# Factores determinantes que hacen que los niños y niñas abandonen la escuela en la educación secundaria de Oaxaca 

Determining factors that make children drop out of secondary school in Oaxaca

Fatores determinantes que fazem meninos e meninas abandonarem a escola secundária em Oaxaca

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## Resumen

Desde la década de 1990 las disparidades de género se han revertido en favor de las niñas, pues se ha detectado, desde 2003, que son ellas el grupo con más deserción escolar. Por eso, en este artículo se presenta la culminación de un estudio cualitativo etnográfico realizado en la ciudad de Oaxaca, México, durante enero y febrero de 2017. En nuestra investigación, basada en Berg y Lune (2012), se ha procurado encontrar los factores determinantes que hacen que los niños(as) abandonen la escuela secundaria. Para ello, se empleó un enfoque inclusivo mediante la aplicación de un instrumento basado en la entrevista semiestructurada. Este estudio se aplicó a alumnos de alto rendimiento y a estudiantes en riesgo de abandonar la escuela secundaria, así como a los que ya lo hicieron y a sus padres. El objetivo fue comprender cómo estos elementos influyen en la decisión de un alumno(a) de abandonar sus estudios. Los resultados obtenidos proporcionan evidencia sobre la participación escolar, el abandono y la deserción escolar, en donde se obtuvieron factores influyentes como las prácticas en el aula, la dinámica familiar, las creencias culturales, las razones económicas, entre otras.

Palabras clave: abandono escolar, educación, desigualdad educativa, factores de deserción secundaria.


#### Abstract

However, In the 1990s years, the gender disparities have been reversed in favour of girls, due it has been detected since 2003 that they are the group with the highest school dropouts. This article presents the culmination of a qualitative ethnographic study which took place in the city of Oaxaca, Mexico, during January and February 2017. Our research seeks to find the determining factors that cause children to drop out of secondary school. Some factors could be such as family, school and social context influence the dropout phenomenon. An inclusive approach was also used to analyze the most significant number of determining elements through the application of an instrument based on the semi-structured interview; this study was applied to high-achieving students and students at risk of dropping out of secondary school, also those who their parents already did. Our goal is to understand how these elements influence a student's decision to abandon their studies. The results obtained provide evidence


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on school participation, dropout, and dropout, where influential factors were obtained such as classroom practices, family dynamics, cultural beliefs, economic reasons, among others.

Keywords: School dropout, education, educational inequality, secondary dropout factors.

## Resumo

Desde a década de 1990, as disparidades de gênero foram revertidas em favor das meninas, uma vez que se detectou, desde 2003, que elas são o grupo com maior evasão escolar. Por isso, este artigo apresenta o culminar de um estudo etnográfico qualitativo realizado na cidade de Oaxaca, México, durante os meses de janeiro e fevereiro de 2017. Em nossa pesquisa, baseada em Berg e Lune (2012), procuramos encontrar os fatores determinantes que levam as crianças a abandonar o ensino médio. Para tanto, utilizou-se uma abordagem inclusiva por meio da aplicação de um instrumento baseado na entrevista semiestruturada. Este estudo foi aplicado a alunos com alto desempenho e em risco de evasão do ensino médio, bem como aos que já o fizeram e seus pais. O objetivo foi compreender como esses elementos influenciam a decisão do aluno de abandonar os estudos. Os resultados obtidos fornecem evidências sobre a participação escolar, evasão e evasão, onde foram obtidos fatores influentes como práticas de sala de aula, dinâmica familiar, crenças culturais, motivos econômicos, entre outros.

Palavras-chave: evasão escolar, educação, desigualdade educacional, fatores de evasão secundária.

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## Introduction

This research has arisen from the following question: what are the factors that influence educational inequities? In order to try to find an answer to this question, in principle various works have been reviewed, such as those by Rumberger (2003), O’Toole and Due (2014) and Bautista and Briseño (2014). These authors have focused on investigating the causes why some students graduated from high school, and others did not. To do this, they took into account variables such as sex, race, locality, socioeconomic status and school behavior - characteristics that are also analyzed by other researchers (Lee and Burkam, 2003) -, as well as demographic aspects, social situation of the father, skills and attitudes (Le and

Miller, 2004). One of the main differences between graduates and undergraduates was that the latter came from families with low socioeconomic levels and formed minority groups.

Therefore, the objective of this work was to determine how certain variables (family, school, geography and public policies) can affect gender participation in secondary education in the city of Oaxaca, Mexico. The questions asked were the following:

- What are the factors that affect the level of participation of students in high school?
- Why do children drop out of high school?
- What are the factors that contribute to school dropout in secondary education?

As highlighted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) (2003), gender parity is not common in developing countries. In the case of Mexico, for example, it has not been possible to control or establish equitable education. In fact, in the state of Oaxaca, more women than men tend to find themselves in areas of extreme poverty, hence this study has focused on that locality, a place of cultural, ethnic and sociodemographic convergence of the cities Isthmus, Sierra, Costa de Oaxaca.

According to the National Institute for the Evaluation of Education in Mexico (INEE, 2018), based on the Intercensal Survey 2015, INEGI (2015) and on the Measurement of poverty at the municipality level 2015, (CONEVAL, 2017) in In the state of Oaxaca, the 15-year-old population only has an average of 7.5 degrees of schooling, which is equivalent to just over the first year of secondary school at the national level, figures that allow this entity to be placed in the penultimate national place in terms of schooling (figure 1).

Figura 1. Grados promedio de escolaridad por entidad federativa (2015)


Fuente: INEGI. Encuesta Intercensal 2015.
Fuente: Inegi (2015)
In fact, more specifically it can be indicated that in Oaxaca, out of every 100 people aged 15 years or over, 11.8 do not have any level of schooling, 58.6 have completed basic education, 16.1 have completed upper secondary education, 11.6 have completed education superior and exists 1.9 unspecified. In this regard, it is worth noting that in Mexico basic education begins with primary ( 6 years) and secondary ( 3 years).

In this context, it should be noted that a study carried out by Inegi in 2014 found that the number of primary schools distributed is greater than the number of secondary schools (figure 2 ).

Figura 2. Distribución de escuelas por nivel educativo nacional en México

## Distribución de escuelas por nivel educativo



Fuente: Inegi (2015)
On the other hand, figure 3 shows the number of students by educational level.

Figura 3. Distribución de alumnos por nivel educativo nacional en México


Fuente: Inegi (2015)
However, inequality in gender participation is very latent in disadvantaged regions such as the state of Oaxaca, compared to the more developed regions of the country. Patterns:

- As a general pattern, the older the age group, the lower the presence of men in the population. ISSN 2007-7467
- The number of boys and girls of one age to attend secondary education is balanced in both areas (figure 4).
- Oaxaca has fewer males of one age to attend upper secondary education compared to the Mexico City area, where the number of males and females in that age group is the same.
- Figures suggest that there were the same number of girls and boys of secondary school age; however, there are fewer men who could attend upper secondary and higher education in Oaxaca.


## Essential observations

Based on the research sources reviewed, the following observations are presented.

- Participation in secondary education is high and more equitable in other cities, with slightly higher participation by girls.
- The gender gap is much larger in disadvantaged regions (such as Oaxaca) for attendance at secondary, upper secondary and higher education compared to metropolitan areas.
- Oaxaca has a lower level of participation that begins to be evident in secondary education, the low rates of attendance of women accentuate the level of education, and that of the region is poorer than that of men.

Figura 2. Alumnos por sexo en Oaxaca, México

## Promedio de escolaridad de la población de 15 años y más hablante de lengua indígena por sexo



Fuente: INEGI. Encuesta Intercensal 2015
Fuente: Inegi (2015)

## Definition of the problem

Those with limited financial resources have fewer opportunities to enter or continue education. In this regard, Doll, Eslami and Walters (2013) indicate that for the poor the dilemma is between whether to go to school or go to work to earn a daily living, although it is worth noting that education can offer a different future for the child (a), as well as an alternative to address the problems of education in Mexico.

In this sense, it should be noted that according to the Ministry of Public Education (SEP), the failure rate of primary education decreased in the country during the last government. In fact, according to a report of the indicators of the General Directorate of Educational Planning, Programming and Statistics of the SEP, school drop-out in primary education in the 2014-2015, 2015-2016 and 2016-2017 school cycles was $0.6 \%, 0.3 \%$ and $0.3 \%$, respectively, and school failure was $2.2 \%, 1.6 \%$ and $1.4 \%$, respectively. In secondary education, on the other hand, school dropout was located at $2.0 \%, 1.9 \%$ and $1.9 \%$, respectively, while failure was $4.0 \%$ in the three school cycles (Table 1). For its part, Oaxaca
had the highest failure rates for primary education, followed by Guerrero and Chiapas (three of them top the list of the most disadvantaged states in Mexico).

Tabla 1. Indicadores de la educación secundaria en México

| Educación secundaria | Ciclos escolares |  |  |
| :--- | :---: | :---: | :---: |
|  | $2014-$ | $2015-$ | $2016-$ |
|  | 2015 | 2016 | 2017 |
| Absorción | 96.4 | 96.6 | 96.6 |
| Abandono escolar | 2.0 | 1.9 | 1.9 |
| Reprobación | 4.0 | 4.0 | 4.0 |
| Eficiencia terminal | 94.3 | 93.4 | 93.9 |
| Tasa de terminación | 94.4 | 94.8 | 95.6 |
| Cobertura (12 a 14 años) | 98.1 | 98.5 | 98.7 |
| Tasa neta de escolarización (12 a 14 años) | 85.7 | 85.9 | 86.2 |

Fuente: Secretaría de Educación Pública; informe de la estadística del sistema educativo mexicano para el ciclo escolar 2015-2016

## Method

The educational data presented above reveal that in Oaxaca the actual enrollment figures for girls and boys are lower than expected. This suggests that there are barriers that prevent "normal" participation and that, therefore, influence their dropping out of their studies. Having pointed this out, it can be indicated that this is a qualitative ethnographic type of research (Berg and Lune, 2012; Lee and Burkam, 2003; Ransford and Butler, 1982).

The study began with the review and analysis of secondary data on international educational reports, as well as on demographic and educational figures in Mexico in order to identify predominant patterns of school dropout, school dropout, and educational participation. The research conducts a traditional qualitative study to discover if the findings coincide with the original numerical interpretation (Gorard and Taylor, 2004).

The application of a semi-structured data collection instrument provided information on the selected variables related to educational participation; These will help explain the lack of participation of boys and girls in secondary school.

As an interpretation tool, the qualitative analysis software PSPP was used. It has a graphical interface and multiple analysis tools that, in this case, were written in the C programming language.

The study was carried out in the city of Oaxaca and rural communities with less than 2,500 inhabitants (for example, Abejones, Asunción Tlacolulita, Concepción Buenavista, Cosoltepec among others) and in Juchitán de Zaragoza (113, 570 inhabitants), located on the Isthmus of Tehuantepec, a disadvantaged area of the state of Oaxaca. The main differences between the two regions are in their economic activities, since in the first they are based on tourism, trade and services, while in the second they are based on agriculture, livestock, fishing and trade.

The study covers the three types of secondary schools that exist in Mexico. Specifically, in the city of Oaxaca and Juchitán, surveys were applied in 16 secondary schools in order to have a significant and representative sample. No more secondary schools were included because those chosen are those in the least favored locality. In all cases, the directors showed interest in the project (particularly in the disadvantaged area).

## The variables examined in the study

The variables that were explored were the family, the school, the individual, the geographical context and the influence of public policies, although it is worth noting that an unexpected factor arose: the union strike of teachers in Oaxaca during the years 2014, 2015 and 2016.

## Study subjects

Of the 16 secondary schools, each sampled were 20 high-achieving students, 20 students at risk of dropping out, 10 off-campus students (who were asked about their individual and contextual dynamic characteristics) and 10 parents. In total, a representative sample of 960 participants was obtained. Getting participants in both areas was not a problem. Parents were contacted through direct visits to their homes.

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## Results

The participants were organized by zone. From the information collected, it was obtained that 32 students abandoned their studies in a disadvantaged location and 14 in the favored location during the 2016-2017 academic period. The reasons for this decision vary according to the area (favored or disadvantaged) to which the students belonged, although in general it can be indicated that the most common reasons were related to finding a job (mainly men), followed by marriage (in the case of women), low grades (for both men and women) and behavior problems (for men).

Now, in a concrete way, it can be indicated that in students from the favored area the marriage factor occupies the first place, while in the disadvantaged one the factor finding a job predominates (figure 5).

Figura 5. Comparación de los ambientes en las zonas de interés


Fuente: Elaboración propia
Other findings arising from the interviews show details and division in the variables raised at the beginning of this work. Even so, it should be mentioned that these factors also contribute to school dropouts.
a) Family factors

- Family factors (such as family composition and educational and occupational history) are related to student achievement in school.
- Most of the children whose parents completed the secondary level were in school.
- Parents in the favored area had high expectations of their children because they wanted them to have opportunities that they did not have.
b) School factors
- There is an open door policy in the social worker's office at both schools.
- Parents come and go to school all the time.
- Suspensions in schools tend to be applied to students when they misbehave. They are not allowed to return to class until at least one parent or other adult comes to speak with the social worker, teacher, or school principal, as the case may be.
- Most of the students with behavior problems in class from both schools mentioned having serious problems with the teachers.
- The teacher strike and the delay in starting the 2017-2018 academic program created a general sense of discontent among parents and students.
c) Geographic context
- The use of mobile phones is very popular.
- Large parties are commonly organized in the underprivileged area.
- In the deprived area, it is common practice to consume alcohol for both men and women.
- The disadvantaged locality experiences a very marked cultural practice: bride kidnapping, which precedes marriage.
d) Public politics
- The Oportunidades program was a common topic of concern; several of the students and parents commented on the misuse of monetary aid by government representatives.


## Discussion

In this work it has been observed that poverty impacts on school dropout levels, as pointed out by Peláez (2017). This data served as sustenance to formulate the following question: does poverty make a difference? According to Doll, Eslami and Walters (2013), those who lack economic resources have less opportunity to enter or continue education. To this must be added some particular variables of Oaxaca, because - as Bautista and Briseño (2014) point out - this town occupies the last places in terms of well-being conditions, which
is evidenced in the lack of school infrastructure (buildings, furniture , blackboards, audiovisual equipment, technological equipment).

Another factor is the gender gap, which is more accentuated in disadvantaged regions such as Oaxaca, where attendance at secondary, upper secondary and higher education is lower compared to metropolitan areas. This lower level of participation begins to become evident in secondary education, where the low attendance rates of women are more latent.

Likewise, the impoverishment of the population is another reason that affects participation in secondary education (Bautista and Briseño, 2014). However, it is worth noting that currently $32 \%$ of the student population in the disadvantaged area receives monetary and health assistance through anti-poverty programs and scholarships, while only $11 \%$ of the students in the favored area obtain this type of support.

Even so, it can be affirmed that one of the main reasons why the child leaves school is the lack of resources, hence he must look for a job. Likewise, marriage influences this decision, which - as Unesco (2002) indicates - is due to cultural beliefs. In this sense, it should be noted that in Oaxaca there is a very marked inequality against women, since customs force women to form a family when they are still a teenager, which causes them to be marginalized for many activities. Therefore, work should be done to promote a more equitable and inclusive society (Organization for Economic Cooperation and Development [OECD], 2007; Stromquist, 2001).

Ultimately, our study is consistent with that indicated by Fuentes and Montes (2003) and Bautista and Briseño (2014), since in the state of Oaxaca, habits and customs hinder the achievement of equal opportunities for women.

## Conclusions

The present study served to detect critical indicators that establish new guidelines for the analysis of the real findings of the field work. No determinant or barrier works alone in the process of school dropout by students. There are different factors that can be exerted by different influences, depending on how the determinants combine. After the analysis of the results of the field work, it is expected to present a predictive model for the attention of different leaders in the area of education in Mexico, such as the federal government, the government of Oaxaca, the Ministry of Public Education, the Union of Teachers and civil
society. The objective will be to work on future and urgent proposals to reduce low performance, the phenomenon of desertion, improvement in full participation and the completion of compulsory education as a minimum.

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## References

Bautista, E. y Briseño, M. L. (2014). El derecho a la educación ante la desigualdad y la pobreza: el caso de Oaxaca, México. El Cotidiano, (183), 83-90. Recuperado de https://www.redalyc.org/articulo.oa?id=325/32529943011
Berg, B. L. and Lune, H. (2012). Qualitative research methods for the social sciences (8 ${ }^{\text {th }}$ ed.). Boston: Pearson.
CONEVAL. Consejo Nacional de Evaluación de la Política de Desarrollo Social (2017). Pobreza a nivel municipio 2010 y 2015 (anexo estadístico). Recuperado el 20 de junio de 2019, de: https://www.coneval.org.

Doll, J. J., Eslami, Z. and Walters, L. (2013). Understanding Why Students Drop Out of High School, According to Their Own Reports. SAGE Open, 3(4). Doi: https://doi.org/10.1177/2158244013503834

Fuentes, R. and A. Montes, A. (2003). Country case study towards the Millenium Development goals at the Subnational, Level: Mexico. Human Development Report Office, Occasional Paper, United Nations Development Programme, UNDP.

Gorard, S. and Taylor, C. (2004). Combining methods in educational and social research. McGraw-Hill Education (UK).

INEE (2018). La educación obligatoria en México. Informe 2018. México: autor. Recuperado de: https://www.inee.edu.mx/wp-content/uploads/2018/12/P1I243.pdf

Instituto Nacional de Estadística y Geografía [Inegi] (2007). Porcentaje de la población de 16 a 24 años que asiste a la escuela por entidad federativa según grupos de edad y

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sexo (2000 y 2005). Recuperado de https://www.inee.edu.mx/wp-content/uploads/2019/03/CS01-ab-2006.pdf

INEGI. Instituto Nacional de Estadística y Geografía (2015). Encuesta Intercensal (base de microdatos).Recuperado de: https://www.inegi.org.mx/programas/intercensal/2015/

Le, A. T. and Miller, P. W. (2004). School-leaving Decisions in Australia: A Cohort Analysis. Education Economics, 12(1), 39-65. Doi: https://doi.org/10.1080/0964529042000193943

Lee, V. E. and Burkam, D. T. (2003). Dropping Out of High School: The Role of School Organization and Structure. American Educational Research Journal, 40(2), 353393. Doi: https://doi.org/10.3102/00028312040002353

O’Toole, N. and Due, C. (2014). School engagement for academically at-risk students: a participatory research project. The Australian Educational Researcher, 42(1), 1-17. Doi: https://doi.org/10.1007/s13384-014-0145-0

Organización para la Cooperación y el Desarrollo Económicos [OECD] (2007). Getting it Right OECD Perspectives on Policy Challenges in Mexico. Retrieved from https://www.oecd.org/economy/38136757.pdf
Peláez, Ó. (2017). La marginación a lo largo del tiempo: cálculo del Índice de Marginación Absoluta (IMA) para las entidades federativas de México, 1970-2010. Economía: Teoría y Práctica, (46), 115-137.

Ransford, H. and Butler, G. (1982). Teaching Research Methods in the Social Sciences. Teaching Sociology, 9(3), 291-312. Retrieved from http://www.jstor.org/stable/1317355

Rumberger, R. (2003). The early employment and further education experiences of high school dropouts: a comparative study of the United States and Australia. Economics of Education Review, 22(4), 353-366. Doi: https://doi.org/10.1016/S0272-7757(02)00038-9

Stromquist, N. (2001). What Poverty Does to Girls' Education: The intersection of class, gender and policy in Latin America. Compare: A Journal of Comparative and International Education, 31(1), 39-56. Doi: https://doi.org/10.1080/03057920020030153

Unesco (2002). Education for All. Is the world on track. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000129053

Unesco (2003). Gender and Education for All. The leap to equality. Retrieved from https://en.unesco.org/gem-report/report/2003/gender-and-education-all-leapequality

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