, fourth and last year, of the nine careers that offers the university analyzed. A 25 questions survey was applied and their answers were analyzed using descriptive statistics. The results show that $3.3 \%$ of male students have excellent school grades. This percentage is duplicated by female students $(6.6 \%)$ that have equally outstanding school grades, in spite of the fact that they have to take care of children or old people. In addition, $55 \%$ of the female students chose their career by vocation and none did considering gender issues. On the other hand, $14 \%$ of the female students defend their ideas and answers more than men, who only do it by $7 \%$. Eighty three percent of the female students perceive that female teachers respect equally their opinions and those of their male classmates. On the other hand, male students are in some cases more aggressive, since $7.5 \%$ of women and $4.6 \%$ of men received letters or messages of unwanted sexual nature from a male student, while only $1.6 \%$ of women and $1.7 \%$ of men received this kind of message from a female student. No student was reported to contact lawyers or ask for advice from the institution to address a situation of gender inequality.

It is concluded that it is extremely important to carry out gender-equity diagnoses in universities, because if they are not performed, important aspects, triggers of risk situations for students can be overlooked.


In the analyzed university, there are not gender equity problems. However, it is suggested to strengthen the mutual respect between students and to create formal mechanisms for students to express, and the authorities to sanction, any gender inequality, no matter how small.

Keywords: equity, gender, women, Oaxaca.

## Resumo

No México, mais de dois milhões de estudantes, durante sua carreira escolar, ouvem os colegas ou professores dizerem que as mulheres não devem estudar, uma das várias expressões que impedem a eqüidade de gênero. Sob tais condições, tem sido reconhecido que as instituições de ensino superior (IES) escolhidas e indicadores desagregados que ajudam a reduzir a desigualdade ea exclusão da população feminina são necessários. O objetivo desta pesquisa foi fazer um diagnóstico da equidade de gênero em estudantes de uma IES pública para detectar situações de desigualdade entre homens e mulheres. A pesquisa foi conduzida na Universidade Tecnológica da Mixteca (UTM), localizada no estado de Oaxaca, no México, um dos dez estados mais populosos do país. Foi utilizado indicadores do sistema para a equidade de gênero nas instituições de ensino superior, gerado pelo Programa Universidade de Estudos de Gênero (PUEG) e do Instituto Nacional para a Mulher (INMUJERES), que também foi sugerido pelo Associação Nacional de Universidades e Instituições de Ensino Superior (ANUIES), uma vez que este sistema oferece a possibilidade de padronização de critérios. A população do estudo consistiu de 714 estudantes, $43 \%$ do sexo feminino e $57 \%$ do sexo masculino, terceiro, quarto e último ano das carreiras de nove rosto oferecidas pela universidade já mencionado. Uma pesquisa de 25 questões foi aplicada a elas e suas respostas foram analisadas com o uso de estatística descritiva. Os resultados mostram que $3,3 \%$ dos estudantes do sexo masculino têm uma média superior a 9,0 . Esse percentual é dobrado pelas alunas, ou seja, $6,6 \%$ dos alunos têm médias igualmente salientes; e que, apesar do fato de que uma maior porcentagem destes são responsáveis por crianças ou idosos. Além disso, $55 \%$ dos alunos escolheram sua carreira por vocação e nenhum o fez considerando questões de gênero. É também digno de nota que $14 \%$ dos estudantes defendem suas idéias e respostas mais do que os homens, dos quais apenas $7 \%$. Oitenta e três por cento dos alunos percebem que os professores respeitam suas opiniões, assim como as de seus colegas. Por outro lado, os estudantes do sexo masculino são, em alguns casos, mais agressivo, e que 7,5\% das mulheres e 4,6\% dos homens
recebeu indesejada de um estudante cartas ou mensagens de carácter sexual, enquanto apenas 1,6\% das mulheres e $1,7 \%$ dos homens receberam este tipo de mensagens de um aluno. Não foi relatado nenhum estudante que contatou advogados ou pediu orientação da instituição para enfrentar uma situação de desigualdade de gênero.

Concluiu-se que é estudos de diagnóstico extremamente importantes de equidade de género nas instituições de ensino superior, porque você não pode fazê-los perder importantes, como situações de detonadores de risco para aspectos alunos.

Na instituição analisada não há problemas de equidade de gênero. No entanto, sugere-se reforçar o respeito mútuo entre os estudantes e criar mecanismos formais de denúncia, e que as autoridades sancionem qualquer situação de desigualdade de gênero, por mínima que seja.

Palavras-chave: eqüidade, gênero, mulheres, Oaxaca.

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## Introduction

The National Association of Universities and Institutions of Higher Education (ANUIES) has pointed out the importance of higher education institutions (HEIs) making diagnoses "about the condition of equality between men and women" (Ordorika, 2015, p.14) ). When detecting weaknesses, HEIs must implement measures that compensate for existing disadvantages in order for men and women to develop under equal conditions, with the same rules and with the possibility of accessing assets, opportunities, resources and rewards (Canadian International Development Agency [CIDA], 1999, p.25). It has also been recognized that HEIs require ordered and disaggregated indicators that allow the creation of policies and mechanisms that contribute to reducing inequality and the exclusion of the female population (Sánchez and Villagómez, 2012).

When reviewing the literature it is possible to note that in the state of Oaxaca only some diagnoses of gender equity have been made and, among these few, the majority has taken place in HEIs located in the state capital. In this regard, it is necessary to point out that this entity has a
broad territory, in fact, it occupies the fifth place at the national level. It is divided into 570 municipalities, grouped into 8 regions, and its capital, Oaxaca de Juárez, concentrates only $6.9 \%$ of the population of the entity (National Institute of Statistics and Geography [INEGI], 2016). Although there are universities in the Central Valleys that already have the Gender Equality Model certification granted by the National Institute for Women [INMUJERES] (Instituto Tecnológico de Oaxaca [ITO], 2014) or that have integrated a network for the gender equity (Universidad Autónoma Benito Juárez de Oaxaca [UABJO], 2016), it is necessary to make gender equality diagnoses in HEIs in the rest of the state.

The objective of this research was to make a diagnosis of gender equity in the students of the Technological University of the Mixteca (UTM), located in the northwest of the state of Oaxaca. With this diagnosis, it is expected to contribute, on the one hand, to the generation of information on the situation that gender equity holds in HEIs in other regions of the state, and on the other, it is intended to generate information that can be integrated into a basic of data at the state or national level. For this, during the realization of this study, the System of indicators for gender equity in higher education institutions was used, created by the University Program of Gender Studies (PUEG) and INMUJERES (Buquet, Cooper and Rodríguez, 2010 ), which allows to homogenize criteria (Ordorika, 2015, page 14). Finally, it is expected that the results allow the analyzed university to detect any situation of gender inequality that may be presented. In the same way, it is desired to strengthen the study programs and the normative aspects of the institutional scope in favor of equal opportunities for men and women.

The instrument used was a survey integrated by 25 questions that was applied to 714 students ( $43 \%$ women and $57 \%$ men) of third, fourth and last year of the nine face-to-face courses offered by the UTM, whose curricular plans have a duration of five years, divided into ten semesters. The surveys were conducted from November 2 to 15,2017 and the answers were analyzed with the use of descriptive statistics. The questions that guided this research were as follows: Why are gender equality diagnoses important in HEIs? How is gender equity in HEIs in the state of Oaxaca? What methodology is convenient to use to make diagnoses of gender equity? What aspects of gender equity can be improved in the university analyzed?

The results show that $3.3 \%$ of male students have an average higher than 9.0. This percentage is doubled by female students $(6.6 \%)$, despite the fact that a greater percentage of them are dependent on children or elderly people. In addition, $55 \%$ of the students chose their career by

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vocation and none did so considering gender issues. On the other hand, $14 \%$ of students defend their ideas and answers more than men, which only does so at $7 \%$. Eighty-three percent of the students perceive that the teachers respect their opinions and those of their classmates equally. It is noteworthy that male students are, in some cases, more aggressive, since $7.5 \%$ of women and $4.6 \%$ of men reported receiving unwanted letters or messages of a sexual nature from a student, while only $1.6 \%$ of women and $1.7 \%$ of men received this type of messages from a student. No student was reported who contacted lawyers or asked for advice from the institution to face a situation of gender inequality.

It is concluded that it is extremely important to carry out gender equality diagnoses in HEIs, because, otherwise, important aspects can be overlooked: even detonators of risk situations for students. In addition, this type of diagnosis should be the basis for decision making and should guide the creation of the necessary mechanisms to promote gender equity. In the analyzed institution there are no problems of gender equity, however, it is suggested to reinforce mutual respect among students and create formal mechanisms for students to manifest, and the authorities sanction, any situation of gender discrimination, however minimal.

## Gender equity and women in higher education studies in Mexico

Robert Stoller used the concept of gender for the first time in his book Sex and Gender, published in 1968 (Duarte and García-Horta, 2016); and in the decade of the seventies this was used frequently. According to Incháustegui and Ugalde (2004), the concept of gender describes "the articulated set of customs, values, rules, norms and laws, with which societies regulate the formation of subjectivities; the definition of roles, functions and lifestyles allowed and accepted for women and men "(p.16). Stoller, since the late sixties, made it clear that this concept has a socially constructed character, stemming from the notions of masculinity and femininity.

According to the Dictionary of Humanitarian Action and Development Cooperation, directed by Karlos Pérez de Armiño (2006), gender equity is the cultural construction of sexual difference, that is, the fact that different behaviors, activities and functions of women and men are culturally constructed, rather than biologically determined.

In this sense, gender equity is one of the processes to achieve gender equality based on the creation of measures that help balance and compensate for the social and historical disadvantages
that prevent women from developing on equal terms and with same rules of the game (CIDA, 1999).

In Mexico, women were gradually incorporated into the field of higher education. In the Faculty of Medicine of the Royal Pontifical University of Mexico, for example, for more than 250 years they had no record of female students; It was not until the second half of the 19th century that there were some who graduated from the area of health sciences (Edda and Samudio, 2016). However, in the mid-twentieth century the panorama was completely transformed: a growing presence of women in higher education began (Zubieta and Marrero, 2005). For 1997, the university students of this institution, continuing the example, already constituted $46 \%$ of the total student population (Zubieta and Marrero, 2005, p.17).

The above data show that in Mexico women have been given the opportunity to study higher education and it is important to point out that their participation in studies linked to science and technology should be sought. Despite these evident advances, some researchers acknowledge that higher education is still influenced by gender stereotypes, which sometimes adopt veiled forms of rejection towards men or women, which are difficult to identify and confront, although they are often decisively influence the expectations and trajectories of the student body (Vázquez and Elston, 2006).

For this reason, efforts should be made to make changes in institutional practices and in social relations, since, as established in the report of the Organization for Economic Cooperation and Development [OECD] (2012), the equity of Gender means giving importance to aspects such as: 1) gender equality, social norms and public policies, 2) education, 3) employment and 4) entrepreneurship. In relation to education, women should not be limited in their participation in some areas of knowledge, namely administration, education, health and social welfare, but should be given the opportunity to choose between the wide spectrum of possibilities, according to their will, including, of course, those related to science and technology.

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## The importance of the diagnosis of gender equity in HEIs

Universities are spaces to which men and women come to acquire training in various fields of knowledge. To achieve this objective optimally, HEIs must address pedagogical, academic and administrative aspects. In addition, they must evaluate the relationships between men and women, in order to ensure that this process is developed in an equitable environment that gives the same opportunities to each of them.

In Mexico, according to the National Survey of Values in Youth, in 2012 there were 7.1 million young people between 12 and 29 years old who were neither working nor studying. The largest proportion of these young people ( $25.8 \%$ ) lived in the southern and southeastern states of the country (Campeche, Chiapas, Guerrero, Oaxaca, Quintana Roo, Tabasco, Veracruz and Yucatan) (Mexican Institute of Youth [IMJUVE], 2013) . Among these young people, in addition, $85.0 \%$ were women. This shows the percentage of young women in Mexico who are studying higher education to prepare in a certain area.

When asked if gender equity is a problem overcome in universities and if it is possible to describe this type of organization as a space free of stereotypes, several researchers have concluded that HEIs are just another space in which the customs, values, beliefs and attitudes that can be found in other scientific, cultural, artistic and coexistence areas that exist in any society (López, Viana-Orta and Sánchez-Sánchez, 2016, Fernández, Hernández and Rodríguez, 2014). Therefore, it can be foreseen that, if among the members of a society there are discriminatory situations towards women, these attitudes would also be present in the universities.

There is no doubt that the offer of educational services with gender equity should be sought. And to ensure that this goal is met, it is very important to conduct gender equality diagnoses in HEIs. The ANUIES has addressed this issue through the Regional Networks of Gender Studies. Among its actions, the creation and continuous activity of the National Network of Institutions of Higher Education (RENIES) stands out, called Caminos para la Equidad de Género, which in 2009 highlighted the importance of carrying out statistics and diagnoses with a gender perspective, in order to create an information system that concentrates and allows to disseminate the results of the condition that keeps equality between men and women in each institution (Ordorika, 2015, p.14).

Chan, García and Zapata (2013, p.141) have also pointed out the importance of carrying out gender equality diagnoses in order to accurately indicate the situation of exclusion that might
be presented in HEIs, in order to optimally place the resources and prevent the generation of new types of exclusion.

On the other hand, Sánchez and Villagómez (2012, p.14) have pointed out that a way to start with the analysis of the condition of women in HEIs is by making a diagnosis of the situation of women and men and analyzing how the situation develops. educational process.

The methodology used to make a diagnosis of gender equity must allow the detection, first of all, of the imbalances that may be present, and thus, be able to visualize and accompany the changes in the gender order of HEIs (Vázquez and Elston, 2006, pp. 14-15). It is worth mentioning that there are multiple methods and instruments that have been used to evaluate gender equity. An example is the Gender Equity Index (GEI), which was created in 2007 by Social Watch to make gender inequalities more visible and monitor their evolution in different countries of the world (Social Watch [SW], 2012, paragraph 1). However, although these indicators are useful for carrying out the evaluation by countries and regions, including aspects of education and empowerment, they are not an appropriate instrument to measure the different aspects that contribute to gender equity within HEIs. . Two other examples are those presented by Ramírez (2017), who analyzes, as a first method, the Ranking of Gender Equity in Aereal Organizations, which has as axes of work: a) the organizational structure, b) the organizational culture, c ) talent management and d) goal management. This methodology aims to generate awareness and implement good inclusion practices. The second method presented by Ramírez (2017) is the Gender Equity Model, developed by the World Bank, whose axes of work include the analysis of the following aspects: a) the selection and hiring of personnel, b) career development , c) familywork balance, d) the prevention of sexual harassment and e) the promotion of non-sexist public images. With this method, it is intended to carry out a diagnosis that allows, subsequently, the implementation of good practices to guarantee the same opportunities and success in the labor market for both men and women. As can be seen, these methodologies allow an evaluation of gender equity in different organizations, but they have not been designed to be applied in HEIs, because they do not consider specifically the relationship of the students with their peers, with the administrative staff and with the teaching staff.

On the other hand, the methodology proposed by López, Viana-Orta and Sánchez-Sánchez (2016) to recover the perceptions of the students of the University of Valencia with respect to gender equality and violence, has a mixed approach that uses a questionnaire -scale designed ad

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hoc for this university. One aspect in favor of this methodology is that the results of the questionnaires are complemented with the results obtained from discussion groups, which always allow to deepen the analysis of the central issues. However, this methodology, although it is appropriate to know the perception of the figure of the university teaching staff, which is key to achieving equality between men and women, leaves aside the role of the administrative staff with whom the students also have a constant role. interaction, even though it is clearly not as important as that of the teaching staff. Coupled with this, this instrument is not suitable for this investigation either, because here it is intended to investigate not only the aspect of gender equality, but also gender violence.

It is also important to bear in mind that, although it seems simple, this type of situations are not always perceived easily, since they tend to be presented indirectly, imperceptibly or with neutrality, which is why they are sometimes not recognized. less can be prevented or sanctioned (López, Viana-Orta and Sánchez-Sánchez, 2016). Therefore, when carrying out a diagnosis of gender equity in HEIs, it is necessary to cover aspects that may arise as a result of the interaction between students, as well as the relationship between these, the administrative staff and the teachers.

It is equally important to bear in mind that the interactions of students are influenced by the type of relationship they have previously established in their family environment, which may have even determined a certain attitude of contempt or preference towards men or women. In this sense, the results of various investigations are exemplary in which it has been highlighted that some aspects, such as the choice of career, are the result of the construction of the identity of the university students, which is shaped by the environment or the academic climate in which students develop, as well as the incentivized behaviors in the classroom from an early age (Erwin and Stewart, 1997). In other words, the identity is integrated with the participation of the different actors that are in the student's environment, for example: teachers, classmates and family members (Carrasco and Sánchez, 2016, p.137). This is evident in the research of Kleanthous and Williams (2013), who proved that there is a great paternal influence in the choice of certain courses in the girls who are about to enter university.

Thus, the results of this type of diagnosis allow us to detect whether the relationships between women and men in an HEI contribute to perpetuate a certain gender order that, in turn, can condition the existence of relations of domination or subordination. Based on the results, as
already mentioned, rules, policies and strategies can be developed aimed at mitigating institutional inequalities (Vázquez and Elston, 2006, p.14).

In short, carrying out gender equality diagnoses allows the detection of areas of opportunity and promotes equity between women and men; Their presence is also important, since they are aimed at taking care of students at a higher level, one of the key educational stages for the economic and social development of any region.

Undoubtedly, providing higher education with gender equity allows for an increase in the percentage of women who graduate from HEIs and who join the labor force. This was reflected in the fact that in 2000 the Economically Active Population (EAP) was composed of $31 \%$ of women, while by 2017, women already represented $40 \%$ of this indicator (Undersecretariat of Employment and Labor Productivity, 2017 , p.8)

Also, according to data from the Ministry of Public Education (SEP), in the 2015-2016 school year a total of 71,443 students were enrolled, of which $97 \%$ were studying at the undergraduate level, while $3 \%$ were I was doing studies at the graduate level. Of this total of students, $51.2 \%$ were women and $48.8 \%$ were men; $77.5 \%$ were enrolled in public universities (Sosa, 2017). Hence the importance of making gender equality diagnoses and continuously assess the inequalities between women and men in this type of institutions, as well as take the necessary measures to achieve their eradication, if still present.

## Method

## Design of the investigation

This research is of a quantitative type and exploratory descriptive scope, according to Hernández, Fernández and Baptista (2014).

The first part of the research was focused on reviewing the literature related to the importance of gender equity studies in HEIs, in order to find an appropriate methodology to make a gender equity diagnosis in a specific public university .

In this regard, in a study to analyze aspects of gender equity, carried out by researchers from 17 universities belonging to the Network of Gender Studies (REGEN) of the ANUIES (SouthSoutheast Region), Sánchez and Villagómez (2012) acknowledge that it does There is a lack of
indicators ordered and disaggregated by gender that contribute to reducing the gaps of inequality and exclusion of the female population in higher education institutions.

In addition, they suggest that indicators to carry out a gender equity diagnosis must meet three requirements: a) represent the main social dimensions in which gender inequalities are expressed, b) be common to all entities and c) reflect the current situation (Sánchez and Villagómez, 2012).

To carry out this diagnosis, the methodology proposed by Buquet, Cooper and Rodríguez (2010), researchers from the National Autonomous University of Mexico (UNAM) in coordination with INMUJERES was chosen, since both RENIES and ANUIES have suggested using this methodology. system, known as the System of indicators for gender equity in higher education institutions, generated by the PUEG and INMUJERES, as already mentioned above, in order to standardize criteria (Ordorika, 2015). The goal of having homogeneous indicators is a fundamental aspect that has been recognized by various researchers, including Chan, García and Zapata (2013, p.141), who established a research project between higher education institutions in the European Union and in Latin America, whose main results included the homogenization of the data sources of the participating HEIs, in order to make possible in the long term the integration of proposals to improve social inclusion and gender equity.

## Selection of the object of study and its relevance

The study was carried out in the UTM, located in the Mixtec region of Oaxaca. This university was selected because it is located in one of the ten most populated entities in the country; It has four million inhabitants, where for every 105 women there are 100 men (INEGI, 2015). In addition, Oaxaca also stands out because $31.6 \%$ of homes have elderly people, one of the highest proportions at a national level, which sometimes represents for the young women of this entity, who are studying at a higher level, a task more to the who should contribute (Moreno, 2017). Another relevant factor to analyze an educational institution located in the state of Oaxaca is that since 2013, both in this state and in Campeche, Chiapas, Guerrero, Quintana Roo, Tabasco, Veracruz and Yucatan, $25.8 \%$ of its youth between 12 and 29 they neither studied nor worked (IMJUVE, 2013, p.9). In addition, the Gender-related Development Index (GDI) highlights that women in Oaxaca have an asymmetric treatment that restricts their freedoms and the exercise of their rights, since, for example, the literacy rate is $75.88 \%$ for women and $86.97 \%$ for men, while
the enrollment rate (from primary to bachelor's degree) is $68.53 \%$ for women and $71.81 \%$ for men (INEGI, 2008, p.10).

On the other hand, the state of Oaxaca is immersed in a very particular cultural context to analyze gender equity, an aspect linked to culture -understanding the latter as a pattern of historically transmitted meanings, generated by man, which takes account systems of shared practices and inherited conceptions, expressed in a symbolic way, through which man develops his knowledge and attitudes towards life (Geertz, 1987). For example, 73\% of the municipalities of Oaxaca are governed by the system of uses and customs and among the customs of women is to follow the precepts of the Catholic religion, so that girls grow accustomed to participate in the festivities developing support roles, not leadership, and also have the habit of obeying their parents, who in most cases make decisions regarding the activities that daughters should perform, and even in some populations it is still the parents who decide with whom their daughters are to marry (Espinosa, Bartolo and Maceda, 2012).

An interesting aspect of the IES that was considered in this research is its educational model, in which both students, teachers and administrative staff carry out their activities in the institution on a full-time basis, which implies that there is a continuous interaction between its various actors.

The selected research instrument, on the other hand, was applied to the student population that was in the third, fourth and final year of the nine face-to-face courses offered by the IES analyzed. This group of students was chosen because, by having a stay of at least two years in the institution, they can make a more accurate assessment about the aspects that are evaluated in the research instrument.

The next stage was the review of the answers obtained from the application of the surveys. Subsequently, the results were discussed to conclude with some general recommendations regarding the methodology used, the importance of making gender equality diagnoses and some actions that could be implemented in this institution to ensure that the results obtained are maintained, if they are adequate. or improve, if necessary.

## Characteristics of the sample

The questionnaire was applied to 714 students in the third, fourth and final year of the nine face-to-face courses offered by the institution analyzed at the undergraduate level, where all the courses have a duration of five years. It should be noted that a sample was not taken, but the survey was applied to all students of the aforementioned years. The student population analyzed was composed of $43 \%$ women and $57 \%$ men.

## Process

The application of the surveys was carried out from November 2 to 15, 2017. Subsequently, data was processed using descriptive statistics to determine the values of various indicators on gender equity in the group of students analyzed. Finally, the main results were extracted to translate them into this document and subsequently the conclusions and recommendations for the implementation of some actions that could contribute to improve the values obtained in said student population were drawn up.

## Research instrument

As previously specified, the instrument used was the System of indicators for gender equity in higher education institutions, which was composed of 23 multiple-choice questions formulated to gather information related to the following aspects: general data, career, if the students have a scholarship, if in addition to studying they work, if they have children, what factors have affected the completion of their studies due to the need to take responsibility for children or other relatives, reasons to study the career, evaluation of their perception of to discrimination and exclusion due to gender issues, frequency with which they heard or witnessed discriminatory or offensive behaviors by teachers or peers, assessment of the origin of various harassment situations to determine if they were caused by peers, teachers or management personnel; the actions taken in a poster ior before the experience of any of these situations.

## Results

The instrument was applied to 714 students, of whom $43 \%$ were women and $57 \%$ were men, that is, the proportion of men was greater than that of women.

In relation to the allocation of scholarships, $75.3 \%$ of women and $67.6 \%$ of men have some support of this type. This shows that the proportion of women who have this benefit is greater, compared to that of men.

On the other hand, $10 \%$ of women and $20.2 \%$ of men work, that is, approximately twice as many men work compared to women. In this regard, $47 \%$ of working women declared that this activity makes their studies difficult, while only $41 \%$ of men who work perceive an impact in their studies due to this cause.

Among the respondents, only $2.0 \%$ of women and $2.4 \%$ of men have children. In addition, $16 \%$ of women and $14.6 \%$ of men have someone under their care. Regarding their academic performance, $7 \%$ of women and $3.4 \%$ of men have an average greater or equal to 9.0.

They were also asked about the main reason that led them to choose the career they are currently pursuing. More than half of the men and women indicated that they chose their career by vocation. Of the total, $20 \%$ chose their career because of the job opportunities offered; third, they indicated that it was because it was their second option (in the case of women, the percentage that chose this response is greater than that of men). It is important to note that no student indicated the option of choosing the race because it is appropriate for their sex.

When asked if they had been excluded from any activity, prize or scholarship due to gender issues, only $2 \%$ of women and $2 \%$ of men answered affirmatively. Only $7 \%$ of women said that they consider that frequently or very often students defend their ideas and answers more than students, that is, most women do not consider men to defend their ideas and answers more than women. On the other hand, $14 \%$ of men indicated the same in relation to this behavior.

They were also asked about a series of behaviors in the classroom or institution that could have been observed by teachers, students and teachers and they were asked to rate each of them using the five-point Likert scale, where one corresponds to "Never" and five to "Very frequently". Table 1 shows the percentages, disaggregated by sex, of the students who pointed out that teachers and professors never or rarely make disparaging comments about men or women. As can be seen,
they are all greater than $75 \%$, which indicates that a significant percentage of the student population perceives that teachers do not make disparaging comments for reasons of sex.

Tabla 1. Porcentaje de encuestados que señalaron que el personal académico de la institución nunca o rara vez realiza comentarios que denigran a los hombres o a las mujeres

| Comportamiento | Nunca o rara vez |  |
| :--- | :---: | :---: |
|  | Mujeres | Hombres |
| Comentarios denigrantes de profesores sobre las mujeres | $75.7 \%$ | $77.8 \%$ |
| Comentarios denigrantes de profesores sobre los hombres | $89.7 \%$ | $75.3 \%$ |
| Comentarios denigrantes de profesoras sobre las mujeres | $90.4 \%$ | $92.9 \%$ |
| Comentarios denigrantes de profesoras sobre los hombres | $91.7 \%$ | $88.5 \%$ |

Fuente: Elaboración propia

Table 2, on the other hand, shows the percentages of students who reported having observed frequently or very frequently that the teachers take seriously the responses and suggestions of the students in the same measure as those of the students.

Tabla 2. Porcentaje de encuestados que indicaron que frecuentemente o muy frecuentemente el personal académico de la institución toma en serio las respuestas de las alumnas en igual medida que las de los alumnos

| Comportamiento | Frecuentemente o muy <br> frecuentemente |  |
| :--- | :---: | :---: |
|  | Mujeres | Hombres |
| Los profesores toman con la misma seriedad las respuestas <br> de las alumnas que las de los alumnos | $79.7 \%$ | $84.9 \%$ |
| Las profesoras toman con la misma seriedad las respuestas <br> de las alumnas que las de los alumnos | $83.4 \%$ | $82.7 \%$ |

Fuente: Elaboración propia

According to the data in Table 2, the percentage of students who reported having observed frequently or very frequently that teachers take with the same seriousness the answers of the students that of the students, compared with the same behavior on the part of The teachers, that is, among the students, have a greater perception that the teachers take the answers of their students with equal seriousness, regardless of their gender. In the case of the students, this perception is the opposite: more students consider that the teachers take with the same seriousness the answers of the students regardless of their gender, compared with those who consider that this behavior is given by the students. teachers

On the other hand, when analyzing uncomfortable situations that students have experienced, $21 \%$ of women and $15 \%$ of men reported having seen posters, calendars, computer screens or other images of a sexual nature that bothered them and pointed out that these behaviors were caused by a male student, while only $1.6 \%$ of women and $1.7 \%$ of men reported having experienced such a situation on the part of a student.

Likewise, $38 \%$ of women and $42.9 \%$ of men reported receiving compliments or unwanted comments about their appearance from a male partner, while $40 \%$ of men and $9.1 \%$ of women reported having experienced this on the other hand. of a female companion.

In the same area, $34 \%$ of women and $30.3 \%$ of men reported that they perceived morbid glances or suggestive gestures by a student, which was annoying. In contrast, $10.9 \%$ of men and only $3.2 \%$ of women reported having gone through this situation performed by a woman.

Regarding teasing, jokes, comments or uncomfortable questions about their sex or love life, $31.7 \%$ of women and $38.9 \%$ of men reported having received them from a student, while the percentages corresponding to situations of this type by part of women are lower: $14.5 \%$ of women and $8.0 \%$ of men answered this. The previous answer is interesting because it shows that a considerable percentage of women are bothered by the same women by embarrassing questions about their sex or love life.

On the pressure to accept invitations to meetings or unwanted appointments outside the school, $6.5 \%$ of women and $6.4 \%$ of men reported having experienced them mentioning that they were provoked by a student. The cases in which this type of situations were caused by female students was only $2.2 \%$.

Added to this, $7 \%$ of women and $4.6 \%$ of men indicated that they received unwanted letters, phone calls or messages of a sexual nature from a student, while only $1.6 \%$ of women and $1.7 \%$ of men reported having experienced the same on the part of a student.

Regarding friction or unwanted physical contact, $9.7 \%$ of women and $8.0 \%$ of men declared that they have experienced this type of situation on the part of a student, while only $5.1 \%$ of men said the same about a student. Only one woman indicated that she had experienced this on the part of another student.

On the other hand, the students were asked to indicate if they had done something about it in case they had experienced a situation that they perceived as gender inequity. If we divide them by gender, $79 \%$ of the women and $58 \%$ of the men involved in some situation of this type indicated that they had taken some measure. Specifically, $56 \%$ of women and $39 \%$ of men told a friend, while $0.5 \%$ of women and $4 \%$ of men asked for advice from a teacher. On the contrary, $31 \%$ of women and $42 \%$ of men refrained from taking any action in this regard. There were no men or women who hired a lawyer or asked for advice in the university in this situation.

Finally, of the women who answered that they had not taken action in a situation of gender inequality, $68.8 \%$ said that it was because they did not give importance, while $14.1 \%$ indicated that they did not know what to do. In the case of men, $74 \%$ did not give importance and $5.2 \%$ mentioned that they did not know what to do.

## Discussion

As can be seen, although the participation of women who are studying at a higher level at the national level has been increasing, the university analyzed found that the proportion of women is $14 \%$ lower than that of men who are studying. of education at a higher level, which means that, although the presence of women is important, it is still necessary to take measures so that it is greater or equal to that of men.

The results of the field research confirm that many women decide to pursue higher education studies despite their parents having told them that they do not need to. One way to discourage such actions is not providing them with financial support to carry out their studies, since, at the family level, it is not considered a priority to dedicate part of the budget to support the daughters in order to carry out their studies. Fortunately, the institution analyzed has tuition
scholarships and the percentage of women receiving this support is $7.7 \%$ higher than that of male students. This confirms that, if women want to study, they can do it: in the analyzed institution there is equity in terms of the granting of opportunities and scholarships. However, women always have the alternative of only engaging in domestic activities without being criticized or sanctioned in the family environment.

The results also show that the students enrolled in the institution analyzed are conducting their studies by their own conviction and that gender was not a reason when choosing their career. In addition, their performance is greater than that of men, since, as could be seen in the results, the percentage of women with an average higher than 9.0 was almost double that of men.

On the other hand, the women indicated that they have not felt discrimination on the basis of gender at the moment of carrying out any activity or receiving any prize or scholarship.

In addition, when it comes to expressing and defending their ideas freely in class, women defend their ideas more than men, according to the same results.

The students mentioned that the teachers are respectful both with the students and with the students, although the students indicated that the teachers are more respectful than the teachers.

With regard to uncomfortable situations due to gender issues, there were only reports of these caused by the comrades themselves; it was not detected that the academic or administrative staff was involved. For the most part, situations were provoked by men against women, although in some cases it was found that the women themselves are the ones who embarrass others with embarrassing comments about their sexual or love life. In the situations of discomfort referred to above, most of the students limited themselves to commenting with a friend or decided not to take action in this regard. In some cases the students had no idea what they could do.

Although the results obtained show that there are no serious situations of inequity due to gender issues, it is suggested that in the institution analyzed, mechanisms be created so that students can manifest any situation of this type they face, in order that corresponding authorities take appropriate measures.

These results confirm the importance of carrying out gender equity studies, since they contribute to creating an information system that concentrates and disseminates the results of each institution. An important strength of the present investigation is that to carry out this diagnosis, the System of indicators for gender equity in higher education institutions was used, which has been suggested by RENIES and ANUIES. The results obtained give a very detailed description of the
gender equity among the students, due to the careful design of the research instrument used. These results may be compared with those obtained in other institutions applying the same suggested instrument.

One limitation of this research is that among the results of this diagnosis only the prevailing situation regarding gender equity in relation to students was described, however, it is considered convenient to carry out a second stage that complements these results with those extracted. of the teaching and administrative staff. This will allow having a comprehensive vision of gender equality in the institution.

Undoubtedly, this research is important, since it contributes to the area of gender studies, enriching the current understanding of this in HEIs in the state of Oaxaca, an entity characterized by a high educational gap. Women who enter one of the HEIs of the state and are interested in acquiring new knowledge must have an environment that favors them. The results of this research make it clear that in the south of Mexico there are HEIs in operation in which women are having an increasing participation, they can choose their career freely and venture into careers related to the exact sciences, they have an environment where they predominate respect for both teachers and peers; all of which is favoring that students are able to express their ideas, defend their opinions and achieve a training that allows them to take high-level positions.

## Conclusions

In this research it can be concluded that it is extremely important to carry out gender equality diagnoses in HEIs, because they allow to know in a clear way the situation of the interactions between students, professors and administrative staff, having as a guiding axis the questions of gender. This is important, since in order to get the students to perform adequately, there must be respect between them and towards them, regardless of their gender, by the other actors who interact in the same educational space. In case any undesirable situation is detected in relation to gender equity, actions must be taken to correct it.

The methodology used in this research was very important, since it allowed to know the main aspects about gender equity in an HEI by applying a survey that was simple to answer by the students, and that was later analyzed in an equally practical way.

The women of the IES analyzed have a great interest in carrying out higher education studies, even if they do not have the support of a scholarship, and they have shown as good academic performance as men.

In the theoretical approaches, it is pointed out that gender equity does not only depend on the HEI analyzed, but also on the social environment in which the students develop. That is, the perception of gender equity is significantly influenced by the family and cultural background of the students, in which it is still considered, in some cases, that the role of provider of the family belongs to the man, while The woman must limit herself to the financial resources provided by her parents or her partner. In contrast to these approaches, it is interesting to note that none of the students surveyed indicated that they had chosen the race because they considered it appropriate for their gender.

It is also important to underline that $98 \%$ of men and women did not feel gender discrimination because they participated in an activity, apply for scholarships or compete for a prize. In addition, the students considered that teachers, men and women, are respectful with students in gender issues, although teachers are perceived as such by more than $90 \%$ of students, while teachers are more than $75 \%$.

In that sense, no harassment was reported by teachers or administrative staff. Regarding the unwanted compliments or compliments on the appearance, it is important to note that the percentage of men was greater, compared to that of women, who reported having gone through this situation in charge of a man, by a difference of $5.3 \%$. This reflects the fact that men have a marked tendency to interact with each other in this way.

In order for the analyzed institution to continue promoting gender equality in the student population, it is suggested to create formal mechanisms for students to manifest any situation of gender inequality that they face, even when it is propitiated by their peers. It is also important that talks be held on a continuous basis with gender equality as a central theme, so that students become aware of the importance of respect among the members of the student community.

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