

# THE RELATIONSHIP BETWEEN PEERS' SUICIDAL BEHAVIOR, FAMILY SUPPORT, FAMILY VIOLENCE, DEPRESSION, AND SUICIDE IDEATION IN SCHOOL-AGE ADOLESCENTS

Emily Davis and Noah Williams, Institute of Space Science, University of Tunis, Tunisia

### Abstract

The goal of this study was to determine a model of relationship in order to predict school-age adolescents suicide ideation. A model based on peers' suicidal behavior, father and mother's support, family violence and depression was proposed. A sample of 912 subjects was used. The results through *path analysis* suggest that teenagers with depression symptoms prefer relating with friends who show suicidal behavior.

Keywords: peers; family; depression; suicide ideation

#### Introduction

In Latin America, the adolescent suicide rate varies from one country to another and the figures fluctuate from 2.5 to 9.3 cases per 100,000 inhabitants (González, 2007; Toro, Paniagua, González, & Montoya, 2009; Ventura-Juncá et al., 2010). Likewise, the contingent of young people who report suicidal ideas in this region can range between 16 and 62% (Espinoza-Gómez et al., 2010; Florenzano et al., 2011; Gascón, 2005; Ventura-Juncá et al., 2010; Vera & Díaz, 2012). There is no doubt that these statistics show a public health



problem, in particular, because suicide is among the three main causes of death during adolescence worldwide (World Health Organization [WHO], 2014). On the other hand, in the majority of research, suicidal behavior-or also called suicidal spectrum—is an escalation of stages that varies from less to greater severity (Maris, 2002). This escalation begins with suicidal ideation, continues with the manifestation of suicidal threats, plans and attempts and, finally, concludes with complete or completed suicide (Viñas, Jané, & Domènech, 2000). Although less frequent, other researchers propose that this process is not always sequential and that presenting any of the suicidal behaviors does not necessarily imply the manifestation of others (De Wilde, Kienhorst, & Diekstra, 1996; González, Ramos, Caballero, & Wagner, 2003). In any case, What does seem to be better established is that suicidal ideation is about those cognitions that range from sporadic ideas that life is not worth living to chronic and sustained thoughts of self-annihilation (Goldney, Winefield, Tiggemann, Winefield, & Smith, 1989). And, furthermore, it is a risk factor for both attempted suicide and completed suicide; It is even the most frequent component of the suicidal spectrum and its risk is amplified when it is chronic (Miranda de la Torre, Cubillas, Román, & Valdez, 2009).

Likewise, empirical research shows that in adolescence several individual and environmental factors occur that increase or reduce the possibility of suicidal ideation, some of them are depression, domestic violence, family support and the peer group with suicidal behavior. (Espinoza-Gómez et al., 2010; Evans, Hawton, & Rodham, 2004; Gascón, 2005; Miranda de la Torre et al., 2009; Sánchez-Sosa, Villareal-González, Musitu, & Martínez, 2010; Srdanovic-Maras, Duric, Markovic, & Biro, 2011; Toro et al., 2009). Regarding depression, in the Latin American case, there is a substantial number of works



that indicate a strong relationship between this disorder and suicidal ideation in adolescents (e.g., Barroilhet et al., 2012; González et al., 2003; Miranda de la Torre et al., 2009; Toro et al., 2009). In Venezuela, for example, Gascón (2005) reports that suicidal ideation among school-aged adolescents is influenced by sex, social stratum, anxiety and depression. However, in most of these studies it is not sufficiently established whether the effect of depression on suicidal thinking is direct or indirect. Perhaps the research that offers the most solid evidence in this regard is that of Sánchez-Sosa et al. (2010) with adolescents from Mexico. Their results suggest that depression is a variable that has direct effects on suicidal thinking and, in the same way, acts as a mediator in the relationship between family functioning, school integration problems, school victimization and the dependent variable suicidal ideation. . Gascón (2005) reports that suicidal ideation among school-aged adolescents is influenced by sex, social stratum, anxiety and depression. However, in most of these studies it is not sufficiently established whether the effect of depression on suicidal thinking is direct or indirect. Perhaps the research that offers the most solid evidence in this regard is that of Sánchez-Sosa et al. (2010) with adolescents from Mexico. Their results suggest that depression is a variable that has direct effects on suicidal thinking and, in the same way, acts as a mediator in the relationship between family functioning, school integration problems, school victimization and the dependent variable suicidal ideation. . Gascón (2005) reports that suicidal ideation among school-aged adolescents is influenced by sex, social stratum, anxiety and depression. However, in most of these studies it is not sufficiently established whether the effect of depression on suicidal thinking is direct or indirect. Perhaps the research that offers the most solid evidence in this regard is that of Sánchez-Sosa et al. (2010) with adolescents



from Mexico. Their results suggest that depression is a variable that has direct effects on suicidal thinking and, in the same way, acts as a mediator in the relationship between family functioning, school integration problems, school victimization and the dependent variable suicidal ideation. . In most of these studies, it is not sufficiently established whether the effect of depression on suicidal thinking is direct or indirect. Perhaps the research that offers the most solid evidence in this regard is that of Sánchez-Sosa et al. (2010) with adolescents from Mexico. Their results suggest that depression is a variable that has direct effects on suicidal thinking and, in the same way, acts as a mediator in the relationship between family functioning, school integration problems, school victimization and the dependent variable suicidal ideation. . In most of these studies, it is not sufficiently established whether the effect of depression on suicidal thinking is direct or indirect. Perhaps the research that offers the most solid evidence in this regard is that of Sánchez-Sosa et al. (2010) with adolescents from Mexico. Their results suggest that depression is a variable that has direct effects on suicidal thinking and, in the same way, acts as a mediator in the relationship between family functioning, school integration problems, school victimization and the dependent variable suicidal ideation. (2010) with adolescents from Mexico. Their results suggest that depression is a variable that has direct effects on suicidal thinking and, in the same way, acts as a mediator in the relationship between family functioning, school integration problems, school victimization and the dependent variable suicidal ideation. (2010) with adolescents from Mexico. Their results suggest that depression is a variable that has direct effects on suicidal thinking and, in the same way, acts as a mediator in the relationship between family functioning, school integration problems, school victimization and the dependent variable suicidal ideation. .



Regarding the contextual or environmental variables, the type of parenting practices is associated with the occurrence of adolescent suicidal ideation. In Latin America, for example, Salvo and Melipillán (2008), through a multiple linear regression analysis, find that cohesion and parental support contribute to explaining the variability of suicidality and, specifically, are factors that prevent suicidal ideation in young Chileans. Also in Chile, Florenzano et al. (2011), based on a logistic regression analysis, determine that a good relationship between father and mother, appropriate parenting styles, and conventional relationships between parents and children prevent suicidal thinking in adolescents. In Mexico, González et al. (2003), examining a sample of adolescents, detect that the affection and communication of parents with their children are variables that reduce the risk of depression and suicidal ideation, particularly in men who report a good relationship with their parents. Likewise, Sánchez-Sosa et al. (2010) tested a relationship model to explain suicidal ideation among adolescents in that same country, and one of their main findings indicates that the effect of family functioning on suicidal thinking is indirect and mediated by depression.

For their part, regarding conflict and family violence, González et al. (2003) document as correlates of suicidal ideation in Mexican adolescents the child's problems with both parents and their arguments economic over problems. Espinoza-Gómez and her research team (2010) report on the strong association between suicidal ideation and the perception of domestic violence in all its manifestations, that is, psychological, physical and sexual violence. Also in Mexico, Sarmiento and Aguilar (2011) found positive correlations between fights between parents and children and their suicidal thoughts. Furthermore,



conflict with the mother is one of the predictive variables that enters the model obtained through multiple linear regression analysis. Besides,

Now, it should be noted that research in Latin America has not looked into the way friends who exhibit suicidal behavior act in the adolescent's own suicidality, but there are reasons to advocate that the peer group can play a significant role in suicidality. Of the youngs. Perhaps the contribution of Sánchez, Guzmán and Cáceres (2005) constitutes one of the few systematic studies in the region that evaluates the impact of peers on adolescent suicidal ideation. Their findings suggest that adolescents with a depressive diagnosis tend to imitate the suicidal behaviors of their friends.

With reference to other contributions outside of Latin America, Cerel, Roberts and Nilsen (2005), analyzing a representative sample of 5852 adolescents, observe that those young people exposed to friends with suicidal behaviors are more likely to experience suicidal ideation and attempts and, in addition, suicidal behavior. antisocial (e.g., alcohol, drug use, and aggression). Evans et al. (2004) confirm that several studies reach similar conclusions, that is, there is a significant association between having friends who manifest suicidal behaviors and suicidal thinking itself. Specifically, it is the suicide attempt of peers, and not the completed suicide, that is the variable that has an effect on the suicidal ideation of young people. By contrast, Feigelman and Gorman (2008) determined that the suicide of a friend is associated with adolescent suicidal thoughts and attempts, and also with greater depression during the first year of death. Similarly, Gould et al. (2004) maintain that adolescents who report the loss of a friend to suicide generally present a short-term deterioration in their mental health (e.g., depression) and the incidence of completed suicide increases; although this study does not detail whether this death also affects the



adolescent's suicidal cognitions. They present a short-term deterioration in their mental health (e.g., depression) and the incidence of completed suicide increases; although this study does not detail whether this death also affects the adolescent's suicidal cognitions. They present a short-term deterioration in their mental health (e.g., depression) and the incidence of completed suicide increases; although this study does not detail whether this death also affects the adolescent's suicidal cognitions.

In this sense, Phillips (1974) reported that friends' suicidal behavior is a correlate of people's suicidal tendencies. This author interprets this correlation as follows: 1) individuals imitate the suicidal behaviors of their peers or 2) those subjects with suicidal attitudes seek environments with such propensities. Agnew (1998) maintains that the adolescent's interest in suicide may be the effect of a process of learning and contact with family members or peers who have manifested this type of behavior, which teaches the young person that suicide is an alternative to solve problems. . De Wilde (2000) argues that suicidal behavior manifested by a member of the peer group at school or outside of it, can have an effect on adolescent suicidality through a suggestive process called "suicidal contagion." According to Evans et al. (2004), the literature suggests that it is the process of modeling suicidal behavior in the peer group that exerts an influence on the adolescent's own suicidal tendency. In conclusion, it seems that adolescents whose peer group expresses suicidal ideations and attempts and/or completed suicides may be at risk of manifesting suicidal behaviors.

#### Goals

The present study is innovative because it strengthens works in Spanish on the risk of suicidal ideation during adolescence. Given the lack of systematic



studies on the topic in the region, the aim is to mainly explore the role that the peer group plays in the probability of suicidal ideation; of course, without excluding from the analysis the interactive link of other variables linked to this phenomenon. Taking into consideration the findings in the area, this study seeks to determine a relationship model (Figure 1) with which the suicidal ideation of school-aged adolescents can be explained, defining the effect of suicidal behavior of peers, depression , father and mother support and domestic violence.

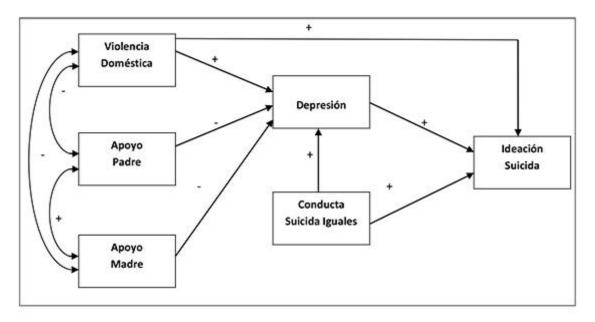


Figura 1. Modelo hipotético de partida sobre ideación suicida. Fuente: elaboración propia

# Method

# **Participants**

The type of sampling in this research was non-probabilistic. Thus, the sample is made up of 912 high school students who were present in the classroom at the time of applying the questionnaire. The participants fall into an age range of 11 to 18 years, whose average is 14.55 years (SD = 1.58 years). Regarding sex, 441



of these students are men (48.4%) and 471 women (51.6%). All adolescents were part of five public education centers selected by convenience in Mérida, Venezuela. The distribution by educational stages is as follows: 411 subjects (45.1%) were part of the basic cycle (1st, 2nd and 3rd year) and 501 (54.9%) were part of the diversified cycle (4th and <sup>5th</sup>. <sup>or</sup> year).

Of the total number of adolescents enrolled in school, 83.4% reported that they only studied and the rest (15%) reported that they alternated studies with work activities. Almost half of these young people belong to two-parent families (49.7%), more than a third (36.2%) to single-parent families and the rest live exclusively with siblings or other relatives (14.1%).

# Instruments and variables

A set of standardized questionnaires and some ad hoc indicators were used to collect information . In previous research, all of them have presented satisfactory levels of reliability and validity (see in greater detail Loinaz, Echeburúa, Ortiz-Tallo, & Amor, 2012; Rodríguez, Mirón, & Rial, 2012; Sanz & García-Vera, 2007; Villalobos, 2009, for an analysis of both the adaptation process of these questionnaires to Spanish and their validity and reliability). The variables and their respective instruments are detailed below.

# Parental support

A Spanish adaptation of the Abusive and Supportive Environments Parenting Inventory (EASE-PI) by Nicholas and Bieber (1997) was used. The parental support subscale consists of 24 items for fathers (12 items referring to the father's affectionate behaviors and 12 referring to the mother's affectionate behaviors). All of these items evaluate the frequency with which each of the parents displays behaviors aimed at helping the young person in difficulties or providing comfort and affection when they need it. Any of these items are



answered in a 5-point Likert format (0 = never, 1 = rarely, 2 = sometimes,  $3 = quite \ a \ few \ times$  and  $4 = very \ often$ ). In the present study, the Cronbach's alpha obtained for the support of the mother was 0.92 and for the father it was 0.94.

### Domestic violence

An adaptation of the Conflict Tactics Scales (CTS) by Straus, Hamby, Boney-McCoy, and Sugarman (1996) was used to assess the frequency with which physical violence is used as a tactic to resolve conflicts in the home (e.g., "Beating or beating the other"). The response range of the 4 items goes from "*Never*" (0) to "*Always*" (4). In this research, the Cronbach's alpha observed for the physical violence subscale was 0.86.

### Depression

In this study, the Beck Depression Inventory (BDI-IA) (Beck, Steer, Ball, & Ranieri, 1996) was applied to assess depression. The Beck inventory is a self-report that consists of 21 items that assess the severity of depression. The 21 factors that this questionnaire measures are: sadness, pessimism, feeling of failure, dissatisfaction, guilt, feeling of punishment, self-hatred, self-accusation, suicidal thoughts, crying, irritability, social disinterest, indecision, changes in body image, difficulty work, insomnia, fatigue, loss of appetite, weight loss, somatic concerns and low libido. Each item presents four response categories whose range ranges between 0 and 3 points. Due to the objectives of this research, the factor on suicidal ideation was excluded from the sum.

# Peer suicidal behavior

Based on the literature in the area (e.g., Prinstein, Boergers, & Spirito, 2001), three items were developed referring to the occurrence of suicidal thoughts, suicidal attempts, and completed suicide of peers. In particular, adolescents



were asked about the following situations: 1) How many of your friends think that suicide is the only way out of the problems in their lives? 2) How many of your friends have attempted suicide in the last year? and 3) How many of your friends have committed suicide in the last year? The response category for these questions is established on a four-point Likert scale (0 = none, 1 = some,  $2 = almost \ all$ , and 3 = all). A global index was estimated by totaling the 3 items. This variable has been called peer suicidal behavior. The Cronbach's alpha achieved was 0.72.

### Suicidal ideation

The Positive and Negative Suicide Ideation Inventory (PANSI) by Osman, Gutiérrez, Kopper, Barrios and Chiros (1998) was the questionnaire administered to evaluate suicidal ideation in adolescents. A Spanish version was validated by Villalobos (2009) in Colombia and is part of the present work. The original instrument and the Spanish adaptation include a total of 14 items underpinned by two factors. One of these factors is related to positive suicidal ideation and consists of 6 items, the other refers to negative suicidal ideation and has a total of 8 items. The person surveyed is asked about the frequency with which he or she has had suicidal thoughts during the last year. The response category is formulated on a 5-point Likert scale that varies in an interval of 0(never) to 4 (*always*). The reliability estimated through Cronbach's alpha was 0.87 in this study.

# Procedure

After requesting and obtaining authorization from the educational establishments, the instruments were applied collectively in the classroom where the academic activities take place. At the beginning, the purpose of the research was explained to the participants and the anonymity of the responses



and, in addition, their voluntary participation in collecting information was insisted on. The sample was taken in November 2012. Of a total of 1,187 questionnaires applied, 275 were eliminated due to inconsistencies and errors in the information provided.

### Data analysis

To establish the general characteristics of the sample in terms of the study variables, the main measures of centrality and dispersion were analyzed, that is, mean, standard deviation and ranges. Also to explore the association between each of the factors analyzed and suicidal ideation, a Pearson correlation analysis was carried out. Both analyzes were carried out using the SPSS statistical program (version 17.0). Next, using the AMOS 18.0 program (Arbuckle, 2009), *a path* analysis was developed in order to test the hypothetical model described in Figure 1.. In this case, the Maximum Likelihood Method was chosen for parameter estimation. Thus, the goodness of fit indices between the initial model and the empirical data of the sample were reviewed to observe their suitability. Specifically, both the contrast on the c2 distribution and the rest of the goodness-of-fit indices were verified. According to Hair, Anderson, Tatham and Black (2000), a proposed model presents a good fit to the observed data when the product between c2 and the degrees of freedom is less than 3, the fit indices NFI, CFI and GFI are equal to or greater than 0.9 and the RMSEA is less than 0.08. Finally, due to the adjustment problems found, the starting model was respecified based on the following criteria: 1) the significance levels of the estimated parameters (relationships between variables), 2) the information provided by the residual matrix and 3) the modification indices established by the AMOS program itself.

#### Results



### Descriptives and correlations

According to <u>Table 1</u>, perceived levels of parental support are, on average, high and physical violence is rare in the homes of these young people. On average, these adolescents interact with very few friends who exhibit suicidal behavior and, at the same time, report low levels of depression and suicidal ideation. However, it is convenient to contrast this trend with the variability present in some scores, especially that confirmed by the standard deviation and the observed range. Simultaneously, it can be verified with the correlation analysis in <u>Table 1</u>, that the support of the father and the mother reduces the probability of suicidal ideation in the adolescent and, on the contrary, domestic violence, suicidal behavior of peers and depression increase it.

#### TABLA 1

Coeficientes de correlación de Pearson, media, desviación estándar y rangos de las variables observadas

	1	2	3	4	5	6
1. Apoyo madre						
2. Apoyo padre	0.55***					
3. Violencia doméstica	-0.23***	-0.24***	4			
4. Conducta suicida iguales	-0.13***	-0.14***	0.25***			
5. Depresión	-0.27***	-0.32***	0.27***	0.31***	S2	
6. Ideación suicida	-0.28***	-0.27***	0.31***	0.29***	0.53***	
Media	36.68	31.46	1.21	0.65	5.36	8.91
(DE)	(10.2)	(13.03)	(2.68)	(1.15)	(6.72)	(8.71)
Rango teórico	0-48	0-48	0-16	0-9	0-60	0-56
Rango observado	0-47	0-47	0-16	0-9	0-59	0-52

\*\*\* p < 0.001 \*\* p < 0.01

Fuente: elaboración propia

# Path Analysis

<u>Consistent with the data analysis strategy, the model presented in Figure 1</u> was tested. Table <u>2</u> shows that the goodness of fit indices between the initial model and the empirical data were not entirely appropriate. Especially, the product between X  $^2$ /dgl and the RMSEA reveal fitting problems of the proposed model



as pointed out by Hair et al. (2000). This made it necessary to respecify the hypothetical starting model according to the criteria described in previous paragraphs. The respecification process was developed step by step, until a model achieved whose fit the empirical was data to was appropriate. Consequently, a final model was obtained, whose fit indices are also summarized in Table 2. According to this table, the different indices analyzed show an improvement in the quality of fit.

TABLA 2

Índices de bondad de ajuste del modelo inicial y el modelo final

	$\chi^2$	gl	р	$\chi^2/gl$	NFI	CFI	GFI	RMSEA
Modelo Inicial	30.9	3	0	10.29	0.93	0.94	0.97	0.16
Modelo Final	3.2	4	0.52	0.8	0.99	1	0.99	0.01

Fuente: elaboración propia

The final model of relationships between the variables is then configured according to the results presented in Figure 2. Regarding this graphic representation, it is observed that there is a positive and significant correlation between the father's support and the mother's support (r = 0.56, p < 0.001) and a negative correlation of these two variables with domestic violence (r = -0.2, p < 0.001 in both cases).



#### Violencia .22\*\*\* .16\*\*\* Doméstica .27\*\*\* -.20\*\*\* Depresión R2= .39 .50\*\*\* Apovo Ideación -.24\*\*\* .11\* -.20\*\*\* Padre Suicida .11\*\* Conducta .56\*\*\* Suicida Iguales

#### Vol. 10 No. 1 (2022)

Apoyo Madre -.11\*

Regarding the direct effects, the final model shows that depression has a significant effect on suicidal ideation ( $\beta = 0.5, p < 0.001$ ). Specifically, high levels of depression are associated with high levels of suicidal thinking. Similarly, the suicidal behavior of peers has a significant effect on the explained variable ( $\beta = 0.11, p < 0.01$ ). Thus, the greater the contact with friends who manifest suicidal behaviors (e.g., suicidal thoughts and attempts and completed suicide), the greater the probability of suicidal ideation in adolescents. Finally, another direct effect is that of domestic violence on suicidal ideation ( $\beta = 0.22, p < 0.001$ ). Perceiving physical violence at home directly increases suicidal thinking in young people.

In addition to these, other indirect effects of special consideration are observed in the final model. Thus, mother and father support present a negative and significant relationship with depression ( $\beta = -0.11$ , p < 0.05 and  $\beta = -0.24$ , p < 0.001, respectively) and the latter with suicidal ideation. Domestic violence has

Figura 2. Modelo final de relaciones sobre ideación suicida (n = 369). \*\*\* p < 0.001 \*\* p < 0.01 \* p < 0.05 Fuente: elaboración propia



an indirect effect on suicidal ideation, through its positive relationship with depression ( $\beta = 0.16$ , p < 0.001). Likewise, domestic violence and depression also show an indirect relationship with suicidal ideation through their effect on the suicidal behavior of peers ( $\beta = 0.27$ , p < 0.001 and  $\beta = 0.11$ , p < 0.05, respectively). The indirect effect of both variables was indicated by the analysis technique itself. Finally, the model obtained explains 39% of the variance in suicidal ideation.

### **Discussion and conclusion**

As already explained, the main objective of this study was to test a structural model that includes the suicidal behavior of peers, to estimate its influence on adolescent suicidal ideation. When asked what factors amplify or minimize suicidal thinking in young people, some explanatory models have merged individual factors related to stressful life events, hopelessness, depression, self-esteem, problem solving, drug use, loneliness, self-efficacy. , etc., with contextual factors referring, for example, to family conflict, family cohesion, economic problems in the family, paternal physical abuse, divorce, teacher support, social support, etc. (e.g., Sánchez-Sosa et al., 2010; Villalobos, 2009). However,

Based on the above, the final model of this study indicates that the peer group with suicidal behaviors has a direct effect on adolescent suicidal ideation. Although a similar finding was not found in other publications that have applied Structural Equations as an analysis technique, this data agrees with works that achieve at a bivariate and multivariate level that suicidality in the peer group is a predictor of suicidal thinking in adolescents. (e.g., Evans et al., 2004; Feigelman & Gorman, 2008; Prinstein et al., 2001). Of course, this empirical evidence can be interpreted in several ways. For example, adolescents



in their peer groups with suicidal inclinations learn definitions, rationalizations and motives favorable to suicide. It should also be said, that in a group environment with such characteristics, the learning mechanisms that facilitate suicidal thinking are those that have generally been proposed in psychology, that is, those of reinforcement and modeling. This explanatory proposal is consistent with the interpretations made by Phillips (1974), Agnew (1998) and Evans et al. (2004). However, the direct effect generated by the suicidality of peers on one's own suicidal ideation can also be explained by other group processes such as, for example, "social contagion" seen as a suggestion mechanism (De Wilde, 2000). In any case, the findings of this research confirm that the suicidal behavior of peers has a direct effect on the probability of suicidal thinking.

Also, from a group point of view, in the initial starting model an indirect effect of the peer group on the dependent variable through depression was proposed. This relationship was raised based on the findings revealed by Feigelman and Gorman (2008) which suggest that the suicidality of a friend increases depression and suicidal thinking in the adolescent. However, the *path analysis* indicated that such a relationship, at least in this sample, is not empirically plausible; On the contrary, the modification indices of the AMOS 18 program show that the relationship is inverse, that is, presenting depressive symptoms increases the possibility of associating with friends who express suicidal tendencies. Provisionally, this effect allows us to infer that depression instigates adolescents to seek out peer groups with inappropriate behavior, in this case, other young people who experience suicidal ideas and attempts, or even friends who end up taking their own lives.



In addition to this, the structural model allows us to determine that the support of both the mother and the father are variables that indirectly affect suicidal ideation, through their impact on depression. This finding is consistent with that reported by other authors such as Sánchez-Sosa et al. (2010) and Srdanovic-Maras et al. (2011). Also, from the family domain itself, the perception of domestic violence directly increases adolescent suicidal thinking, which coincides with the results of other authors who highlight the stressful role of this variable in suicidal ideas (e.g., Espinoza- Gómez et al., 2010). Likewise, youth who witness physical abuse in their homes experience depression, which subsequently has an effect on suicidal ideation. It's more, Perceiving problems of domestic abuse increases the risk of relating to groups that manifest suicidality problems and, through these, the risk of suicidal ideation. Although this indirect effect was not established in the initial model, it was indicated by the path analysis. It is evident then that a dysfunctional family environment, characterized by low support and the use of physical violence, has an influence both on the appearance of mental disorders and on coming into contact with a group of friends with inappropriate behaviors, which Altogether it increases the possibility of suicidal thinking. the same was indicated by the trail analysis. It is evident then that a dysfunctional family environment, characterized by low support and the use of physical violence, has an influence both on the appearance of mental disorders and on coming into contact with a group of friends with inappropriate behaviors, which Altogether it increases the possibility of suicidal thinking. the same was indicated by the trail analysis. It is evident then that a dysfunctional family environment, characterized by low support and the use of physical violence, has an influence both on the appearance of mental disorders and on coming into contact with a group of



friends with inappropriate behaviors, which Altogether it increases the possibility of suicidal thinking.

Regarding depression, the model makes it clear that it is the key variable and, without a doubt, the one that best explains suicidal ideation. The strength of such effect, in this case direct, coincides with the findings of other research (e.g., Konick & Gutiérrez 2005; Sánchez-Sosa et al., 2010). Likewise, the mediating property and the possible indirect effects that this disorder presents in the final model allow us to confirm its prominent role in the etiology of the phenomenon addressed. Therefore, and consistent with what was pointed out by Konick and Gutiérrez (2005), depression is an individual variable that should not be excluded from any explanatory model of suicidal ideation in adolescence; above all, if it is empirically demonstrated that 60% of men and 44% of women who contemplate suicide and have attempted to take their own life, They present symptoms of moderate and severe depression (Srdanovic-Maras et al., 2011). Rounding out these observations, depressed adolescents who think about suicide present a multisystemic context that includes a home with problems of affection, conflict and physical violence, and also encompasses friendships tending to suicidality, without ruling out that other factors such as school failure are also involved., eating disorders, impulsivity or antisocial behavior (Sánchez-Sosa et al., 2010).

Based on the above, it must be clarified that it is not plausible to support or reject the order of causality of the observed variables, given the cross-sectional nature of this study; However, the relationships proposed in the model come from the literature in the area. It is not superfluous to indicate that these relationships must be understood with discretion.



Finally, looking to the future, it is proposed to replicate this structural model in other cross-sectional studies considering that, if possible, it may be more valuable to test the effects found here and explained through longitudinal studies. It may also be a valuable contribution to separately contrast the effect of the three types of suicidal behavior of peers (ideation, attempt and completion), in such a way that it is possible to specify which has a greater explanatory capacity for adolescent suicidal thinking. Likewise, it would be appropriate to test the explanatory power and invariability of these models with other groups that may be made up of categories linked to gender, age, or even adolescents from the general and/or clinical population. Analyze different models in these terms,

#### References

Agnew, R. (1998). The approval of suicide: A social-psychological model. *Suicide and Suicide and Life-Threatening Behavior*, 28(2) 205-225. doi: 10.1111/j.1943-278X.1998.tb00640.x []

Arbuckle, J. L. (2009). *Amos 18 useras guide*. Chicago: Amos Development Corporation. []

Barroilhet, S., Fritsch, R., Guajardo, V., Martínez, V., Võhringer, P., Araya, R., & Rojas, G. (2012). Self-lytic ideas, self-inflicted violence and depressive symptoms in Chilean schoolchildren. *Medical Journal of Ch i le, 140(7),* 873-881. Recovered from <a href="http://www.scielo.cl/pdf/rmc/v140n7/art07.pdf">http://www.scielo.cl/pdf/rmc/v140n7/art07.pdf</a> [] Beck, A., Steer, R., Ball, R., & Ranieri, W. (1996). Comparison of Beck Depression Inventary-IA and II in psychiatric outpatients. *Journal of Personality Assessment,* 67, 588-597. doi: 10.1207/s15327752jpa6703\_13 []



Cerel, J., Roberts, T., & Nilsen, W. (2005). Peer suicidal behavior and adolescents risk behavior. *Journal of Nervous and Mental Disease*, *193*(4), 237-243. []

De Wilde, E. (2000). Adolescent suicidal behavior: A general population perspective. En K. Hawton & K. Van Heeringen (Eds.), *The international handbook of suicide and attempted suicide* (pp. 249-259). Chichester: Wiley. []

De Wilde, E., Kienhorst, I., & Diekstra, R. (1996). Suicide in adolescence. In J. Buendía (Ed.), *Psychopathology in children and adolescents. Current developments* (pp. 309-332). Madrid: Pyramid. []

Espinoza-Gómez, F., Zepeda-Pamplona, V., Bautista-Hernández, V., Hernández-Suarez, C., Newton-Sánchez, O., & Plasencia-García, G. (2010). Domestic violence and risk of suicidal behavior in adolescent college students. *Public Health of Mexico*, *52* (3), 213-219. Recovered from <u>http//www.scielo.org.mx/pdf/spm/v52n3/05.pdf</u> []

Evans, E., Hawton, K., & Rodham, K. (2004). Factors associated with suicidal phenomena in adolescents: A systematic review of population-based studies. *Clinical Psychology Review, 24*, 957-979. doi: 10.1016/j.cpr.2004.04.005 []

Feigelman, W., & Gorman, B. (2008). Assessing the effects of peer suicide on youth suicide. *Suicide and Life-Threatening Behavior*, 38(2), 181-194. doi: 10.1521/suli.2008.38.2.181 []

Florenzano, R., Valdés, M., Cáceres, E., Santander, S., Aspillaga, C., & Musalem, C. (2011). Relationship between suicidal ideation and parenting styles in a group of Chilean adolescents. *Medical Journal of Chile*, *139*, 1529-



1533. Recovered

from <u>http://www.scielo.cl/pdf/rmc/v139n12/art01.pdf</u> []

Gascón, AI (2005). Suicidal ideation, depressed mood and anxiety in middle adolescence in school at the Antonio Spinetti Dini Parish: some risk factors. Mérida 2005 (specialization thesis in Psychiatry). University of Los Andes, Mérida, Venezuela. Available at http://tesis.ula.ve/postgrado/tde\_busca/arquivo.php?codArquivo=2948 [

]

Goldney, R., Winefield, A., Tiggemann, M., Winefield, H., & Smith, S. (1989). Suicidal ideation in a young adult population. *Acta Psychiatrica Scandinavica*, 79, 481-489. doi: 10.1111/j.1600-0447.1989.tb10291.x []

Gonzalez, J. (2007). Epidemiology of suicides. Colombia, 2007. In *Forensic* 2007. *Data for Life* (pp. 179-204). Bogotá: National Institute of Legal Medicine and Forensic Sciences. [

González, C., Ramos, L., Caballero, M., & Wagner, F. (2003). Psychosocial correlates of depression, suicidal ideation and attempts in Mexican adolescents. *Psychothema*, *15(4)*, 524-532. Retrieved

from <u>http//www.psicothema.com/pdf/1102.pdf</u> [ ]

Gould, M., Drew, V., Kleinman, M., Lucas, C., Thomas, J., & Chung, M. (2004). Teenagers'attitudes about coping strategies and help-seeking for suicidality. *Journal of the American Academy of Child and Adolescents Psychiatry*, *43*, 1124-1133. doi: 10.1097/01.chi.0000132811.06547.31 [] Hair, J., Anderson, R., Tatham, R., & Black, W.C. (2000). *Análisis multivariante*. Madrid: Prentice Hall. []



Konick, L., & Gutiérrez, P. (2005). Testing a model of suicide ideation in college students. *Suicide and Life-Threatening Behavior*, *35*, 181-192. doi: 10.1521/suli.35.2.181.62875 []

Leyva, J., Hernández, J., Nava, J., & López, G. (2007). Depression in adolescents and family functioning. Medical Journal of the Mexican Institute of 45 (3), 225-232. Recovered Social Security, from http://new.medigraphic.com/cgibin/contenido.cgi?IDREVISTA=46&IDPUBLICACION=1295 ſ 1 Loinaz, I., Echeburúa, E., Ortiz-Tallo, M., & Amor, P. (2012). Psychometric properties of the Conflict Tactics Scales (CTS-2) in a Spanish sample of intimate aggressors. *Psychothema*, 24 (1), 142-148. Retrieved partner from http://www.psicothema.com/pdf/3991.pdf [ ] Maris, R. W. (2002). Suicide. The Lancet, 360(9329), 319-326. [] Miranda de la Torre, I., Cubillas, M., Román, R., & Valdez, E. (2009). Suicidal ideation in children attending school: associated psychological factors. Mental 495-502. Retrieved *Health*, 32 (6), from http://www.redalyc.org/pdf/582/58122267007.pdf [ ] Moad, C. (2007). Depression in adolescents from public and private

6-12. Retrieved schools. Ibero-American Psychology, 15(1),from http://www.redalyc.org/articulo.oa?id=133915928002 ſ 1 Nicholas, K., & Bieber, S. (1997). Assessment of perceived parenting behaviors: The Exposure to Abusive and Supportive Environments Parenting Inventory (EASE-PI). Journal of Family Violence, 12(3), 275-291. [] World Health Organization. (2014). Health for the world's adolescents. A second decade. Geneva: Author. Retrieved second chance in the



from http://apps.who.int/adolescents/second-

decade/files/WHO\_FWC\_MCA\_14.05\_spa.pdf [ ]

Osman, A., Gutiérrez, P., Kopper, B., Barrios, F., & Chiros, C. (1998). The positive and negative Suicide Ideation Inventory: Development and validation. *Psychological Reports, 82,* 783-793. doi: 10.2466/ pr0.1998.82.3.783 []

Phillips, D. (1974). The influence of suggestion on suicide: Substantive and theoretical implications of the Werther effects. *American Sociological Review*, *39*, 340-354. []

Prinstein, M., Boergers, J., & Spirito, A. (2001). Adolescents'and their friends'health-risk behaviour: Factors that alter or add to peer influence. *Journal of Pediatric Psychology*, *26*(5), 287-298. doi: 10.1093/jpepsy/26.5.287 [] Rodríguez, JA, Mirón, L., & Rial, A. (2012). Analysis of the relationship between peer group, family and school bonding, self-control and antisocial behavior, in a sample of Venezuelan adolescents. *Journal of Social Psychology*, *27*(1), 25-38. doi: 10.1174/021347412798844033 []

Salvo, L., & Melipillán, R. (2008). Predictors of suicidality in adolescents. *Chilean Journal of Neuro-Psychiatry*, 46(2), 115-123. Recovered from <a href="http://www.scielo.cl/pdf/rchnp/v46n2/art05.pdf">http://www.scielo.cl/pdf/rchnp/v46n2/art05.pdf</a> []

Sánchez, R., Guzmán, Y., & Cáceres, H. (2005). Study of imitation as a risk factor for suicidal ideation in adolescent university students. *Colombian Journal* 

ofPsychiatry,34 (1),12-25. Retrievedfrom <a href="http://www.redalyc.org/pdf/806/80628403003.pdf">http://www.redalyc.org/pdf/806/80628403003.pdf</a> []Sanz, J., & García-Vera, M. (2007). Psychometric analysis of the short versionsof the 1978 Beck Depression Inventory (BDI-IA). Behavioral Psychology,15 (2),191-214. Recovered



from <u>http//www.funveca.org/revista/pedidos/product.phpJid\_product=288</u>
[ ]

Sánchez-Sosa, J., Villareal-González, M., Musitu, G., & Martínez, B. (2010). Suicidal ideation in adolescents: a psychosocial analysis. *Psychosocial Intervention*, 19(3), 279-287. doi: 10.5093/in2010v19n3a8 []

Sarmiento, C., & Aguilar, J. (2011). Family and personal predictors of adolescent suicidal ideation. *Psychology and Health*, 21(1), 25-30. Retrieved from <u>http://www.uv.mx/psicysalud/psicysalud-21-1/21-1/Carolina-Sarmiento-</u>

<u>Silva.pdf</u> [ ]

Srdanovic-Maras, J., Duric, O., Markovic, J., & Biro, M. (2011). Family and individual factors of suicidal ideation in adolescents. *PSIHOLOGIJA*, 44(3), 245-260. doi: 10.2298/PSI1103245S []

Straus, M., Hamby, S., Boney-McCoy, S., & Sugarman, D. (1996). The revised Conflict Tactic Scales. Development and preliminary psychometric data. Journal of Family Issues, 17(3), 283-316. Recuperado de http://pubpages.unh.edu/~mas2/CTS15.pdf

Toro, D., Paniagua, R., González, C., & Montoya, B. (2009). Characterizationof school-aged adolescents at risk of suicide, Medellín, 2006. *Revista SaludPública*,27 (3),302-308. Retrievedfrom <a href="http://www.scielo.org.co/pdf/rfnsp/v27n3/v27n3a07.pdf">http://www.scielo.org.co/pdf/rfnsp/v27n3/v27n3a07.pdf</a>

Ventura-Juncá, R., Carvajal, C., Undurraga, S., Vicuña, P., Egaña, J., & Garib, M. (2010). Prevalence of suicidal ideation and attempts in adolescents in the Metropolitan Region of Santiago de Chile. *Medical Journal of Chile, 138*, 309-315. Recovered from http://www.scielo.cl/pdf/rmc/v138n3/art08.pdf



Vera, O., & Díaz, C. (2012). Suicide in adolescents in South America: a growing problem. *Public Health of Mexico*, 54 (4), 363-364. Retrieved from http://www.scielosp.org/pdf/spm/v54n4/03.pdf []
Villalobos, F. (2009). *Suicidal ideation in young people: formulation and validation of the explanatory integrative model in secondary and higher education students* (Doctoral Thesis). University of Granada, Spain. Recovered from http://hera.urg.es/tesisugr/1805982x.pdf []
Viñas, F., Jané, M., & Domènech, E. (2000). Assessment of the severity of self-reported suicidal ideation in schoolchildren aged 8 to 12 years. *Psychothema*, *12* (4), 594-598. Retrieved

from <u>http://www.psicothema.com/pdf/377.pdf</u> [ ]