

Psychometric properties of the family communication scale in colombian population

Propiedades psicométricas de la escala de comunicación familiar en población colombiana

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SUMMARY

Family communication establishes a vehicle for the transmission of information between family members and completely marks the nature and quality of family life. Family communication can be understood as an index of the climate and quality of the family system.

Objective: *To determine the psychometric properties of the Family Communication Scale of Olson et al. (1982) in its 20-item version. The participants were 934 Colombian university students between 18 and 35 years old.*

Method: *A descriptive analysis of items and correlation with the scale was carried out, additionally a confirmatory factor analysis was carried out with the maximum likelihood method and varimax rotation. The internal consistency was evaluated using Cronbach's alpha and McDonald's Omega, followed by the analysis of the discrimination of the items through the biserial correlation coefficient.*

Results: *The results indicate that the scale is reliable for its use in the Colombian population between 18 and 35 years old.*

Keywords: *Family communication, parent/child communication, psychometric properties, validation.*

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RESUMEN

La comunicación familiar establece un vehículo para la transmisión de información entre los miembros de la familia y marca por completo la naturaleza y la calidad de la vida familiar. La comunicación familiar puede entenderse como un índice del clima y la calidad del sistema familiar.

Objetivo: *Determinar las propiedades psicométricas de la Escala de Comunicación Familiar de Olson y col. (1982) en su versión de 20 ítems. Los participantes fueron 934 universitarios colombianos entre 18 y 35 años.*

Método: *Se realizó un análisis descriptivo de los ítems y correlación con la escala, adicionalmente se realizó un análisis factorial confirmatorio con el método de máxima verosimilitud y rotación varimax. La consistencia interna se evaluó mediante el alfa de Cronbach y el omega de McDonald, seguido del análisis de la discriminación de los ítems mediante el coeficiente de correlación biserial.*

Resultados: *Los resultados indican que la escala es confiable para su uso en la población colombiana entre 18 y 35 años.*

Palabras clave: *Comunicación familiar, comunicación padre / hijo, propiedades psicométricas, validación.*

INTRODUCTION

For the general population, the family institution is the backbone of society; For this reason, one of the motivations that human beings have is related to affiliation, especially if it is related to affective relationships towards others (1). It is through the family as a natural institution that the actions developed by its members are important, in the way in which the self could freely express itself, through emotions, feelings, will, intelligence, conscience, values, and beliefs, before an intimate and close environment, to be happy with others, allowing individual growth and biopsychosocial maturation processes, to achieve comprehensive well-being; therefore, there is no more important bond for people than the one that demands and gets very early in their family nucleus and that is sustained during the evolutionary cycle (2).

Within families some dynamics affect their functioning and that has to do with communication processes, the latter represents a significant social tool for change, through it the feelings and thoughts of others are influenced, it is impossible

not to communicate since even when you are in silence something is communicated. People who can establish communication in a fluid and assertive way do better in many aspects of life. Nowadays, communication between parents and children is essential, it is important to talk with children and, above all, listen to them, to make them safe and easy-going adults, capable of living in a globalized and demanding world. Therefore, it is necessary to mobilize communication spaces, share family time and get closer to the other. The communication seeks to strengthen emotional ties and be attentive to the changes and needs of others, communication and getting closer to others allows us to identify when someone is going through a difficulty and it is possible to dialogue with the affected person to interact and know what to do (3-6).

Therefore, family communication not only constitutes a vehicle for the transmission of information between family members, but it completely permeates the nature and quality of family life. For this reason, family communication can be understood as an index of the climate and quality of the family system. As support for family life, a solid relationship between the different types of family communication (dialogue and communication conflicts) is foreseeable. In the model proposed by Olson (1979), family communication is analyzed as a dimension that, in addition to being a basic resource in the family, facilitates its functioning. The presence of double messages, criticism, empathy, messages that imply support, etc. are evaluated. From this point of view, the effect that one or another family form has on the development and evolution of the family is closely linked to the type of family communication present in the system. Positive and effective communication between its members facilitates the resolution of family transitions adaptively, while negative communication obstructs family development (7,8).

In this sense, family communication is more than a vehicle for transmitting messages that are presumably permeated by a specific family climate (9). On many occasions, family communication is both the origin and the consequence of the inability of the family system to evolve harmoniously. In this way, the presence of problems in family communication constitutes

a very reliable indicator that family functioning is far from being adequate for the well-being of its members.

Main studies on the family communication scale

Evaluating family communication has been a significant issue since the 1960s; much progress has been made in scientific knowledge regarding the implications that some characteristics may have on human development (10).

Various investigations show that families with positive communication, with an assertive dialogue, clear and coherent messages, provide support, show affection, and face conflict resolution strategies and skills, can optimally face challenges in education from home; While families that have negative communication, that excessively criticizes their members, do not express their feelings, frequently conflicts arise and do not have the skills to resolve them, they have difficulties listening and attending to the emotional demands and difficulties that arise, their ability to confront the education of their children in an assertive manner (11,12).

It is necessary to conceptualize parent-child communication, which is defined as the effective relationship between the filial subsystem and the parental subsystem that facilitates belonging and identification with the family system (7).

There is evidence through a study in which 339 dyads of parents and young adults participated, to whom the questionnaires on family environment, parenting, family communication, and family satisfaction were applied, to establish the relationship between participation, control, and young adult self-identity, that is, self-efficacy and psychological right; showed as findings that adaptability, balanced family cohesion, and open family communication were positively associated with family satisfaction of parents and young adults. While those authoritarian parents, with rigid limits, who exercised control over their children, were related to a decrease in autonomy and an exaggerated psychological right in young people (13).

Regarding the investigations carried out on psychometric properties of the family communication scale (7), there are studies carried

out in the Spanish (14) North American (15) and Italian (16) population; At the Latin American level, there are interesting studies in Peru (17) and the Latino population residing in the United States (18) that show that the family communication scale has adequate properties that make it a valid and reliable instrument to evaluate family communication in In those countries, the present investigation becomes the first study of psychometric properties of the family communication scale in the Colombian population and the second study in Latin America.

Despite the scientific interest in studying family communication, there are currently few assessment instruments that allow understanding the theoretical construct, in the case of Latin America there are few studies and most focus on the adolescent population, leaving aside the approaches that may Ask about family communication in early adulthood (people ages 18 to 40).

MATERIALS AND METHOD

Participants

The sample consisted of 934 Colombian university students (77.1 % women and 22.9 % men). The ages vary between 18 and 35 years with a mean age of 20.18 $\sigma = 2.12$ at the time of evaluation. Table 1 shows the descriptive statistics of the sociodemographic characteristics of the participating subjects.

Instruments

Sociodemographic characterization questionnaire

The questionnaire that measures sociodemographic variables such as sex, age, type of family of the participants, prepared by the authors.

Parent-Adolescent Communication Scale (ECPA; Barnes and Olson, 1982, 1989)

Family Communication Scale (Olson, 1988), Family Communication Questionnaire (C.A.-M

Table 1
Descriptive Statistics of the Sociodemographic Characteristics of the participants

Variables		% Frequency
Sex	Male	77.1 (N=214)
	Female	22.9 (N=720)
Age	18-23 years	95.2 (N=890)
	24-29 years	4.06 (N=38)
	30-35 years	0.6 (N=6)
Kind of family	Nuclear	90.1 (N=842)
	Extensive	9.9 (N=92)

Source: self-made.

// C.A.-P) by Olson and Wilson. *The Family Communication Questionnaire* (Olson et al., 1982) is made up of two scales. The first assesses the communication between the children and the mother - in our case from the point of view of the children - and the second assesses the communication with the father - in this case, also from the point of view of the children. Each scale consists of 20 Likert-type items that represent two major dimensions of parent-child communication: dialogue in communication and difficulties in communication. Openness in communication has to do with the presence in the parent-child dyad of positive communication, based on freedom, the free flow of information, understanding, and satisfaction experienced in the interaction. Communication problems, on the other hand, have to do with ineffective, excessively critical, or negative communication in the dyad. Thus, it focuses on aspects such as resistance to sharing information and affection or negative styles of interaction. The scale is the same for the mother as it is for the father. Here we present the scale referring to the mother and, in the case of the father, it would only be a matter of substituting mother for father. In the study carried out by the authors of the instrument, alpha coefficients of 0.88, 0.87, and 0.78 were obtained.

Ethical aspects

This study rigorously followed the ethical

aspects of research with human beings considered in Resolution # 008430 of 1993 by the Ministry of Health and Social Protection of Colombia and the deontological regulatory framework of the psychologist contemplated in Law 1090 of 2006 updated to June 2016 and Law 1164 of 2007 - Chapter VI, which includes professional secrecy, the right to refuse participation or withdraw, informed consent and the return of results. The participants signed an informed consent form where the objectives, procedures, risks, benefits, voluntariness, and confidentiality of the data offered for this research were clearly explained.

Data Analysis

Descriptive data analyzes were processed using the statistical program IBM SPSS Software®, Version 25, while the inferential data were processed with the LISREL 8.80 program.

Internal consistency was evaluated using Cronbach's alpha (19) and McDonald's Omega w (20). Values equal to or greater than $\alpha = 0.70$ $w = 0.70$ were considered satisfactory (21). Next, an analysis of the discrimination of the items was performed through the biserial correlation coefficient, to establish to what degree, the dimensions measured by the scale were also measured by the items. Correlations were obtained for each item in relation to its dimension, the quadratic residual was calculated for each item, and the percentage distribution of the responses in each of the alternatives. The existing correlations between the dimensions with the total scale were also calculated to determine if there is the independence of these with the global evaluation of the scale. Confirmatory analysis was performed to determine to construct validity using the LISREL 8.80 software.

RESULTS

Internal consistency

Table 2 shows the descriptive statistics and Cronbach's alpha and McDonald's omega values of the scale. Cronbach's alpha and McDonald's omega values were calculated with the sum of all the items defined by Lee (2020). The

estimates of the reliability indices of the scale as a global construct exceeded the traditional limit of 0.70 (21) both in the calculation performed using Cronbach's Alpha and Omega. although the omega value was lower, it was above the limit. On the other hand, the analysis of the two communication scales aimed at the father and the mother were located at values between 0.747 and 0.928, showing admissible indices to consider the test as reliable. However, the behavior of the mother and father positive perception subscales yielded discrepant indices between the calculations performed, as well as not admissible to consider their reliability, which is why their interpretation should be taken with caution (Table 2).

Item Analysis

Analysis of the items was carried out by identifying the quadratic residual to determine the factor load, the correlation analysis between the item and its dimension, and finally the percentage distribution of the response options. The lowest factor loadings were identified in items: 1, 12, 13, and 14 on the communication with the mother scale and items: 1, 3, 10, 12, and 13 on the communication with the father scale. The correlations of the item with the communication with the mother scale were identified three items with null and very low correlations (11, 13, 15, and 20), the rest of the items fluctuated between 0.356 ** and .790 **.

Table 2
Internal consistency of the Family Communication Scale

Scales	Min.	Max.	Half	DT	α	Ω
Total scale score	0	20	2.50	3.303	0.831	0.928
Mother communication subscale	36	100	65.94	7.842	0.633	0.747
Parent communication subscale	33	100	60.55	8.918	0.683	0.951
Mother dialogue	18	50	38.10	6.072	0.789	0.641
Mother difficulties	2	34	17.00	6.344	0.589	0.562
Positive mother perception	6	20	13.24	2.510	0.900	0.388
Negative mother perception	8	20	16.98	2.712	0.653	0.476
Parent dialogue	15	50	33.57	7.590	0.843	1.00
Father difficulties	18	57	34.07	6.253	0.566	0.978
Positive perception father	6	20	11.85	2.812	0.209	0.977
Negative perception father	6	20	15.00	3.379	0.737	0.999

Source: self-made.

In the scale of communication with the father, six items with null or very low correlations were identified (2, 11, 13, 15, 19, and 20), the rest of the items fluctuated between 0.228 ** and 0.479 **. When correlating the items with the total of the mother and father communication dimensions, very low but significant correlations were identified with items 3, 5, 11, 15, 18, and 19 in mother and 5, 11, 13, 15 18, 19, and 20. In the percentage distribution by the response, it is observed that the distribution in the test tends to 1 and 2 in all the items evaluated (Table 3).

Construct Validity

Correlation analysis between dimensions

The analysis of correlations between the different dimensions of the scale showed statistically significant correlations that fluctuated between 0.249 ** and 0.874 ** for communication with the mother (Table 4), and between 0.346 ** and 0.903 ** in the scale of communication with the father (Table 5) showing that all the elements and the grouping of the items are related to the construct of

Table 3
Item analysis: correlation and floor and ceiling effects of the Family Communication Scale

MOTHER COMMUNICATION	Correlation		Item- CM	Percentage distribution per response				
	Item-Dim	R ²		% 1	% 2	% 3	% 4	% 5
1. I can talk to you about my thoughts without feeling bad or uncomfortable	0.623**	0.140	0.431**	3.2	7.0	23.8	35.3	30.7
2. I usually believe what he tells me	-0.420**	0.536	0.355**	0.2	2.7	19.9	32.1	45.1
3. He pays attention to me when I speak to him	0.502**	0.350	0.278**	2.1	2.0	7.6	22.3	66.0
4. I dare not ask what I want or want	-0.404**	0.369	0.377**	21.6	12.7	12.3	13.7	39.6
5. He tells me things that hurt me	0.437**	0.421	0.233**	54.5	24.3	10.4	3.5	7.3
6. You can tell how I feel without asking	0.648**	0.261	0.539**	6.4	8.8	19.5	31.0	34.3
7. We get along	0.540**	0.520	0.322**	1.9	5.9	16.5	75.7	1.9
8. If I had problems, I could tell them	0.755**	0.576	0.492**	2.6	4.6	22.4	24.6	45.8
9. I easily show affection	0.659**	0.536	0.393**	0.6	7.3	15.3	26.4	50.3
10. When I am angry, I speak badly	0.410**	0.089	0.305**	11.9	27.4	31.9	19.7	9.1
11. I am very careful what I say	0.041	0.456	0.234**	3.0	15.1	22.4	25.3	34.3
12. I tell him things that hurt him	0.356**	-0.123	0.343**	49.3	26.3	14.6	8.4	1.5
13. When I ask him questions, he answers me wrong	-0.051	-.134	0.249**	44.8	33.9	13.4	4.6	3.3
14. Try to understand my point of view	0.669**	0.277	0.496**	3.1	12.0	19.7	39.0	26.2
15. Try to understand my point of view	0.278**	0.397	0.263**	6.0	22.9	33.8	20.1	17.1
16. I think it's easy to talk to him about problems	0.714**	0.546	0.494**	2.9	16.4	25.5	29.9	25.4
17. I can express my true feelings to you	0.790**	0.639	0.504**	4.7	9.6	19.0	24.5	42.2
18. When we talk I get in a bad temper	0.543**	0.418	0.233**	35.7	31.3	23.7	5.7	3.7
19. Try to offend me when he gets mad at me	0.443**	0.366	0.179**	51.6	21.1	16.5	4.9	5.9
20. I don't think I can tell you how I really feel in certain situations	-0.232**	0.388	0.429**	17.6	24.4	33.5	13.9	10.6
PARENT COMMUNICATION	Correlation Item-Dim	R ²	Item CP	Percentage distribution per response				
				% 1	% 2	% 3	% 4	% 5
1. I can talk to you about my thoughts without feeling bad or uncomfortable	0.305**	0.140	0.557**	14.9	16.6	32.8	15.0	20.8
2. I usually believe what he tells me	-0.150**	0.520	0.471**	2.4	12.6	23.0	30.6	31.4
3. He pays attention to me when I speak to him	0.247**	0.095	0.391**	1.1	7.4	16.5	24.6	50.4

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...continuation Table 3.

4. I dare not ask what I want or want	-0.404**	0.497	0.321**	23.7	15.1	17.1	12.0	32.1
5. He tells me things that hurt me	0.247**	0.498	0.207**	51.2	26.2	14.1	3.0	5.5
6. You can tell how I feel without asking	0.319**	0.559	0.605**	17.1	19.6	29.3	20.6	13.4
7. We get along	0.223**	0.652	0.440**	2.6	13.0	23.0	61.5	2.6
8. If I had problems, I could tell them	0.383**	0.626	0.529**	9.0	16.8	25.1	15.8	33.3
9. I easily show affection	0.375**	0.523	0.548**	4.0	15.4	25.2	22.9	32.5
10. When I am angry, I speak badly	0.346**	-0.109	0.246**	23.2	29.2	25.8	16.0	5.8
11. I am very careful what I say	-0.011	0.493	0.159**	1.2	14.0	20.8	25.5	38.5
12. I tell him things that hurt him	0.228**	-0.068	0.370**	47.6	29.7	15.0	3.7	4.0
13. When I ask him questions, he answers me wrong	-0.037	0.180	0.257**	42.5	33.0	16.9	4.9	2.7
14. Try to understand my point of view	0.348**	0.620	0.566**	7.5	18.7	21.8	32.2	19.7
15. Try to understand my point of view	0.199**	0.484	0.056	4.5	26.2	27.3	25.5	16.5
16. I think it's easy to talk to him about problems	0.377**	0.534	0.565**	10.3	23.1	28.8	22.3	15.5
17. I can express my true feelings to you	0.479**	0.674	0.644**	7.6	20.6	23.0	20.0	28.8
18. When we talk I get in a bad temper	0.215**	0.426	0.194**	36.4	32.2	21.8	6.4	3.1
19. Try to offend me when he gets mad at me	0.179**	-0.563	0.122**	49.5	24.2	14.8	6.5	5.0
20. I don't think I can tell you how I really feel in certain situations	-0.197**	0.354	0.245**	18.4	27.2	29.0	13.2	12.2

Note: Significant correlations (at the 0.01 level) are highlighted in bold; R² = Quadratic residual, CM = Mother communication, CP = Father communication.

Source: self-made.

family communication. When establishing the correlations between the specific dimensions between mother and father communication, a moderate association was detected 0.591 ** (Table 4).

Confirmatory Factor Analysis

To establish the construct validity of the confirmatory factor analysis (CFA) considering two models. Model one corresponds to the author's original proposal that considers the presence of two factors (communication with the mother and communication with the father) and a second model that considers the scale in a

one-dimensional way. As seen in Figure 1, the two-factor theoretical model was confirmed. Table 5 shows the goodness of fit indicators of the theoretical model. The GFI index showed a value of 0.50 indicating a reasonable adjustment considering that it is close to the perfect adjustment value which corresponds to 1.0 (22). The RMR (0.18) was located above the acceptable range that it establishes as reasonable in values between 0.05 and 0.08 as stated by Hair, Anderson, Tatham, and Black (22). The CFI that represents a comparison between the estimated model and the null or independent model and its values must range between 0 and 1.0, the value obtained in this study was 0.59 within the established range. The NNFI value compares the χ^2 , compares previously with its expectation,

Table 4
Correlation between the dimensions of the family communication scale

		MF1	MF2	MF3	MF4	PF1	PF2	PF3	PF4	TCM	TCP
Dialogue Mom (MF1)	Correl.	1	-0.353**	0.367**	0.874**	0.521**	-0.110**	0.180**	0.446**	0.724**	0.399**
	by Pearson Sig.		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Difficulties Mom (MF2)	Correl.	-0.353**	1	-0.331**	-0.409**	-0.136**	0.606**	-0.200**	-0.181**	-0.092**	0.039
	by Pearson Sig.	0.001		0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.239
Perception positive breast (MF3)	Correl.	0.367**	-0.331**	1	0.249**	0.123**	-0.224**	0.561**	0.062	0.652**	0.330**
	by Pearson Sig.	0.001	0.001		0.001	0.001	0.001	0.001	0.058	0.001	0.001
Perception breast negative (MF4)	Correl.	0.874**	-0.409**	0.249**	1	0.424**	-0.169**	0.086**	0.480**	0.598**	0.279**
	by Pearson Sig.	0.001	0.001	0.001		0.001	0.001	0.008	0.001	0.001	0.001
Daddy Dialogue (PF1)	Correl.	0.521**	-0.136**	0.123**	0.424**	1	-0.346**	0.492**	0.903**	0.346**	0.802**
	by Pearson Sig.	0.001	0.001	0.001	0.001		0.001	0.001	0.001	0.001	0.001
Difficulties Potato (PF2)	Correl.	-0.110**	0.606**	-0.224**	-0.169**	-0.346**	1	-0.513**	-0.411**	-0.012	-0.187**
	by Pearson Sig.	0.001	0.001	0.001	0.001	0.001		0.001	0.001	0.703	0.001
Perception positive potato (PF3)	Correl.	0.180**	-0.200**	0.561**	0.086**	0.492**	0.513**	1	0.374**	0.421**	0.707**
	by Pearson Sig.	0.001	0.001	0.001	0.008	0.001	0.001		0.001	0.001	0.001
Perception negative potato (PF4)	Correl.	0.446**	-0.181**	0.062	0.480**	0.903**	-0.411**	0.374**	1	0.239**	0.661**
	by Pearson Sig.	0.001	0.001	0.058	0.001	0.001	0.001	0.001		0.001	0.001
Total Communication breast (TCM)	Correl.	0.724**	-0.092**	0.652**	0.598**	0.346**	-0.012	0.421**	0.239**	1	0.591**
	by Pearson Sig.	0.001	0.005	0.001	0.001	0.001	0.703	0.001	0.001		0.001
Total Communication potato (TCP)	Correl.	0.399**	0.039	0.330**	0.279**	0.802**	-0.187**	0.707**	0.661**	0.591**	1
	by Pearson Sig.	0.001	0.239	0.001	0.001	0.001	0.001	0.001	0.001	0.001	

(**) Level of significance P<0.01 (bilateral); (*) Level of significance P<0.05 (bilateral)

the degrees of freedom of the base model (gb) and the model in question (g), values greater than 1 tend to indicate overparameterization of the model and in this case, the value thrown is within the established limits. The PNFI relates the constructs to the theory that supports them. The closer it is to 1.0, the greater its ratio, so the

value of this index is in a medium range (0.55). And finally, the RMSEA that accounts for the discrepancy in degrees of freedom measured in population terms yielded a value of 0.162 which can be considered acceptable considering that it is located above the range between 0.05 and 0.08.

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Table 5
Confirmatory factor analysis models

Model	χ^2	Df	χ^2/ gl	GFI	RMR	CFI	NNFI	PNFI	RMSEA
Model 1. Two factors	18749.85	739	25.371	0.50	0.18	0.59	0.57	0.55	0.162
Model 2. A factor	20556.47	740	27.779	0.48	0.18	0.56	0.55	0.52	0.169

χ^2 = normal theory weighted least squares chi-square; df=degrees of freedom; gfi=goodness of fit index; rmr=root mean square residual; cfi=comparative fit index; nnfi=; non-normed fit index; pnfi=parsimony normed fit index; rmsea=root mean square error of approximation

source: self-made

DISCUSSION AND CONCLUSIONS

The evaluation of family interaction processes is an important resource for making specific diagnoses on the functioning of the family system, its assessment provides valuable information for the formulation of interventions that contribute to the strengthening of this fundamental nucleus for the development of societies.

Communication is the cornerstone to promote cohesion among its members since it transcends the possibility of “expressing” some type of content and gives a symbolic place to the senses, meanings, emotions, among other elements that will ultimately contribute to the well-being of its members. members (17).

Considering the existence of different types of communication, which in families can occur between spouses, siblings, and children with their parents, this study focused specifically on the communication of adolescents and young adults with their parents. This type of communication is an important indicator to determine the level of family functioning, as well as its degree of cohesion and adaptability (8,23); According to different studies, it can constitute a protective or risk factor for unhealthy behaviors in this population (24-29).

The communication with parents scale is a diagnostic tool that allows evaluating communication with mother and father independently, its original structure proposes a bifactorial composition (dialogue with mother, dialogue with father) although its authors proposed the analysis of three additional dimensions (difficulties, positive perception and negative perception) (Barnes and Olson, 1982),

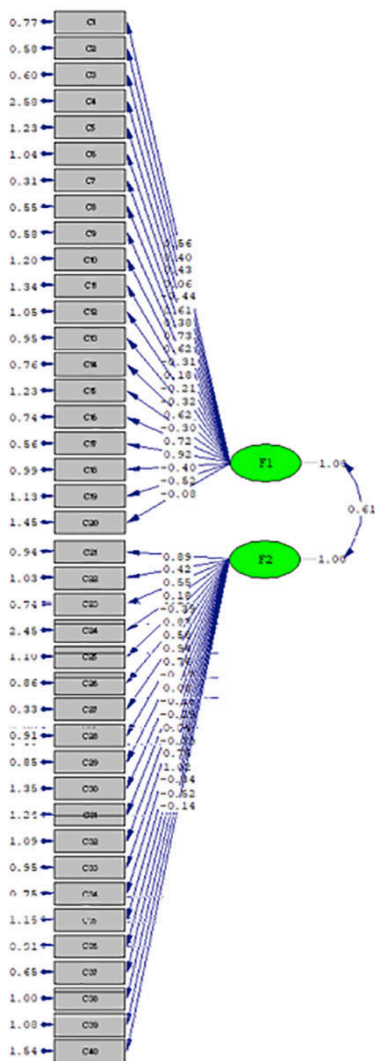


Figure 1. Confirmatory factor analysis model.

even though its empirical evidence is scarce.

Now, the results of the present study showed reliability indices for the global score of the scale of 0.83, while for the bifactorial structure 0.63 in the subscale of communication with mother and 0.68 in the subscale of communication with father, although these scores were significantly increased by the Omega calculation to 0.74 and 0.95 respectively.

These results are similar to those found in the Peruvian population (17) where alphas between 0.80 and 0.90 were found; in the Spanish population (14) where alphas between 0.89 and 0.88, and 0.87 and 0.89 were obtained; in the North American population (15), which showed alphas of 0.84 and 0.95; in the Italian population (16) who obtained alphas of 0.83 and in the Latin population residing in the United States (18), whose alpha was 0.89.

In general terms, it is possible to affirm that the reliability of the instrument is high considering its indices and the coincidence of these with the results of studies carried out with different populations, which shows stability in these data, except for a study carried out in the Netherlands where the values they were a bit low (0.65 and 0.85) compared to most studies (30). One aspect to consider is that the studies found do not report data on the additional scales originally proposed by the authors in addition to communication with mother and father.

Regarding the correlations between the dimensions of the scale, this study found moderately high significant associations of 0.59** for the two subscales, data that coincide with that found by Jackson et al. (30), who identified correlations of 0.45 ** and 0.51 ** question that shows an important relationship between the factors that correspond to the same theoretical construct.

Regarding the behavior of the items, these showed significant correlations with the two subscales that make up the questionnaire, except for item 15, which showed a very low value. This information partially agrees with what was found by Araujo-Robles, Ucedo-Silva and Bueno-Cuadra (17), who identified problems with items 11 and 16, and with Jackson et al. (30), who identified as items problematic on 18, 2,

and 15. This information suggests the need to analyze in-depth the relevance of item 15 in the Latin American population.

Regarding the validity of the instrument, only one study was identified that reported the indices generated by the evaluation of the structural model corresponding to the scale (17), which showed pertinent adjustment values. This information partially coincides with the results obtained in this study, although the RMSEA was not reported by these authors.

It reflects on the structure in general terms of the scale, which according to the results of the study and the research purposes of the authors consulted affirm the hypothesis of a bifactorial structure, especially when the subscale positive perception of the mother and father showed serious problems of reliability when performing the calculation using Cronbach's alpha and McDonald's Omega, as well as a deficit in the analysis of the items, from which it is possible to conclude that it presents a negative behavior among the Colombian population, therefore it would not be convenient to consider it at the time of evaluations.

Finally, it will be necessary to consider as an important limitation of this study, the lack of evaluation of similar measures that allow reviewing the concurrence with instruments that assess similar constructs.

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