

# Social Skills and Behavioral Problems in Children with a History of Institutionalization and Foster Care

Habilidades sociales y problemas de conducta en niños y niñas con historial de institucionalización y cuidado en hogares de acogida

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## María Paula Moretti

Pontificia Universidad Católica Argentina (UCA), Buenos Aires, Argentina.  
Instituto de Medicina y Biología Experimental de Cuyo (IMBECU) del Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET).  
Mendoza, Argentina<sup>1</sup>  
ORCID: <https://orcid.org/0000-0001-6014-192X>

## Nandy Lourdes Edith Ibarra Ureta

Pontificia Universidad Católica Argentina, Mendoza, Argentina  
ORCID: <https://orcid.org/0000-0001-5314-1374>

## Norma Mariana Torrecilla

Pontificia Universidad Católica Argentina, Instituto de Medicina y Biología Experimental de Cuyo (IMBECU) del Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET). Mendoza, Argentina  
ORCID: <https://orcid.org/0000-0001-7303-3901>

## Abstract

The aim of the study was to analyze whether there were significant differences in social skills and in externalizing and internalizing behavior problems among three groups of children in Argentina: one group of adopted children with a history of institutional care, another group of adopted children with a history of foster care, and a third group of children with no history of alternative care who have lived with their biological family since birth. A non-experimental, descriptive, cross-sectional study was conducted. The sample consisted of 119 Argentine parents with children between the ages of 3 and 7. Of these, 41 parents had adopted a child with a history of institutional care, 38 had adopted a child with a history of foster care, and 40 were biological parents whose children had no history of alternative care. The Preschool and Kindergarten Behavior Scale (PKBS) by Merrell (2003), adapted in Argentina by Reyna and Brussino (2009), was used to measure the variables studied. Adopted children with a history in institutional care obtained significantly lower scores in the three social skills assessed (social cooperation, social interaction, and social independence) and significantly higher scores in the two behavior problems assessed (internalizing and externalizing) compared to the other two groups. No significant differences were found in social skills and behavioral problems between the group of adopted children with a history of foster care and the group

of children without a history of alternative care who have lived with their biological family since birth. Foster care could be considered a protective factor for children at risk.

## Keywords

Social skills, behavior problems, institutional care, foster care, vulnerability.

## Resumen

El objetivo del estudio fue analizar si existían diferencias significativas en las habilidades sociales y problemas de conducta externalizantes e internalizantes entre tres grupos de niños y niñas de Argentina: uno de niños y niñas adoptados con historial de cuidados institucionales, otro de niños y niñas adoptados con historial de acogimiento familiar y un tercer grupo de niños y niñas sin historial de cuidados alternativos que han convivido con su familia de origen desde el nacimiento. Se trabajó desde un enfoque cuantitativo no experimental transversal de alcance descriptivo. La muestra estuvo conformada por 119 padres y madres argentinos, cuyos niños y niñas tenían entre 3 y 7 años de edad. De dicho total, 41 padres y madres habían adoptado a un niño o niña con historial en cuidado institucional, 38 habían adoptado a un niño o niña con historial en acogimiento familiar y 40 eran padres y madres biológicos cuyo hijo o hija no presentaba historial de cuidados alternativos. Para medir las variables se administró la Escala de Comportamiento Preescolar y Jardín Infantil de Merrell (2003), adaptada en Argentina por Reyna y Brussino (2009). Los niños y niñas adoptados con historial en cuidado institucional obtuvieron puntajes significativamente más bajos en las tres habilidades sociales evaluadas (cooperación social, interacción social e independencia social) y puntajes significativamente más altos en los dos problemas de conducta estudiados (internalizantes y externalizantes) en comparación con los otros dos grupos. No se hallaron diferencias significativas en las habilidades sociales y problemas de conducta entre el grupo de niños y niñas adoptados con historial en acogimiento familiar y el grupo de niños y niñas sin historial de cuidados alternativos en convivencia con su familia de origen desde el nacimiento. Se podría considerar al acogimiento familiar como un factor protector para los niños y niñas en situación de vulnerabilidad.

## Palabras clave

Habilidades sociales, problemas de conducta, cuidado institucional, acogimiento familiar, vulnerabilidad.

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- .....
- 1 Centro de Investigación en Psicología y Psicopedagogía, Facultad de Psicología y Psicopedagogía, Pontificia Universidad Católica Argentina (UCA). Buenos Aires, Argentina. Instituto de Medicina y Biología Experimental de Cuyo (IMBECU), Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET). Mendoza, Argentina. Contact Information:

**Institutional Address:** Av. Alicia Monreau de Justo 1300

**E-mail:** [mariapaulamoretti@uca.edu.ar](mailto:mariapaulamoretti@uca.edu.ar)

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## Introduction

In recent decades, there has been a growing interest in the study of social behavior. Although a universally accepted definition of this concept remains elusive, it is widely acknowledged that social behavior includes adaptive aspects, such as social skills, and non-adaptive aspects, such as behavior problems (Reyna & Brussino, 2009). Defining these adaptive and non-adaptive aspects separately is also a complex challenge due to their multidimensional nature (Lacunza & Contini de González, 2011).

On the one hand, Caballo (2005) defines social skills as a set of behaviors that allow a person to develop effectively in an individual and interpersonal context. These behaviors involve the expression of feelings, attitudes, desires, opinions or rights in a manner appropriate to the situation. They allow for the immediate resolution of problems and help prevent future problems to the extent that individuals respect the behaviors of others. Following this emphasis on problem solving, León Rubio & Medina Anzano (1998) and Kelly (2009) highlight the central role of social skills in resolving interpersonal situations, making them necessary and useful for adapting to the person's immediate environment.

On the other hand, regarding behavioral problems, Achenbach et al. (1987) distinguish two general groups of problems: externalizing and internalizing. Externalizing problems are characterized by aggression, fighting and acting out, while internalizing problems are characterized by anxiety, social isolation and depression (Reyna & Brussino, 2009).

The nurturing environment is critical to development from the earliest stages of life and plays a significant role in shaping social behavior. In particular, the family has been recognized as one of the privileged environments for learning social behavior. It is within this family context that both healthy and dysfunctional social behaviors are acquired and practiced. Moreover, there is consensus in the scientific community that childhood and adolescence are critical periods for this learning process (Lacunza & Contini de González, 2011).

Although the family is the nucleus of child development and protection, in exceptional cases of rights violations involving experiences of violence and maltreatment, children and adolescents may be separated from their biological families and placed in one

of the two modalities of alternative care: institutional care or foster care. In both cases, the care provided is temporary, and the child may eventually return to his or her biological family or be adopted by a new family (United Nations International Children's Emergency Fund [UNICEF], 2019).

Numerous studies have described the general characteristics of institutional care. Recently, through a systematic review, Moffa et al. (2019) uncovered conditions related to environmental health in institutions, concluding that inadequacies and deficiencies in facilities, as well as overcrowding, are common. Overworked care staff has also been observed due to the shortage of caregivers in relation to the large number of children (Hermenau et al., 2017). This hinders personalized care, leading to overcrowding and group care (Groark et al., 2011). Furthermore, all this is hindered by the lack of training of staff, with low levels of motivation and aptitude for the job (Hermenau et al., 2017; Lecannelier et al., 2014). It has also been found that these caregivers often work long hours, resulting in high levels of exhaustion and physical and mental fatigue (Groark et al., 2011).

These challenging conditions in institutional care have far-reaching implications for attachment issues. Research has examined how these conditions negatively affect the establishment of an exclusive and stable attachment figure, resulting in disruptions in bonds. Caregivers in these settings are often inaccessible, provide little physical and emotional contact and exhibit low sensitivity and responsiveness (Groark et al., 2011; Hecker et al., 2017; Jaar & Córdova, 2017). Jaar & Córdova (2017) describe in detail the phenomenon of chronic affective deprivation that these children often experience.

Based on the above information, Hermenau et al. (2017) and Sherr et al. (2017) detail how institutionalization seems to contribute to the cycle of rights violations by becoming a space of violence and abuse, which affects child development. Through a systematic review, Moretti & Torrecilla (2019) synthesize the negative effects of institutionalization on child development, across different dimensions such as cognitive, socio-affective, physical and neurological abilities.

As a result of these findings, several intervention programs have been developed in this care setting with the aim of preventing institutional maltreatment and

repairing attachment aspects, in order to function as a protective environment for the development of children in alternative care. In this context, it has been observed that high levels of commitment, emotional sensitivity and the provision of good quality care by caregivers, along with structural aspects such as a low number of children per caregiver, low staff turnover and minimal changes in the child's placement, function as protective factors for development (Almas et al., 2020; García Quiroga & Hamilton-Giachritsis, 2017; Hecker et al., 2017; Lecannelier et al., 2014; Lecannelier, 2019; McCall et al., 2019; Oiberman & Lucero, 2021).

However, beyond these programs and interventions, as well as institutional differences attributed to social contexts and the organizational, bonding and structural principles of each institution, the literature is extremely clear in postulating that institutions provide suboptimal care environments. For this reason, all institutional care should be the last resort for children separated from their parents, with the shortest possible duration. On this basis, deinstitutionalization and family strengthening policies are proposed, of which temporary foster care is one of them (Browne, 2017; Gaviria Chica et al., 2023; van IJzendoorn et al., 2020).

In Argentina, the foster care system involves a family that assumes the responsibility of caring for a child without legal parentage for a limited period of time, without the child acquiring the legal status of a son or daughter (Luna, 2001). Moretti and Torrecilla (2019) describe three foundations for the creation and existence of these programs. First, they are based on the principles of the Convention on the Rights of the Child, which recognizes children as subjects of rights and guarantees their right to a family environment. Second, they aim to avoid the widely studied negative consequences of institutionalization on children's development, predominantly as a preventive measure. Thirdly, the existence of these programs is justified by studies that highlight the healthy development of children who, after experiencing situations of violence and abuse, enter a protective foster family.

Given the information outlined above, it would be important to describe the development of social behavior, taking into account social skills and behavioral problems of those children who spend part of their lives in alternative care.

With regard to social skills, some studies have focused on this variable, particularly among institutionalized

children. They have found lower levels of social skills in institutionalized children compared to those living with their biological families (Lemos et al., 2021; Muzi & Pace, 2022; Naumova et al., 2019; Palacios et al., 2013; Ralli et al., 2017). Specifically, Palacios et al. (2013) found low scores on the dimensions of cooperation, communication and social engagement. More recently, Ralli et al. (2017) reported poor levels of interpersonal communication skills and cooperation with peers, while Naumova et al. (2019) found low scores in socialization, including interpersonal communication and playing and sharing leisure activities with peers. Finally, the majority of these studies documented low levels of empathy, with impairments related to theory of mind (Lemos et al., 2021; Muzi & Pace, 2022; Palacios et al., 2013; Ralli et al., 2017).

At the same time, social skills have been studied by comparing two groups of children: those who live or have lived part of their lives in institutions and those who live or have lived in foster care. These studies have shown positive effects of foster care in the social domain. For example, children in foster care were rated as significantly less reticent in social communication and as having higher reciprocal social participation and interaction skills than children in institutional care (Almas et al., 2015; Humphreys et al., 2018; Levin et al., 2015; Tang et al., 2021; Wade et al., 2020).

It is important to note that these findings regarding social skills may be influenced by several variables. Humphreys et al. (2018) and Wade et al. (2020) highlighted that early entry into foster care is associated with an increased likelihood of manifesting this adaptive social functioning. Meanwhile, Tang et al. (2021) stated that not all foster homes allow for this development, but those in which a secure attachment is established between the child or adolescent and the adult foster caregiver.

With regard to behavioral problems (externalizing and internalizing) in institutional care, higher levels of both behavioral problems have been observed in institutionalized children compared to those who have lived with their biological families since birth (Campos et al., 2019; Paine et al., 2021). This disparity is particularly pronounced for externalizing problems (Baptista et al., 2014; Nsabimana et al., 2019; Paine et al., 2021; Ralli et al., 2017). Regarding internalizing problems, some studies have specifically focused on depression in institutionalized children and adolescents, concluding that it has a high prevalence in this population (Gearing et al., 2015; Vinnakota & Kaur, 2018). In addition,

behavioral dysregulation has been studied in relation to externalizing problems. MacKenzie et al. (2017) described dysregulated temperaments in institutionalized toddlers, with intense crying that is difficult to calm.

There are other studies that compare the development of psychopathology and behavioral problems between institutionalized and foster children. They have found significant differences in externalizing problems, with children in foster care scoring lower. It is worth clarifying that none of these investigations found statistically significant differences between the two groups in internalizing problems (Humphreys et al., 2015; Koss et al., 2014; Wade et al., 2018). Along these lines, Sheridan et al. (2018) found high levels of depression in children in alternative care compared to children who have lived with their biological families since birth. However, they found no significant differences between children in institutional care and foster care.

Similar to social skills, the results obtained for conduct problems in this population may be influenced by various variables. A meta-analysis concluded that the moderating effect of Gross Domestic Product (GDP) was significant, indicating that studies conducted in countries with high GDP showed less differentiation between institutionalized and foster care children in terms of behavioral problems (Li et al., 2019). A second variable examined was the duration of institutionalization. It was found that the longer the time of institutional care, the higher the level of behavior problems (Kaur et al., 2018; Lamm et al., 2018; Troller-Renfree et al., 2016). A third factor, closely related to the previous one, relates to the age of entry into foster care. Similar to the positive effect of a younger age of entry into foster care on social skills, early entry into foster care is also highlighted as a protective factor against psychopathology (Wade et al., 2018). Fourth, the number of placement changes of

the child during alternative care has also been noted. Frequent placement changes of the child during alternative care (from one institution to another or from one foster family to another) predict higher levels of both externalizing and internalizing behavior problems (Almas et al., 2020).

Most of the cited studies belong to Anglo-Saxon and European countries, leaving a significant gap in research for Latin America (Fernández-Daza, 2017; García Quiroga & Hamilton-Giachritsis, 2016). Specifically in Argentina, there are no studies that focus on the development of social behavior in any of the alternative care modalities. Moreover, these studies mainly focus on school-age and adolescence, without directly observing preschool and kindergarten-age, which is one of the periods of greatest and fastest growth in a person's life, where the foundations for later realization are built (UNICEF, 2016).

Therefore, the main objective of this study was to analyze whether there were significant differences in social skills and externalizing and internalizing behavior problems among three groups of children: a first group of adopted children with a history of institutional care, a second group of adopted children with a history of foster care, and a third group of children who have lived with their biological families since birth.

Based on previous findings, it is hypothesized that there will be significant differences between the two groups of children who have lived in alternative care in terms of their social skills and behavioral problems. Children with a history of foster care score higher in social skills and lower on behavioral problems compared to children with a history of institutional care. Similarly, children who have lived in foster care do not differ on these variables from children who have lived with their biological family since birth.

## Method

### *Design*

A quantitative, non-experimental, cross-sectional and descriptive study was conducted. In addition, it was a comparative study because three groups of subjects were compared (Hernández Sampieri & Mendoza Torres, 2018).

### *Participants*

The non-probabilistic intentional sample (Hernández Sampieri & Mendoza Torres, 2018) consisted of 119 Argentine parents. Out of this total, 41 had adopted a child with a history of institutional care (IC); 38 had adopted a child with a history of foster care (FC); and 40

were biological parents whose children had no history of alternative care (BF).

Inclusion criteria for adoptive parents of children with a history of alternative care were: age of the child at the time of adoption (between 3 and 7 years), place of alternative care (institutional or foster care in Argentina) and the time elapsed since adoption ( minimum 10 days and maximum 3 years).

For biological parents of children without a history of out- of- home care, inclusion criteria were the age of

the child at the time of data collection (between 3 and 7 years of age) and the child's upbringing environment (biological family, without a history of out-of-home care).

As for the adults, 95.79% were mothers, while only 4.20% were fathers. The mean age was 40.67 ( $SD=7.13$ ). Among the children, 52.10% were boys and 47.89% were girls. The mean age was 4.92 ( $SD=1.52$ ).

In terms of place of residence, there were 10 different provinces. Most of the participants lived in Buenos Aires followed by Mendoza. Table 1 shows these data in detail.

**Table 1.** Province of residence of participants (N=119)

Province	Frequency	Percentage (%)
Buenos Aires	77	64.7
Mendoza	26	21.8
Santa Fé	3	2.5
Chubut	3	2.5
Córdoba	2	1.7
Entre Ríos	2	1.7
Río Negro	2	1.7
San Luis	1	0.8
Jujuy	1	0.8
Chaco	1	0.8
Total	119	100

Finally, it was examined whether there were statistically significant differences between the three groups according to age and gender of the children. An ANOVA test was

performed for age. It showed that there were no statistically significant differences in the age of the three groups of children:  $F(2, 116) = 1.47, p > .05$ . This can be seen in Table 2.

**Table 2.** Age comparison by type of care (N=119)

	Type of Care			F	p
	Institutional Care (n=41)	Foster Care (n=38)	Biological Family (n=40)		
Age (SD)	5.04 (1.39)	4.57 (1.70)	5.12 (1.45)	1.47	.234

*Note.* Subscript values indicate the mean of the scores that differed significantly in the Bonferroni *post hoc* analysis ( $p < .05$ ).

The Chi-square test was used for gender. No statistically significant association was found for gender with belonging to the group with no history of alternative

care or with a history in institutional care or foster care:  $X^2(2) = 3.69, p > .05$ . See Table 3.

**Table 3.** Association between gender and type of care (N=119)

Gender	Institutional Care (n=41)	Foster Care (n=38)	Biological Family (n=40)	X2	p
Female	43.9%	60.5%	40.0%	3.69	.158
Male	56.1%	39.5%	60.0%		

From this it is possible to infer a certain homogeneity between the three groups of children taking into account the variables of gender and age.

### Measures

#### Ad Hoc Sociodemographic Questionnaire

Information was requested of the gender, province of residence, and age of the adult respondent, as well as additional details about their children. Specifically: gender, age, grade level, and, if applicable, the type of alternative care they were in prior to adoption (institutional care or foster care).

#### The Preschool and Kindergarten Behaviour Scale (PKBS) (Merrell, 2003)

Adapted in Argentina by Reyna and Brussino (2009) and known there as “Escala de Comportamiento Preescolar y Jardín Infantil”. The original instrument assesses children’s social behavior in ages 3 to 6 through two scales: a first scale of Social Skills, including the sub-scales of *Social Cooperation*, *Social Interaction* and *Social Independence*, and a second scale of Behavior Problems, including the sub-scales of *Externalizing* and *Internalizing Problems*. Reyna and Brussino carried out the Argentine adaptation of the instrument, obtaining a reduced version that can be administered to caregivers of children between 3 and 7 years of age.

The Social Skills scale consists of 19 items: 8 for *Social Interaction*, 7 for *Social Cooperation* and 4 for *Social Independence*. The Behavior Problems scale consists of 24 items: 13 for *Externalizing Problems* and 11 for *Internalizing Problems*. Caregivers are asked to read each of the behavioral items and rate them on a 4-point Likert

scale based on how often they observe these behaviors in their children, where 0= *never*, 1= *rarely*, 2= *sometimes*, and 3= *frequently*. A higher score on the Social Skills scale indicates more adaptive behavior, whereas a higher score on the Behavioral Problems scale indicates more non-adaptative behavior.

Using confirmatory factor analysis, the trifactorial model of Social Skills showed good fit indices (GFI = 0.99; AGFI = 0.98; SRMR = 0.07), as did the bifactorial model of Behavior Problems (GFI = 0.99; AGFI = 0.99; SRMR = 0.06). In addition, Cronbach’s alpha index was calculated to estimate the internal consistency of the total scale and the sub-scales. The total scale of Social Skills showed a high internal consistency index ( $\alpha = .88$ ), as did the sub-scale of Social Interaction ( $\alpha = .84$ ), Social Cooperation ( $\alpha = .86$ ) and Social Independence ( $\alpha = .74$ ). Likewise, the total scale for Behavior Problems showed a high internal consistency index ( $\alpha = .94$ ), as did the sub-scale of Externalizing Problems ( $\alpha = .96$ ) and Internalizing Problems ( $\alpha = .67$ ). To assess the performance of the instrument with the sample in the current study, internal consistency was also calculated using Cronbach’s alpha index. Values were acceptable for all factors: *Social Skills Total Scale*:  $\alpha = .92$ ; *Social Interaction*:  $\alpha = .83$ ; *Social Cooperation*:  $\alpha = .83$ ; *Social Independence*:  $\alpha = .86$ ; *Behavior Problems Total Scale*:  $\alpha = .90$ ; *Externalizing Problems*:  $\alpha = .92$ ; and *Internalizing Problems*:  $\alpha = .75$ .

### Procedure

First, contact and communication were established with adoption registries and alternative care programs belonging to non-governmental organizations in different provinces of Argentina. Once the necessary permissions were obtained, these registries and programs searched their respective databases for adoptive families that met

the inclusion criteria. The agencies then contacted these families and invited them to participate in the research. Only those families who agreed to participate received a message or telephone call from the researchers. This communication explained that their participation was completely voluntary, and that the data would be kept confidential. Once they agreed, they were sent a Google Forms document to sign the informed consent form and to complete the questionnaires.

After data collection, the analysis was carried out using the Statistical Package for the Social Sciences (SPSS) 25.0, applying the ANOVA test. Before applying this test, the conformity of the assumptions was analyzed. First, the normality of the variables was evaluated by calculating the skewness and kurtosis. As a result of the analysis, values were found to be within those recommended by the literature, with all variables having a normal distribution (George & Mallery, 2011). Secondly, the homogeneity of variance was assessed. Normal variance was observed as the significance value was greater than 0.05 for all variables.

At the end of the study, a comprehensive written report of the findings was provided to the

authorities of the participating adoption registries and non-governmental alternative care programs. Additionally, a brief report was prepared for the participating parents.

**Ethical Considerations**

First, the research project was approved by a Committee of the *Pontificia Universidad Católica Argentina*, Mendoza. This evaluation included both methodological and ethical aspects.

In terms of risk levels, the study presented a minimum risk, as it involved answering a questionnaire about sensitive and intimate aspects of families (Ministerio de Salud, 2016). In this regard, the provisions of the Declaration of Helsinki (2000) and the UNESCO Universal Declaration on Bioethics and Human Rights (2005) were taken into account. All participating families gave their informed consent. They were previously informed about the voluntary nature of participation, confidentiality, and anonymity. This informed consent process ensured compliance with National Law No. 25.326 on the Protection of Personal Data (2000).

**Results**

**Table 4.** *Descriptive data on social skills and behavior problems by type of care: institutional care (n=41), foster care (n=38) and biological family (n=40) (N=119)*

Social skills	Type of Care	M (SD)	Minimum	Maximum
<b>Social Cooperation</b>	Institutional Care	12.71 (4.60)	3	21
	Foster Care	14.03 (4.24)	4	21
	Biological Family	15.72 (3.07)	10	21
<b>Social Interaction</b>	Institutional Care	13.68 (5.62)	4	22
	Foster Care	17.08 (4.31)	6	24
	Biological Family	19.47 (2.89)	13	24
<b>Social Independence</b>	Institutional Care	7.61 (3.36)	0	12
	Foster Care	9.82 (2.53)	4	12
	Biological Family	10.32 (1.84)	5	12
<b>Externalizing Problems</b>	Institutional Care	20.27 (9.00)	2	37
	Foster Care	13.52 (9.88)	3	39
	Biological Family	13.75 (7.14)	0	34



Social skills	Type of Care	M (SD)	Minimum	Maximum
Internalizing Problems	Institutional Care	14.76 (5.76)	2	25
	Foster Care	11.00 (5.16)	5	25
	Biological Family	9.27 (4.30)	1	26

First of all, it is important to detail the descriptive data of the two variables considering the three participating groups. These are summarized in Table 4.

Continuing with the inferential statistics, the following results are presented using the ANOVA test.

Regarding the social skill of Social Cooperation, significant differences were found:  $F(2, 116) = 5.70, p < .05$ . The Bonferroni *post hoc* analysis revealed that there were differences between the group of adopted children with a history in IC and the group in BF. The latter group obtained a higher mean in this skill. It is worth clarifying that there were no significant differences in Social Cooperation between the group of adopted children with a history of FC and the group in BF.

Significant differences were also found for the social skill of Social Interaction:  $F(2, 116) = 17.46, p < .001$ . The Bonferroni *post hoc* analysis showed that there were differences between the group of adopted children with a history of IC and the group in BF. The latter group scored higher on this skill. On the other hand, differences were

also observed between the group of adopted children with a history of IC and the group of children with a history of FC. The latter group obtained a higher mean in this skill. Finally, it is important to mention that no significant differences were found between the group of adopted children with a history of FC and those in BF.

Finally, significant differences were found in the social skill of Social Independence:  $F(2, 116) = 11.87, p < .001$ . The Bonferroni *post hoc* analysis indicated that these differences occurred between the group of adopted children with a history in IC and the group in BF. The latter group obtained a higher mean in this skill. In addition, another difference was observed between the group of adopted children with a history of IC and the group of children with a history of FC. The latter group scored a higher mean on this skill. Again, no significant differences were found between the group of adopted children with a history of FC and those in BF.

These three results on Social Skills can be seen in detail in Table 5.

**Table 5.** Significant differences in social skills by type of care (N=119)

Social Skills	Type of Care	M	F	p	$\eta^2$
Social Cooperation	Institutional Care (n=41) <sup>1</sup>	12.71			
	Foster Care (n=38)	14.03	5.70	.004	0.09
	Biological Family (n=40) <sup>1</sup>	15.72			
Social Interaction	Institutional Care (n=41) <sup>1,2</sup>	13.68			
	Foster Care (n=38) <sup>2</sup>	17.08	17.46	.000	0.23
	Biological Family (n=40) <sup>1</sup>	19.47			
Social Independence	Institutional Care (n=41) <sup>1,2</sup>	7.61			
	Foster Care (n=38) <sup>2</sup>	9.82	11.87	.000	0.17
	Biological Family (n=40) <sup>1</sup>	10.32			

**Note.** Subscript values indicate the mean of the scores that differed significantly in the Bonferroni *post hoc* analysis ( $p < .05$ ).

Significant differences were found for Externalizing Behavior Problems:  $F(2,116) = 7.74, p < .05$ . The Bonferroni *post hoc* analysis revealed differences between the group of adopted children with a history of IC and the group with a history of BF. The latter group scored lower on these problems. On the other hand, a difference was observed between the group of adopted children with a history of IC and the group of adopted children with a history of FC. The latter group scored lower on these behavior problems. It is important to note that no significant differences were found between the group of adopted children with a history of FC and the group in BF.

Finally, significant differences were also observed for Internalizing Behavior Problems:  $F(2, 116) = 12.16, p < .001$ . The Bonferroni *post hoc* analysis showed that the differences occurred, first, between the group of adopted children with a history of IC and the group in BF. The latter group scored lower on these problems. Second, there was a difference between the group of adopted children with a history of IC and the group of children with a history of FC. The latter group scored lower on these problems. Again, no significant differences were found between the group of adopted children with a history of FC and those in BF.

Both results regarding behavioral problems are shown in Table 6.

**Table 6.** Significant differences in externalizing and internalizing behavioral problems by type of care (N=119)

Behavioral Problems	Type of Care	M	F	p	n
Externalizing	Institutional Care (n=41) <sup>1 2</sup>	20.27			
	Foster Care (n=38) <sup>2</sup>	13.52	7.74	.001	0.12
	Biological Family (n=40) <sup>1</sup>	13.75			
Internalizing	Institutional Care (n=41) <sup>1 2</sup>	14.76			
	Foster Care (n=38) <sup>2</sup>	11.00	12.16	.000	0.17
	Biological Family (n=40) <sup>1</sup>	9.27			

**Note.** Subscript values indicate the mean of the scores that differed significantly in the Bonferroni *post hoc* analysis ( $p < .05$ ).

## Discussion

The main objective of this study was to analyze whether there were significant differences in social skills and externalizing and internalizing behavior problems among three groups of children: a first group of adopted children with a history of IC, a second group of adopted children with a history of FC, and a third group of children with no history of alternative care who have lived with their BF since birth.

Starting with social skills, adopted children with a history of IC scored the lowest on Social Cooperation. This could imply a lower ability to follow and comply

with instructions and rules given by adult caregivers, as well as poor levels of companionship and difficulty sharing belongings and toys with peers (Reyna & Brussino, 2009). This is consistent with the findings of Palacios et al. (2013) and Ralli et al. (2017) who found low scores on the cooperation dimension among institutionalized children.

Similar results were found for Social Interaction, with adopted children with a history of IC scoring significantly lower than the other two groups of children. This would imply greater poverty in the ability to understand the

behavior of others and to be sensitive to the problems of others (both adults and peers). This, in turn, would be related to greater difficulties in showing affection and defending the rights of others (Reyna & Brussino, 2009). This could be related to those studies that reported poor interpersonal communication as well as low levels of empathy in institutionalized children (Lemos et al., 2021; Ralli et al., 2017).

Also in Social Independence, adopted children with a history of IC scored significantly lower than the other two groups of children. This would correspond to a less self-confident development in social situations, with difficulties in playing with different children and making friends easily (Reyna & Brussino, 2009). This could be related to what was observed by Naumova et al. (2019): low scores in play and leisure activities with peers.

Findings from previous surveys and studies on institutional conditions would help to deepen the understanding of these identified data. First and foremost, the nature of the bond established between institutionalized children and their caregivers could explain the difficulties in developing social skills.

Assuming that these skills are learned (Lacunza & Contini de González, 2011), it is understood that institutionalized children may find it difficult to develop empathy and sensitivity towards their peers and adults. This difficulty arises when their caregivers are described as having low levels of sensitivity and responsiveness to the needs of these children (Groark et al., 2011; Hecker et al., 2017; Jaar & Córdova, 2017).

In addition, the achievement of Social Independence requires a present and available adult who is able to provide the child with feelings of security and trust that allow for the progressive development of autonomy. However, in institutional care, caregivers are often inaccessible and have little physical and emotional contact with the children, which does not foster an environment supportive of autonomous development, but rather one of loneliness (Groark et al., 2011; Hecker et al., 2017; Hermenau et al., 2017; Jaar & Córdova, 2017).

Finally, low levels of Social Cooperation, particularly in the area of companionship, and the associated difficulties in sharing belongings, could also be attributed to a care setting where overcrowding is common, hindering the possibility of having personal and privately used items. In institutional settings, everything is typically shared: toys, clothing, and even cleaning items such as towels or soap (Moffa et al., 2019). This may have

negatively impacted the sense of belonging and sharing based on what is perceived and identified as one's own.

The results enable the identification of foster care as a caregiving modality that allows favorable development in these three social skills. Children in this alternative caregiving modality obtained scores similar to those of children without a history of family violence and maltreatment who have lived with their biological families since birth. This is consistent with studies highlighting foster care as a protective factor for social dominance (Almas et al., 2015; Humphreys et al., 2018; Levin et al., 2015; Tang et al., 2021; Wade et al., 2020).

It is noteworthy that the characteristics and conditions of foster care are very different from those of institutional care, which may explain the significant differences found in social skills. First, it is a family environment that takes full and personal responsibility for the care of a child, taking into account its own needs and characteristics. On the other hand, these are families that, in order to be accepted into the program and assume the role of a caregiver, have undergone a psychological evaluation and have a certain level of family functionality and relationship modalities necessary for developmental protection. As some studies show, not every family can be a foster family. More specifically, the development of social skills in foster children requires families with secure attachment styles (Tang et al., 2021).

Continuing with the behavioral problems, significant differences were observed between the group of adopted children with a history of IC and the other two groups of children. In this group with a history of IC, scores were significantly higher on both behavior problems. From an externalizing perspective, this means increased levels of hyperactivity, aggression, fighting and impulsive or acting-out behavior. Meanwhile, from an internalizing perspective, it suggests increased levels of anxiety, social isolation, and depression in institutionalized children (Achenbach et al., 1987; Reyna & Brussino, 2009).

The results obtained are partially consistent with other studies that have found similar results (Baptista et al., 2014; Campos et al., 2019; Humphreys et al., 2015; Koss et al., 2014; Nsabimana et al., 2019; Paine et al., 2021; Ralli et al., 2017; Wade et al., 2018). However, they differ from some of the same studies in that they do not show significant differences specifically for internalizing problems (Humphreys et al., 2015; Koss et al., 2014; Wade et al., 2018).

It is necessary to mention that these differences between studies on internalizing behavior problems may be due to different variables, such as the gross domestic product of the country where the research is conducted (Li et al., 2019), the length of institutionalization of the children in the sample (Kaur et al., 2018; Lamm et al., 2018; Troller-Renfree et al., 2016), the age of entry into foster care (Wade et al., 2018) and the number of placement changes the participating children have experienced within alternative care (Almas et al., 2020).

As mentioned earlier, the caregiving environment can act as a protective or risk factor for the development of nonadaptive social behavior and psychopathology (Lacunza & Contini de González, 2011). The results lead to the assumption that the living conditions previously described and detailed in institutional care do not protect against these behavioral problems, as do the conditions in a foster family.

### **Conclusions**

It is crucial to consider that both groups of adopted children with a history of alternative care come from family environments with rights violations and, for the most

part, had records of violent experiences and intrafamilial mistreatment. However, the two groups differed significantly in terms of adaptive and non-adaptive social behavior. The foster care group achieved healthier scores, even similar to those of children without a history of vulnerability. This underscores the protective and restorative role of foster care.

This alternative care modality implies a public policy that intervenes in a risk situation, reconstructing the context and the relational environment of the children, achieving internal transformations in their personality and in their way of interacting with those around them.

For future studies, it would be important to focus on specific psychosocial characteristics of foster families to determine which ones promote more adaptive social behavior. This would allow for more clarity in the admission procedures for applicant families. It would also be positive to look more closely at the specifics of the institutions, such as their organizational, structural, and bonding principles, and to analyze how they relate to the development of children's social behavior. Finally, it could be enriching to administer the instruments directly to the children to obtain results from their own perspectives.

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