DIFFERENCES ON THE PERCEPTION OF FAMILY FUNCTIONING IN ADOLESCENTS FROM PARAGUAY AND MEXICO*

DIFERENCIAS EN LA PERCEPCIÓN DEL FUNCIONAMIENTO FAMILIAR EN ADOLESCENTES MEXICANOS Y PARAGUAYOS

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RESUMEN
El funcionamiento familiar se conceptualiza como las relaciones entre los integrantes de una familia, enfocadas en la comunicación, la expresión emocional y la solución de problemas y conflictos. Estas relaciones son determinantes para el desarrollo psicológico del adolescente y su desempeño a nivel académico y social. Se realiza una comparación de la percepción del funcionamiento familiar, por sexo, de adolescentes tempranos y medios de Paraguay y México. La muestra está constituida por 1728 adolescentes de entre 13 y 18 años (Medad=15; DE=1.460). Todos los participantes son estudiantes en escuelas públicas de enseñanza básica y media, 767 asisten a escuelas de la ciudad de Asunción (Medad=15.20; DE=1.336) y 961 cursan en escuelas de la Ciudad de México (Medad=14.84; DE=1.534). Se aplicó Cédula Sociodemográfica para el Adolescente y su Familia (Barcelata, 2013) y la Escala de Relaciones Intrafamiliares (Rivera-Heredia & Andrade, 2010). El análisis de varianza multivariado (MANOVA) ejecutado con el software SPSS v.21, halló diferencias significativas por país, y por edad, observándose una interacción de ambas variables en todas las escalas del instrumento. No se encontró diferencias significativas por sexo. Los bajos índices de funcionamiento familiar en la muestra paraguaya podrían deberse a factores socio-culturales.

PALABRAS CLAVE: Adolescentes, edad, funcionamiento familiar, México, Paraguay, sexo.

ABSTRACT
Family functioning is understood as a system of interactions between family members, oriented towards communication, emotional expression, and coping with problems and conflicts. These interactions determine the psychological development of the adolescent, as well as their social and academic performance. The present study focuses on a comparison between sexes on the perception of family functioning among early and middle-stage adolescents from both Paraguay and Mexico. The sample is constituted by 1728 adolescents aged between 13 and 18 years old (Mage=15; DS=1.460). All adolescents attend to public middle schools, 767 of them to schools in Asunción (Mage=15.20; DS=1.336) and 961 of them to schools in Mexico City (Mage=14.84; DS=1.534). The instrument used to measure the variables was the Escala de Relaciones Intrafamiliares (Rivera-Heredia & Andrade, 2010); Intrafamilial Relationships Scale, by its name in English. The data was analyzed by the software SPSS v.21, running a multivariate analysis of variance (MANOVA). There were found significant differences by country and age, with interaction of both variables in all familial functioning’ scales. There were no significant differences by sex in any of the scales. The results indicate that low scores in the scale among Paraguayan adolescents may be due to cultural factors.

KEY WORDS: Adolescents, age, family functioning, México, Paraguay, sex.

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Adolescents’ adaptation relies on personal variables such as sex and age, mainly because of biological, psychological and social changes that occur differently between the development sub stages of this life cycle. According to UNICEF (2011), adolescence has its onset around 10 years of age and continues until around 18, with variations depending of context and culture. Although it is a stage of evolution from the adolescent’s dependency of his family towards his autonomy, familiar dynamics keep on playing a fundamental roll in all of the sub stages (Bloss, 1986; Aberastury, 2002).

The concept of family functioning is defined as the set of relations between family members, based on communication, emotional expression, and coping with problems and conflicts (Rivera, 1999; Rivera-Heredia & Andrade, 2010). This patterns in relationships and coping are influenced by sociocultural variables and the development stages that each of the family members are going through (Barcelata, Granados & Ramirez, 2013).

The quality of the adolescent’s psychological development strongly depends of his family’s functioning, and the lack of a stable familiar background can become an obstacle for his health and wellbeing (WHO, 2011; Jozefiak, Wallander & Wallander, 2016). The comparison run through this study of the family functioning of adolescents between adolescence sub stages is justified by the characterization that Bloss (1986) and Aberastury (2002) made of early and middle adolescence. They described the former of this sub stages as one in which adolescents show an uninterested attitude towards their parents and emotional instability; these features would only intensify in the latter of the sub stages. Although adolescence is all about getting distance from adolescent’s family, trying to gain independence, the family continues to be a basic source of support for the adolescent (Herrera, 1997; Bokszzcanin & Makowsky, 2006). In all cases, the family is the social network most recurred to for support (Medellin, Rivera, Kanas & Rodriguez-Orozco, 2012). It is even noticed that open relationships with the multigenerational family, which includes contact with cousins, uncles, aunts, even nephews, ae associated with less symptomatic nuclear family functioning (Klever, 2015). This type of family represents a common situation in latin american countries such as Paraguay (Céspedes, 2009).

On the other hand, signs of bad quality of family functioning are strongly associated with psychopathology (Reyes & Torres, 2001; Urizar & Giráldez, 2008) and risk behavior as violence and mistreatment (Barcelata & Alvarez, 2005; Reyes & Torres, 2001), running away from home (Brooks, Edelen, & Tucker, 2017), eating disorders (Ruiz-Martinez, Vazquez-Arevalo, Mancilla-Diaz, Lopez-Aguilar, Alvarez-Rayon, & Tena-Suck, 2010; Vázquez, Ruiz, Alvarez, Mancilla, & Tena-Suck, 2010), depression (Martinez & Rosello, 1995; Leyva-Jimenez, Hernandez-Juarez, Nava-Jimenez & Lopez-Gaona, 2007) and suicide (Guibert & Torres, 2001). Gómez (2010) describes how family interactions determine internal cognitive models and relationship with others, becoming either a protective or a risk factor, depending on its qualities (Oliva, Parra & Sanchez, 2002; Cummings, Geoke & Papp, 2003). Valdes, Serrano, Rodriguez, Roizblatt, Scherzer, Florenzano & Labra (1997) mention communication, intrafamilial connection, availability of family members, clarity and flexibility of roles, and familiar hierarchy order as predictive factors for less occurrence of risk behavior in adolescents.

The relevance of the concept is that negative indicators of family functioning are strongly related to psychopathology (Murphy & Flessner, 2015; Christopher A.Reyes & Torres, 2001; Urizar & Giraldz, 2008) and risk behaviors (Reyes & Torres, 2001) such as violence and abuse (Barcelata & Alvarez,
In a study carried out in Mexico on family functioning in adolescents, half of the sample (there were more men than women) reported affection, warmth, listening ability and union in their family. In general, men reported higher levels of union and family support, family expression and family difficulties than women, although none of these differences were significant (Barcelata et al., 2013).

In Paraguay, several studies revealed indicators of higher family satisfaction among women than among men among secondary school students in Asunción (Cuevas y Gomez, 1984; Navarro, 2011; Albiso y Alvarenga, 2012). In particular, Cuevas and Gomez (1984) link failure in the academic performance of these adolescents with absenteeism and family deprivation.

The purpose for this research is based in the state of knowledge on the subject and the studies cited above. The general objective consists on comparing the perception of the familiar functioning of Paraguayan and Mexican adolescents according to their sex and age. The questions of interest is related to how adolescents of Mexico and Paraguay perceive the family in general, and specific areas of operation. Are there differences in perception among Mexican and Paraguayan adolescents? Does the perception of family functioning change in terms of sex, adolescent stage and country?

METHOD

This study was conducted as a field research, with a comparative 2x2x2 design of two non-related samples (Kerlinger & Lee, 2001).

Participants

The samples where non-probabilistic, composed by 1728 adolescent students from Paraguay and Mexico, aged between 13 and 18 years old (M<sub>age</sub>=15; SD=1.460). Students attended to public secondary
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schools in Asuncion and Mexico City. The Mexican sample is composed by 961 students (male=459, female=503; 13-15 years old=662, 16-18 years old=298) with an arithmetic mean of 14.84 years old (SD=1.534); the Paraguayan sample is composed by 767 students (male=321, female=446; 13-15 years old=441, 16-18 years old=298) with an arithmetic mean of 15.20 years old (SD=1.336).

Instruments

The study employed two instruments to measure the variables implied:

Sociodemographic characteristics: composed by 26 items in a multiple-choice format. This section explores the familiar configuration, source of income, housing conditions, material goods, characteristics of neighborhoods and schools.

Intrafamilial Relationships Scale (Rivera-Heredia & Andrade, 2010), also known as ERI by its acronym in Spanish. Its original version its constituted by 12 items in a Likert scale; to which two additional items were added for the purpose of exploring father and mother’s support perception. The adjusted version its constituted by 16 items in 5-options Likert scale (1. Totally disagree; 2. Partially Disagree; 3. Neutral: neither agree nor disagree; 4. Partially agree; 5. Totally agree). The higher the scores of each subscale, higher the grade in which specific factor its present. The subscales measured by the instrument are: 1. Unity and support (3 items; \( \alpha = .80 \)), this subscale assesses a familiar tendency to involve in activities based in interpersonal support and solidarity. 2. Expression (5 items; \( \alpha = .90 \)), evaluates the communication and whether or not family members are able to express their feelings and ideas in an open, respectful environment. 3. Difficulties (4 items; \( \alpha = .67 \)), measures aspects of the familiar interrelation that are perceived as negative (Barcelata et al., 2013). 4. Parental support (4 items; \( \alpha = .75 \)), constituted by the additional items added to measure perceived support of parental figures. The overall test’s Cronbach alpha was .77 for the present study.

Procedure

For the purpose of applying both instruments to the sample, the correspondent permissions were granted by each of the secondary institutes where the study was to take place, in Paraguay and Mexico. Also, each of the participants and their parents were informed about the study and the confidentiality of the results, and explicitly gave their consent to take part on it. The tests were applied in the students’ main classrooms in regular class hours. The applications were evaluated in both countries by trained psychologists and people in charge of the study. Data collected was analyzed through the software SPSS v.21, applying descriptive analysis and multivariate variance analysis (MANOVA). This analysis was preferred as the study aimed to measure several variables and the way they interact with each other. Each of the Intrafamilial Relationships Scale subscales were considered as separate variables, seeking for more richness and specificity for the results when comparing family profiles of different groups.

RESULTS

For the purposes of this study, results were compared by sex (male and female), age (13 to 15 years old and 16 to 18 years old) and country (Paraguay and Mexico).

The Mexican sample is bigger than the Paraguayan sample (table 1). In both of them, the percentage of women its higher than the percentage of men. This tendency is more accentuated among the Paraguayan sample. Also, there are more adolescents aged 13 to 15 years old than 16 to 18 years old in both samples, especially in the Mexican sample. The most notorious difference, though, was regarding to the academic grade of the participants, where
Mexican sample is mostly composed by students in the first three years of secondary schools, and most Paraguayan participants are in the last three years of it. These results can be related to a high rate of scholar desertion, characteristic of Latin-American educational systems because the situation of poverty of these countries.

Table 1.
Sex, age and academic grade of the Mexican sample, Paraguayan sample and total sample.

<table>
<thead>
<tr>
<th>Variables</th>
<th>México n=961</th>
<th>Paraguay n=767</th>
<th>Total sample n=1728</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Male</td>
<td>459</td>
<td>47.8%</td>
<td>321</td>
</tr>
<tr>
<td>Female</td>
<td>502</td>
<td>52.2%</td>
<td>446</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 to 15 years’ old</td>
<td>663</td>
<td>69%</td>
<td>441</td>
</tr>
<tr>
<td>16 to 18 years’ old</td>
<td>298</td>
<td>31%</td>
<td>326</td>
</tr>
<tr>
<td>Academic grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First three years of secondary school</td>
<td>590</td>
<td>61.4%</td>
<td>232</td>
</tr>
<tr>
<td>Last three years of secondary school</td>
<td>371</td>
<td>38.6%</td>
<td>535</td>
</tr>
</tbody>
</table>

The most frequent age (figure 1) among the Mexican sample is 14 years old (M=14.48; SD=1.53), meanwhile in the Paraguayan sample is 15 years old (M=15.20; SD=1.33).

![FIGURE 1. Age distribution of Mexican sample, Paraguayan sample and total sample.](image)

Mexican adolescents (table 2) scored higher on the subscales of unity and support, expression, parental support and overall familial functioning, meanwhile Paraguayan adolescents scored higher on the subscale of difficulties. When it comes to comparisons between men and women, there were not evident differences in any of the subscales. Lastly, participants aged 16 to 18 years old scored higher on every subscale, except for the difficulties subscale, where adolescents aged 13 to 15 years old obtained higher scores.
TABLE 2.
Arithmetic means and standard deviations for the familial functioning subscales compared between countries, sexes and ages.

<table>
<thead>
<tr>
<th>Familial functioning subscales</th>
<th>Mexico N=961</th>
<th>Paraguay N=767</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men n=459</td>
<td>Men n=321</td>
</tr>
<tr>
<td></td>
<td>Women n=502</td>
<td>Women n=120</td>
</tr>
<tr>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Unity and support</td>
<td>2.79 (1.30)</td>
<td>2.80 (1.29)</td>
</tr>
<tr>
<td></td>
<td>3.99 (.77)</td>
<td>3.96 (.91)</td>
</tr>
<tr>
<td>Expression</td>
<td>2.79 (1.24)</td>
<td>3.12 (1.09)</td>
</tr>
<tr>
<td></td>
<td>4.08 (.85)</td>
<td>2.21 (.92)</td>
</tr>
<tr>
<td>Difficulties</td>
<td>3.10 (1.31)</td>
<td>2.81 (1.25)</td>
</tr>
<tr>
<td></td>
<td>2.16 (.86)</td>
<td>3.96 (.91)</td>
</tr>
<tr>
<td>Parental Support</td>
<td>2.81 (1.20)</td>
<td>2.81 (1.25)</td>
</tr>
<tr>
<td></td>
<td>3.99 (.71)</td>
<td>3.96 (.91)</td>
</tr>
<tr>
<td>Familial functioning</td>
<td>2.87 (.75)</td>
<td>2.90 (.72)</td>
</tr>
<tr>
<td></td>
<td>3.55 (.40)</td>
<td>3.48 (.43)</td>
</tr>
</tbody>
</table>

The Roy’s largest root test showed (table 3) significant influences of age (explains 27.4% of variance), and significant interaction between age and country (explains 7.7% of variance).

TABLE 3.
Main effects and interaction effects of sex, age and country in familial functioning subscales.

<table>
<thead>
<tr>
<th>Effect</th>
<th>F</th>
<th>Hypothesis DF</th>
<th>Error DF</th>
<th>Significance</th>
<th>Partial Eta-squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.113(a)</td>
<td>4.000</td>
<td>1704.000</td>
<td>.978</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>41.98(a)</td>
<td>4.000</td>
<td>1704.000</td>
<td>.000</td>
<td>.077</td>
</tr>
<tr>
<td>Country</td>
<td>160.712(a)</td>
<td>4.000</td>
<td>1704.000</td>
<td>.274</td>
<td>.296</td>
</tr>
<tr>
<td>Sex*Country</td>
<td>.911(a)</td>
<td>4.000</td>
<td>1704.000</td>
<td>.456</td>
<td>.002</td>
</tr>
<tr>
<td>Age*Country</td>
<td>35.400(a)</td>
<td>4.000</td>
<td>1704.000</td>
<td>.000</td>
<td>.077</td>
</tr>
<tr>
<td>Sex*Age</td>
<td>.180(a)</td>
<td>4.000</td>
<td>1704.000</td>
<td>.949</td>
<td>.000</td>
</tr>
<tr>
<td>Sex<em>Age</em>Country</td>
<td>1.246(a)</td>
<td>4.000</td>
<td>1704.000</td>
<td>.289</td>
<td>.003</td>
</tr>
</tbody>
</table>

N=2279
a. Roy’s largest root

Lastly, the F values (Roy’s largest root) of the different subscales of familial functioning show an influence of country and age in the subscales of unity and support (d=.57; d=.38, respectively), parental support (d=.95; d=.43, respectively) and familial functioning overall scale (d=.92; d=.38, respectively). Also, the results show an interaction between country and age for all the subscales.

TABLE 4.
Main and interaction effects of sex, age and country in familial functioning subscales.

<table>
<thead>
<tr>
<th>Country</th>
<th>Sex</th>
<th>Age</th>
<th>Country*Sex</th>
<th>Country*Age</th>
<th>Sex*Age</th>
<th>Country<em>Sex</em>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unity and support</td>
<td>508.32 ***</td>
<td>.118</td>
<td>118.90 ***</td>
<td>1.37</td>
<td>104.78 ***</td>
<td>.20</td>
</tr>
<tr>
<td>Expression</td>
<td>517.32 ***</td>
<td>.209</td>
<td>136.78 ***</td>
<td>1.13</td>
<td>116.66 ***</td>
<td>.40</td>
</tr>
<tr>
<td>Difficulties</td>
<td>219.99 ***</td>
<td>.024</td>
<td>80.02 ***</td>
<td>.31</td>
<td>77.34 ***</td>
<td>.06</td>
</tr>
<tr>
<td>Parental support</td>
<td>576.69 ***</td>
<td>.207</td>
<td>136.65 ***</td>
<td>3.33</td>
<td>108.55 ***</td>
<td>.00</td>
</tr>
<tr>
<td>Familial functioning</td>
<td>509.37 ***</td>
<td>.354</td>
<td>111.99 ***</td>
<td>2.02</td>
<td>89.47 ***</td>
<td>.11</td>
</tr>
</tbody>
</table>

df=1, *Sig<.05; **Sig<.01; ***Sig<.001
DISCUSSION

Some of the results obtained confirm findings made by other researchers, thus, according to the study of Barcelata et al. (2013), there are significant differences between the family functioning of Paraguayan and Mexican adolescents, reaffirming the influence of sociocultural factors on that variable. The low scores among the Paraguayan sample are similar to the ones found by Céspedes et al. (2014). Following the proposal by Gómez (2010), Oliva et al. (2002) and Cummings et al. (2003), Paraguayan adolescents would be at greater risk than Mexicans because of the lower quality of their family functioning, seen in the lower scores in the Union, Expression and Parental Support scales; and higher scores on the Difficulty scale. This could mean a bigger exposure to conditions of less protection and promotion of health and well-being. It should be noted that one of the characteristics of Paraguayan families with a low socioeconomic status is that the paternal figure is often absent. This may be one of the factors explaining the dysfunctional family patterns of Paraguayan families, as suggested by Cuevas and Gómez (1984).

Also, there was found an influence of age in the studied variable, coinciding with Barcelata et al. (2013) findings. The scores of adolescents between 16 to 18 years are higher than those of 13 to 15 years in the Union, Expression and Parental Support scales, and the opposite is observed in the Difficulties scale. This difference is not maintained among Paraguayan men, with 13 to 15-year old’s punctuating higher than those of 16 to 18 years old’s at all scales, in contradiction with the results of Céspedes et al. (2014). The fact that 13 to 15 years old adolescents from both countries obtained the highest scores in the scale of Difficulties contradicts the notion given by Bloss (1968) and Aberastury (2002), and indicates that the conflict of the adolescent with his family is more pronounced in the first years of adolescence. However, this trend could be influenced by sociocultural factors, explaining the difference found among adolescents between 16 and 18 years old in Paraguay and Mexico. However, the results found, compared with the previous research mentioned, leave an unclear situation of the connection between age, family functioning and family satisfaction in Paraguayan adolescents. It is recommended to look deeper into this topic in future studies.

On the other hand, no significant differences were found between the sexes in any of the scales, these results are also in the direction of those reported in Barcelata et al. (2013).

The results also show evidence of an interaction effect between country and age over all scales, where Mexican adolescents between 16 and 18 years of age, men and women, present higher scores on the Union, Expression and Parental Support scales, and the lower scores on the scale of Difficulties, indicating that they are the group with better family functioning. Second, there are Mexican adolescents, men and women between the ages of 13 and 15, with average scores that could be considered as bad indicators (as opposed to Mexican adolescents aged 16 to 18). However, although the scores of the former group can be considered as indicators of family malfunction, they are still higher than the scores of all groups of the Paraguayan sample in the Union, Expression and Support scales; and lower on the Difficulty scale.

The lowest scores on the Union, Expression and Support scales, and the highest on the Difficulties scale, were obtained by Paraguayan adolescents, especially in the 13-15 age group, which indicates a situation of risk regarding family functioning.

The evidence found indicates vulnerability in all Paraguayan adolescents, regardless of their age or gender, and in Mexican adolescents between 13 and 15
years old, meaning they are prone to developing psychopathologies, risk behaviors, violence and abuse, eating disorders, depression, poor academic performance and suicide attempts. As well as the results of other studies such as those of Reyes and Torres (2001), Urizar and Giraldez (2008), Barcelata and Alvarez (2005), Ruiz-Martinez et al. (2010) Vazquez et al. (2010), Martinez and Rosello (1995), Leyva-Jimenez et al. (2007), Paz-Navarro et al. (2009), Guibert and Torres (2001), Murphy and Flessner (2015), Brooks et al. (2017).

It's recommended to adopt public measures aimed at strengthening ties in Paraguayan families. This could be translated into positive factors for the development of the demographic bonus that in the present constitutes great value in terms of social capital. These necessities are even more urgent in adolescents between 13 and 15 years old, not only in Paraguay but also in Mexico, calling for public policies aimed at preventing and promoting protective factors for this age group and their families. Since this study reinforces the importance of family in adolescent’s life, it must be a main concern when trying to improve the quality of their life experience during this period.

In order to understand better the role that sociocultural factors play within family functioning, it is recommendable to involve in more studies that would cover larger samples from different cultures. Finally, still remains unknown which of the specific sociocultural variables have a particular relevance in family functioning.

**REFERENCES**


Barcelata, B. (2013). *Cédula sociodemográfica del adolescente y su familia (Versión para investigación)*. CDMX, México: FES Zaragoza, UNAM.


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