

Social Support and Parental Perception in Smoking and Non-smoking Adolescents

Apoyo social y percepción de los padres en adolescentes fumadores y no fumadores

Everardo Villar Aguirre,* Jehú Arturo Tamayo Calderón*

Summary

Objective: to evaluate the association between functional social support and perception of one's relationship with one's parents in smoking and non-smoking adolescents. **Methods:** Analytical cross-sectional study conducted at the Family Medicine Unit (FMU) no. 64 of the Mexican Institute of Social Security (IMSS) from March to May of 2018; there were 250 adolescent participants ranging from thirteen to seventeen years of age, they answered the Argentina scale of perception of their relationship with their parents and a questionnaire of functional social support from Duke-UNC. A descriptive statistical analysis was carried out, with frequency and related variables calculated by means of χ^2 . **Results:** the relationship between function social support and being a smoker or non-smoker was reported to have a χ^2 of 0.733 with a $p=0.392$; the association of the perception of one's relationship with one's father or mother related to being a smoker or non-smoker registered a χ^2 of 2.147 y 3.129 respectively, with a value of $p >0.05$ for both cases. **Conclusions:** there is not a statistically significant relationship between functional social support and the perception of one's relationship with their parents as related to smoking in the evaluated adolescents.

Keywords: Social Support, Perception, Smoking, Adolescents

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*Unidad de Medicina Familiar no. 64. Instituto Mexicano del Seguro Social.

Correspondence:
Everardo Villar Aguirre
ever29liran@hotmail.com

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Resumen

Objetivo: evaluar la asociación entre el apoyo social funcional y la percepción de la relación con sus padres en adolescentes fumadores y no fumadores. **Métodos:** estudio transversal analítico realizado en la Unidad de Medicina Familiar (UMF) no. 64 del Instituto Mexicano del Seguro Social (IMSS) de marzo a mayo de 2018; participaron 250 adolescentes de trece a diecisiete años de edad, contestaron la escala argentina de percepción de la relación con los padres y el cuestionario de apoyo social funcional Duke-UNC. Se realizó estadística descriptiva, cálculo de frecuencias y relación de variables mediante χ^2 . **Resultados:** la relación entre apoyo social funcional y ser o no fumador reportó una χ^2 de 0.733 con una $p=0.392$; la asociación percepción de la relación con el padre o la madre con ser o no fumador registró una χ^2 de 2.147 y 3.129 respectivamente, con un valor de $p>0.05$ para ambos casos. **Conclusiones:** no existe una relación estadísticamente significativa entre el apoyo social funcional y la percepción de la relación con sus padres con el tabaquismo en los adolescentes evaluados.

Palabras claves: apoyo social, percepción, tabaquismo, adolescentes

Introduction

Smoking is a health problem; diverse cardiovascular and respiratory illnesses are associated with the consumption of cigarettes.¹ It is estimated that 22% of adolescents above the age of fifteen are habitual smokers and smoking is calculated to begin at thirteen years of age.²

Worldwide, up to 40% of adolescents are said to have consumed tobacco at least once.³ It is reported that smoking on a weekly basis represents a higher risk

of developing a permanent smoking habit (OR of 1.83).⁴ In Mexico, up to 38% of adolescents have consumed tobacco at least once, and it is estimated that 11.5% will continue to do so until they are adults;⁵ in Mexico City, these figures are more worrying as close to half of adolescents were shown to have smoked cigarettes and it is estimated that 41.8% of said population will continue with this habit.⁶

During adolescence identity crises are experienced that can make one predisposed to tobacco consumption, so family involvement is important⁷. Proper family function can regulate the crises experienced by adolescents;⁸ for this reason, it is fundamental to study the perception that they have about the other members of their family and to determine their relationship to tobacco use⁹. It is known that if parents and adolescents perceive each other in a negative way, there is more probability that the latter will engage in high-risk addictive behaviors, smoking being among them. Reports exist that show a negative association between perception and family support with frequency in tobacco consumption;¹⁰ other authors have concluded that when adolescents perceive their parents to be not understanding of them, a considerable risk exists for smoking (OR of 2.39). For this reason it is necessary to study distinct variables involved and their association with the development of smoking habits.¹¹

On the other hand, social support, contemplated as the support webs outside the adolescent's family nucleus, are able to function as compensators in the face of a variety of social stressors; if these compensators are absent there can be health repercussions, for example, the development of addictions.¹² Some authors

minimize support webs outside of the family and insist that parents are the main social circle who provides said support needed to avoid risky behavior.¹³ There are publications that conclude that there could be a positive relationship between social support and quitting smoking;¹⁴ in the same way, other sources determine that social support permits a better adaptive answer to stopping a smoking habit.¹⁵

With the previous facts in mind, the objective of the current study was to evaluate the association between functional social support and the perception of the relationship with parents in smoking and non-smoking adolescents.

Methods

Analytical cross-sectional study carried out at the FMU no. 64 in the State of Mexico, from March 1st to May 31st, 2018. Adolescents were selected between thirteen and sixteen years of age who attended to the mentioned fmU. The calculation formula was used of a sample size of two proportions; the sample size obtained was of 250 participants, to assure a confidence level of 95% it was adjusted for losses to 10%. The calculated group of adolescents who were smokers was of 150; to prevent absence of response bias or losses it was done with 131. A non-probability sampling by convenience was done.

It was carried out with authorization of the Clinical Coordination of Education and Investigation of Health of the fmU 64 and of the committee of local ethics. The criteria of eligibility to participate in the study were: to be between thirteen and sixteen years of age, to be right-holders of the FMU 64 and to have the to have the consent and assent read and signed from both parents and adolescents. The criteria of exclusion

were: being illiterate, coming from a disintegrated or separated family, suffering from a chronic-degenerative illness, being in therapy for quitting smoking, having some psychiatric illness or consuming any drug other than tobacco.

Previous to the collection of data, five test surveys were conducted for quality control, error correction and standardization of procedures. Participants were surveyed in the waiting area during morning and afternoon shifts; sociodemographic data was collected (gender, age, education level, being or not being a smoker) and they took both the Duke-UNC (alfa of Cronbach of 0.90) questionnaire about functional social support and the argentina scale of perception of the relationship one has with their parents (alfa of Cronbach of 0.73).

The statistical analysis was undertaken with Excel 2016 and the program

SPSS v.25; for the sociodemographic data, a descriptive statistic was applied with a calculation of frequency, percentage and measurements of central tendency. The association of independent variables (social support and the perception of one's relationship with their parents) with dependent variables (being or not being a smoker) was carried out with the test χ^2 with a significance level of 5% ($p < 0.05$).

Results

Among 250 participants there were no losses or withdrawals of informed consent. The median age was 15.23 years old and the age groups with a greater number of participants were seventeen and thirteen years old. The sample was composed of 119 subjects of male gender and 131 participants of female gender. As for education level, 128 adolescents had finished high school. The

prevalence of tobacco use was 52.4%, see table 1. The results were separated into two groups; smokers and non-smokers.

Upon relating functional social support with being or not being a smoker, the χ^2 obtained result was of 0.733 with a $p=0.392$.

Upon associating the variable of the perception of one's relationship with their father with being a smoker or non-smoker, a value of χ^2 of 2.147 was registered with a $p=0.342$. When linking the perception of one's relationship with one's mother with being or not being a smoker, a value of χ^2 of 3.129 was obtained with a value of $p=0.209$, see table 3.

Upon determining the level of functional social support in the 131 smoking adolescents, 107 showed high-functioning social support and 24 showed low-functioning social support. Of the 119 non-smoking subjects in the study, 92 of them showed high-functio-

Table 1. Socio demographic data of adolescent population

Age	Group					
	Smokers		Non-smokers		Total	
	F	%	F	%	F	%
13	14	5.6	38	15.2	52	20.8
14	14	5.6	17	6.8	31	12.4
15	29	11.6	19	7.6	48	19.2
16	32	12.8	13	5.2	45	18
17	42	16.8	32	12.8	74	29.6
Total	131	52.4	119	47.6	250	100
Gender						
Male	69	27.6	50	20	119	47.6
Female	62	24.8	69	27.6	131	52.4
Total	131	52.4	119	47.6	250	100
EducationLevel						
Elementary	6	2.4	9	3.6	15	6
Middle School	47	18.8	60	24	107	42.8
High School	78	31.2	50	20	128	51.2
Total	131	52.4	119	47.6	250	100

F= Frequency, %=Percentage

Table 2. Functional social support in adolescent population

Social Support						
Group	High-functioning Social Support		Low-functioning Social Support		Total	
	F	%	F	%	F	%
Smokers	107	42.8	24	9.6	131	52.4
Non-smokers	92	36.8	27	10.8	119	47.6
Total	199	79.6	51	20.4	250	100

$\chi^2 = 0.733$ with $p = 0.392$

F= Frequency, %=Percentage

Table 3. Perception of one's relationship with one's parents in adolescents

Perception								
Father								
Group	Acceptance		Pathological Control		Extreme Autonomy		Total	
	F	%	F	%	F	%	F	%
Smokers	38	15.2	85	34.0	8	3.2	131	52.4
Non-smokers	43	17.2	72	28.8	4	1.6	119	47.6
Total	81	32.4	157	62.8	12	4.8	250	100
Mother								
Smokers	38	15.20	88	34.0	5	2.00	131	52.40
Non Smokers	46	18.40	67	26.8	6	2.40	119	47.60
Total	84	33.6	155	62	11	4.4	250	100

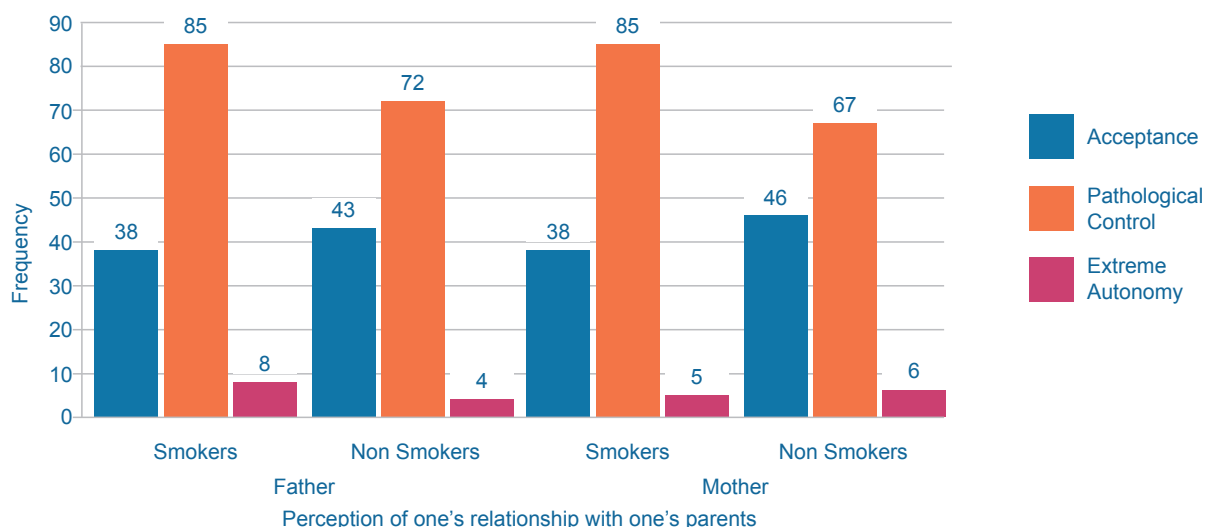
Father: $\chi^2 = 2.147$, $p = 0.342$. Mother: $\chi^2 = 3.129$, $p = 0.209$

F= Frequency, %=Percentage

ning social support and 27 reported low-functioning social support.

In respect to the perception of one's relationship with one's father, of the 131 smoking adolescents, 38 participants referred to perceiving their father with acceptance, 85 identified with pathological control and 8 with extreme autonomy; as for the group of non-smokers, of the 119 adolescents belonging to this group, 43 participants referred to perceiving their father with acceptance, 72 identified with pathological control and 4 with extreme autonomy. In the case of the perception of one's relationship with one's mother, in the smoking group, 38 adolescents mentioned perceiving their mother with acceptance, 88 identified with pathological control and 5, with extreme autonomy; as for the group of non-smokers, 46 participants referred to perceiving their mother with acceptance, 67 identified with pathological control and 6, with extreme autonomy, see figure 1.

Figure 1. Perception of one's relationship with one's parents in adolescents



Discussion

The participants' predominant factors of age and gender were seventeen years of age and female gender, respectively; in the group of smokers, the predominate factors were of seventeen years of age and male gender. Adolescents of male gender were more disposed to being smokers in comparison with women; this is distinct from the result reported by Cabrera et al.,³ and Silva et al.,¹⁶ but similar to what was mentioned by Nazarzadeh et al.¹⁷ This could be due to sociocultural factors related to the places where the research was carried out.

The level of functional social support for both groups was high. Upon relating functional social support with being or not being a smoker, the value p indicated that an association did not exist. That an adolescent is or is not a smoker is a situation that presents itself independently from the level of functional social support that he or she perceives in their surroundings.

The perception of one's relationship with both parents in both groups was pathological control, followed by acceptance, and, in last place, extreme autonomy. Upon relating the perception of one's relationship with one's father with being or not being a smoker, the value of χ^2 established that no association existed. In the same way, upon analyzing the perception of one's relationship with one's mother with being or not being a smoker an insignificant value of χ^2 was obtained, indicating no association. It was shown that an adolescent being or not being a smoker likewise does not depend on their perception of their relationship with their parents; Trujillo Guerrero et al.,¹⁸ mention that said variables tend to not have a significant association, although their study was undertaken particularly related

to alcohol consumption; nevertheless, Kim et al.,¹⁹ established that pathological control by the parents is associated with a lower probability of smoking, a situation contrary to what was reported in the current study.

It is recognized that a limitation of this study was the type of sample, which could generate bias at the moment of collecting information and carrying out broader statistical inferences.

Conclusions

For the adolescents who were analyzed from the fmU no. 64, functional social support and the perception of their relationship with their parents did not influence their decision to begin a smoking habit; thus it is important to inquire about other social and family-related determining factors that could be involved in this phenomenon.

References

1. Ministerio de Salud Pública de Uruguay. Guía nacional para el abordaje del tabaquismo en el primer nivel de atención. Guía de abordaje del tabaquismo. Uruguay. PRONACCAN 2013.
2. González MT, Espada JP, Orgilés M. Estado de ánimo y consumo de tabaco en una muestra de adolescentes españoles. *RevLatinoamPsicol.* 47(2):86-92. [Internet]. 2015 [Cited 2017 Jun 09]. Available in: <http://linkinghub.elsevier.com/retrieve/pii/S0120053415000035>
3. Cabrera Mateos JL, Báez Álvarez A, Gutiérrez Riquelme F, Toledo Perdomo I MLM. Prevalencia y características del consumo de tabaco en adolescentes de Lanzarote. *Semergen.* 2005;31(7):307-13.
4. Adams J, Parkinson L, SansonFisher RW, Walsh RA. Enhancing self-report of adolescent smoking: The effects of bogus pipeline and anonymity. *AddictBehav.* 2008;33(10):1291-6.
5. Blázquezmorales MSL, Pavónleón P, Gogea-cocheatrejo MC, Sustaeta PB. Consumo de alcohol y tabaco en adolescentes de secundaria del estado de Veracruz. *RevMedUV.* 2012;1(228):25-31.
6. Calleja N. Susceptibilidad al consumo de tabaco y comportamiento tabáquico en las adolescentes. *UnivPsychol.* 2012;11(4):1227-34.
7. Aguirre Á. Psicología de la adolescencia. España. PhD Proposal; 2015.
8. Con S, Vida LA, En DEF, Bachilleres A. Family functioning, conflicts with parents and family life

satisfaction in adolescents high-school students. *Acta ColombPsicol.* 2012;15(1):77-85.

9. Casais Molina D, Flores Galaz M, Domínguez Espinosa A. Percepción de prácticas de crianza: análisis confirmatorio de una escala para adolescentes. *Acta Investig Psicológica.* 7(2): 2717-26. [Internet]. 2017 [Cited 2017 Jun 09]. Available in: <http://linkinghub.elsevier.com/retrieve/pii/S2007471917300315>
10. MoleroJurado MM, PérezFuentes MC, GázquezLinares JJ BMA. Análisis y perfiles del consumo de drogas en adolescentes: percepción del apoyo familiar y valoración de consecuencias. *Aten Fam.* 2017;24(2):56-61.
11. ZanderNeves C, Devicari Bueno C, Pires Felden G, Costa Irigaray M, Rivadeneira MF, OenningNSX, et al. Tobacco use in Brazilian school adolescents: association with mental health and family context. *GacSanit.* 32(3):216-22. [Internet]. 2018 [Cited 2017 Jun 09]. Available in: <http://dx.doi.org/10.1016/j.gaceta.2017.07.003>
12. Morales FM, Cerezo MT, Fernández FJ, Infante L, Trianes MV. Eficacia de una intervención para incrementar apoyo social en adolescentes discapacitados motores a partir del voluntariado de estudiantes de educación secundaria. *RevLatinoamPsicol.* 41(1):141-50. [Internet]. 2009 [Cited 2017 Jun 09]. Available in: <http://www.redalyc.org/articulo.oa?id=80511492011>
13. Cumsille P, Martínez ML. Efecto del estrés y el apoyo social sobre el bienestar psicosocial de los adolescentes: revisión de la literatura. *Psykhé.* 1994;3(2):115-23.
14. Stanton CA, Green SL, Fries EA. Diet-specific Social Support among Rural Adolescents. *J NutrEducBehav.* 2007;39(4):214-8.
15. Webb Hooper M, Baker EA, McNutt MD. Associations between coping, affect, and social support among low-income African American smokers. *AddictBehav.* 38(11): 2736-40 [Internet]. 2013 [Cited 2017 Jun 09]. Available in: <http://dx.doi.org/10.1016/j.addbeh.2013.07.005>
16. Silva Junior VF da S, Bispo LD, Valença Neto P da F, Casotti CA. Prevalencia, percepción y factores asociados a la experiencia de tabaco entre adolescentes escolares. *RevEnfermUFPE.* 2014;8(12): 4188-95.
17. Nazarzadeh M, Bidel Z, Ayubi E, Bahrami A, Jafari F, Mohammadpoorasl A, et al. Smoking status in Iranian male adolescents: A cross-sectional study and a meta-analysis. *AddictBehav* [online]. 2013 [Cited 09 junio 2017];38(6):2214-8. Available in: <http://dx.doi.org/10.1016/j.addbeh.2013.01.018>
18. TrujilloGuerrero TJ, VázquezCruz E, CórdovaSoriano JA. Percepción de la funcionalidad familiar y el consumo de alcohol en adolescentes. *Atención Fam.* 20;23(3):100-3 [Internet]. 2016 [cited 2017 Jun 09]. Available in: <http://linkinghub.elsevier.com/retrieve/pii/S140588711630133X>
19. Kim HHS, Chun JS. Analyzing Multilevel Factors Underlying Adolescent Smoking Behaviors: The Roles of Friendship Network, Family Relations, and School Environment. *JSchHealth.* 2018;88(6):434-43.