

# The Need to Belong (NB) in Adolescence: Adaptation of a Scale for its Assessment



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## Abstract

The need to belong (NB) is a fundamental human motive and consists of a strong impulse to form and maintain a minimum amount of meaningful and positive interpersonal relationships. The aim of this paper is to present the adaptation of the NB scale for its use with adolescent students. 709 youths between 12 and 20 years old of the City of Buenos Aires (Mean=14.97, SD=1.73) participated. The NB scale shows adequate reliability indicators, evidence of content validity and construct validity. The NB was studied in relation to sex and age. The obtained results show that female adolescents present a higher NB level indicating the relevance of considering gender in psychological phenomena strongly influenced by the socio-cultural context.

**Keywords:** Need to Belong; Adolescence; Social Activities; Psychological Assessment

**Abbreviations:** NB: Need to Belong; NTBS: Need to Belong Scale; EFA: Exploratory Factor Analysis; CFA: Confirmatory Factor Analysis

## Introduction

### All individuals wish to be Socially Accepted

Adolescents permanently interact with the context they belong to. Family and peer group are considered as two main influential contexts in youths groups [1-3]. The peer group and/or group of belonging have always played a decisive role in the socialization of the adolescent and it is one of the few youth agents poorly controlled by adults. To Baumeister & Leary [4], the need to belong (NB) is a fundamental human motive and starting point to understand and integrate interpersonal human behavior. To these authors, the NB is a strong drive to form and maintain a minimum amount of meaningful and positive interpersonal relationships. To Osterman [5], it is possible to conclude that belonging is an extremely relevant term since it has a deep impact in motivation and human behavior. To this author, the NB is a human characteristic that drives people to obtain stronger and longer-lasting relationships promoting subjective welfare. To Delle [6] this need includes two aspects: frequent interactions with just a few people and interactions that take place in the context of a stable welfare framework for the subjects. The interactions with a sequence of constant changes will be less satisfactory than repeated interactions with the same person. The loss of belonging could become a real deprivation and cause a number of diseases. The NB goes

beyond wanting to be close to other people; it makes it possible for humans to construct culture.

According to Baumeister & Leary [4] many emotional problems occur because people fail to satisfy their need to belong. To Baumeister RF [7], building social bonds is one of the processes that are in the base of all human motivation. Morrison [8] concludes that individuals who attribute a main role to others' opinions in relation to themselves have a high need to belong. These findings indicate that although the NB influences people, making them sharper on the social perception of certain dimensions (e.g. decoding nonverbal cues), it also makes them sharper on other dimensions (e.g. recognition of the opinion of their peers in relation to issues of their own personality). People are motivated to build the social environment in a way that suits their need to belong.

Kelly et al. [9] clarify that all individuals desire to be accepted and belong to a social group. People simply differ in the amount of their desire for acceptance and belonging. Thus, the NB could have two facets: interpersonal acceptance and belonging properly said, both being the «heart» of the same construct. Inter-individual differences in relation to the NB are connected to a wide variety of traits, values, emotions and behaviors that have important implications for social and emotional life.

Motivation or need to belong is an important construct to be evaluated and investigated.

## What is known about this Topic in Adolescent School Population?

Although research on this issue in the context of schools is less extensive, the findings are strong and consistent: students who experience social acceptance are more highly motivated, engaged in learning and with the school, and have a better performance than those students who experience less social acceptance [2]. Then, from an individual viewpoint, the benefits are clear. There is also evidence that this individual sense of acceptance spreads and affects the quality of relationships with others, especially if the norms and values of the context encourage and facilitate interaction based on support among students.

To Baumeister [10], gender differences reflect varied social ways of expressing the need to belong. They suggest that men and women are equally sociable and take care of their relationships with the other. But the sociability of women is oriented towards a very close dyadic relationship, whereas the sociability of men is oriented towards large groups. The findings of international studies show higher NB in women and it is explained in cultural-evolutionary motives [11]. Women can establish deeper and more stable relationships, while men show the need of variable relationships and not necessarily intimate. No significant relationships have been found according to age. If belonging is a motivation and/or a need, its impediment must produce a variety of negative, defensive and/or adaptive reactions. Some Argentinean researchers have worked on themes of adolescence from various perspectives providing complementary views in relation to different problems in this group [12-15], but the theme of the NB and its assessment in adolescents has been poorly studied in Latin America. The general aim of this paper is to present the adaptation of the NB Scale for its use with adolescent school students.

## Specific Objectives

- a) To present the exploratory factor analysis for the determination of the factors underlying the data.
- b) To submit the confirmatory factor analysis with the proposed model
- c) To present descriptive statistics of the NB scale's adaptation.
- d) To show the relationships between NB, sex and age.

## Hypotheses

- a) Hypothesis 1: The NB is higher in women than in men
- b) Hypothesis 2: There is no relation between NB and age.
5. Methodology

## Participants

The sample consisted of 709 participants between 12 and 20 years old (mean=14.97, SD=1.73), of which 63.8% were women. 44% attended public schools and 56% a private school.

## Instruments

**Sociodemographic Questionnaire:** Specifically designed for this study, it tests the sociodemographic characteristics of the participants.

**Need to Belong Scale (NTBS [9]):** After Baumeister & Leary [4] highlighted the relevance of the NB construct, Schreindorfer and Leary developed a self-report measure of the desire to be accepted and belong in order to be used in research. The initial pool of items was made of 23 statements that the subject had to evaluate in relation to the degree in which he desired to be accepted by other people, to see the opportunities to belong to social groups and to react negatively when he was rejected. Using the item-total correlation, an exploratory factor analysis, confirmatory factor analysis and reliability as criteria, the initial pool of items was reduced to 10. The 10 items of the NTBS possess an adequate Inter-Item correlation (Cronbach Alpha superior to .80) and other adequate validity criteria [9].

The process of linguistic adaptation Leibovich [1], non-published paper included different instances: Individual interviews with adolescents, from which through questions about the peer group, the youth spoke of belonging to it and the feelings this generated; translation and back-translation procedure of the original instrument where translators were expert psychologists in psychological assessment (afterwards, the answers given by the adolescents were used for the conceptual and linguistic equivalences of the items), pilot test (a group of adolescents was asked to complete the adapted test and to make comments in relation to the clarity and content of the items), final scale evaluation by assessment specialists who had to value the degree in which the items represented the NB construct. A .71 Alpha was obtained in the first application. The NTBS in its adapted version is made up of 10 items that test the feelings of belonging (need to belong and be accepted) in the youth in relation to his group. The answers to the items must be marked according to a Likert Scale leading from 1 to 4 points (e.g. "Not like this", "Hardly ever like this", "Usually like this", "Exactly like this"), except in inverse items (items 1, 3 y 7) leading from 4 to 1.

## Procedure

The authorities of the schools were contacted, the aims of the research were explained to them and permission for the study was obtained. The scales were administered in groups by trained evaluators, prior explanation of the reasons for the application. The adolescents participated voluntarily and anonymously, with written consent from parents when they were under 18 and

written consent signed by them, when they were older. Feedback was given to them about the test results in sessions designed for that purpose.

**Data Analysis**

The properties of the scale were analyzed with descriptive statistics. «T» Student tests were used to investigate gender differences in NB. A linear Pearson correlation (r of Pearson) was used to study the association between the NB and age, and the relationship between the factors. An exploratory factor analysis (EFA) with Varimax rotation (orthogonal rotation) was performed to understand the structure underlying the set of items and determine the number of factors to extract. Following Tabachnick, Fidell’s recommendations [16], after a first solution without rotation, the correlation between the facets was studied to determine whether orthogonal or oblique rotation was performed. Since the correlation between factors within each temperamental dimension was 200 average (predominantly low according to Cohen’s criteria), it was chosen to use the Varimax method (orthogonal rotation), which minimizes the number of variables that have high loadings per factor, simplifying the interpretation of the factors.

In order to decide the number of factors to extract some of the updated criteria proposed by Lloret et al. [17] was followed not only the scree plot of the eigenvalues of Cattell was taken into account to identify the slopes of the factorial solution, but also it was sought that the resulting model could combine the best possible psychometric indices with a clear meaningful structure from the starting theory following the recommendations of some authors for instance [18]. Other indices of adequacy of the data to the EFA were considered: Kaiser’s KMO and Bartlett’s test of sphericity. In turn, the communalities of each item were taken into account to estimate the portion of the variance of each item explained by the common underlying factor of that set of items. Following the criteria of Lloret et al. [17], it was regarded as appropriate a KMO of 70 or higher and items whose communalities were higher than 30.

A reliability analysis for each factor and for the total score through an analysis of internal consistency (Cronbach Alpha) was performed. A confirmatory factor analysis (CFA) was used to confirm the model suggested by EFA. For the CFA, those variables that did not comply with the assumption of multivariate normality the maximum likelihood were used as a method of estimation. To test the fit of the model the following indices of incremental and absolute fit were used:

- a) RMR (Root Mean Residual);
- b) RMSEA (Root Mean Square Error of Approximation). For these indices, it could be considered that values at or below .08 indicate a good fit [19].
- c) GFI (Goodness of Fit Index);

d) AGFI (Adjusted Goodness of Fit Index). For these indices, it could be considered as fit values equal or superior to .90 [20,21].

**Results**

**Objective 1- Exploratory Factor Analysis of NB Scale**

All of the items presented an adequate discriminatory power and loadings higher than .30, except for item 7 which presented low loading (Table 1). The number of extracted factors was 2. The total explained variance was 38%. The adequacy index of the Kaiser-Meyer-Olkin sample yielded a coefficient of 0.75, so it can be stated that data matrix are suitable for the application of factor analysis. The Bartlett test of sphericity was significant (p <.001). Communalities were above .30. Both factors obtained eigenvalues higher than 1. Factor I was defined by the sum of items 2, 4, 5, 6, 7, 8, 9 and 10, accounting for 23.8% of the variance, while Factor II was defined by the sum of items 1, 3 and 10, accounting for 14.9% of the variance. The reliability analysis yielded a Cronbach’s Alpha of .647 for Factor I and of .468 for Factor II.

**Table 1:** Exploratory Factor Analysis with Varimax rotation.

Item	Factor I	Factor II
1	.035	.768
2	.337	.175
3	.015	.708
4	.566	-.129
5	.604	.217
6	.549	-.037
7	.218	-.136
8	.681	-.029
9	.637	.219
10	.603	.443

**Objective 2 - Confirmatory Factor Analysis**

The purpose of this analysis was to evaluate the fit of the obtained data to the conceptual NB model suggested by AFE, thus contributing to the construct validity of the scale. The two-factor model, in which the first latent factor saturates items 2, 4, 5, 6, 7, 8, 9 and the second factor saturates items 1, 3 and 10 of the scale through confirmatory factor analysis, was tested by the maximum likelihood method. The variables that compose the scale were transformed to natural logarithm as they did not meet the assumption of multivariate normality. The results showed excellent fit indices (AGFI=.918; GFI=.948; RMR=.017; RMSEA=0.0678). Figure 1 presents the model with the regression loadings of the variables, ranging from .13 to .59, in all cases the loadings were significant (<.05). Collinearity between both two factors is high (.68), but not enough to justify the collapse of both factors (Figure 1).

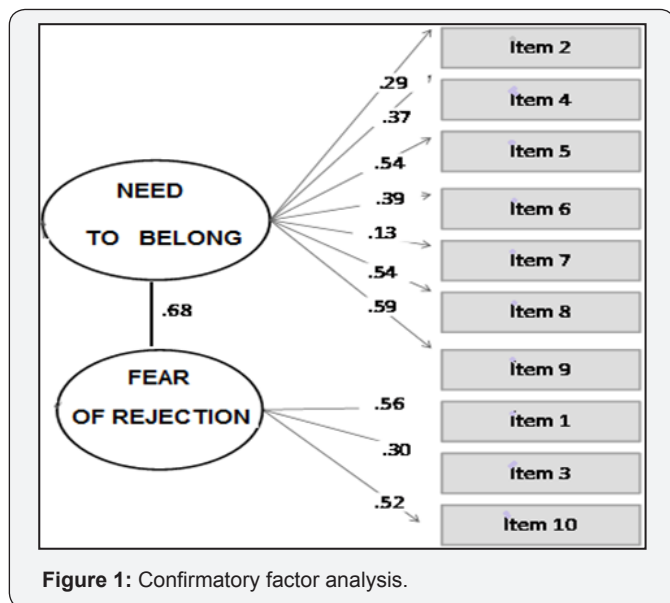


Figure 1: Confirmatory factor analysis.

**Objective 3- Descriptive statistics of the NB scale Total Score and its Factors**

When getting the descriptive statistics of the total score of NB, values ranging between 13 and 40 were observed, with a mean of 27.8 (SD=4.94), and an asymmetry coefficient of -0.103. While the largest number of observations appear to be concentrated in the intermediate values of the variable, a Shapiro Wilk normality test showed that the distribution was significantly away from a normal pattern,  $SW=.99, p < .01$ . Given the high  $n$  it was decided to use parametric tests justifying their use by the Central Limit Theorem. The reliability test of NB scale determined a Cronbach Alpha of .665. A significant positive correlation between the scores of both factors was found,  $r=.481, p < .001$ , with a coefficient of determination  $r^2=.231$  (Table 2).

Table 2: Descriptive Statistics for the total scores of Factor I and Factor II of the NB Scale.

	Factor I	Factor II
Mean	22.74	7.3
Standard Error of the Mean	.17	.08
Median	23	7
Mode	22	8
Standard Deviation	4.4	2.13
Variance	19.39	4.53
Assymetry	-.301	-.148
Mínimum	8	3
Maximum	32	12

**Objective 4- NB, Sex and Age**

**Total NB according to sex**

The descriptive statistics of the total score of NB based on gender are shown in Table 3. The means between women (28.24) and men (27.04) were compared through Student's "t"

test for independent samples. It was found that women showed significantly higher values than men,  $T(707)=3.14, p < .003$ .

Table 3: Descriptive Statistics of the total score of NB according to sex.

	Women	Men
Mean	28.24	27.04
Median	28.00	27.00
Mode	27.00	25.00
Variance	23.95	24.46
Standard Deviation	4.89	4.94
Standard Error of the Mean	.23	.31
Assymetry	-.17	.01

**Differences by Sex in NB Factors**

As it has been observed with the total scores of NB, women obtained higher medium values than men in both factors, these differences being significant in Factor I,  $T(692)=2.66, p < .01$ , as well as in Factor II,  $T(699)=3.81, p < .001$  (Table 4).

Table 4: Mean and Standard Error of the Mean (SEM) of women and men for the total score of Factor I and Factor II.

		Mean	SEM
Factor 1	Women	23.08	.20
	Men	22.17	.28
Factor 2	Women	7.53	.09
	Men	6.90	.14

**Age and NB**

To detect associations between age of subjects and the total score of NB, a linear Pearson correlation was performed, which showed a slight negative association between the two variables,  $r=-.09, p < .02$ . However, when performing the same analysis segmenting the sample by gender, it was observed that in women this relationship was not significant,  $r=-.02, p > .58$ , whereas in men a  $r=-.24, p < .001$  was obtained. These data shows that higher NB values tended to pair with older age in men but not in women in the sample.

**NP Factors and Age**

It was found a slight negative correlation between age and Factor I values,  $r=-.08, p < .04$ , and Factor II values,  $r=-.1, p < .01$ . As it has been observed with the total score of NB, when these associations were separately analyzed between women and men, the first associations between age and both factors were not significant,  $p < .21$ , whereas in men a significant relation was found with Factor I,  $r=-.22, p < .001$ , and Factor II,  $r=-.19, p < .01$ .

**Conclusion and Discussion**

The study of the interaction between the youth and his psychosocial context of belonging is essential to understand any subject matter in this population. The NB is a central concept since it is basically related to the «significant others» of the

adolescent's psychosocial context. This study represents a contribution to research in the assessment of the NB in Hispanic speaking contexts with adolescent school students. The NB Scale in its adapted version shows adequate reliability and content validity. Also, it has adequate construct validity. Unlike the version which was the starting point, in our adaptation two factors were extracted, both with a moderate percentage of explained variance, being the total variance of 38%. The inter-factor correlations account for independent but related factors. Leary et al. [9] proposes to consider two aspects of the NB: acceptance and belonging. In our case, the EFA also indicates that it is necessary to consider two factors. Factor I, given the content of the items (e.g. «I have a strong need to belong to a group of friends», «I do not like to be alone», etc.), would be assessing the tendency to gregariousness, the need to feel part of a group and positive feelings or emotions in relation to the need to belong. It is the factor that captures Leary's construct of NB the most; therefore, it is the heart of the NB, so this factor will be referred to as Need to Belong.

Factor II includes items related to concerns about not being accepted by others, so it will be hereinafter referred to as «Fear of Rejection». It captures the negative feelings and emotions regarding the rejection or concerns about the possibility of not being accepted (e.g. «My feelings quickly hurt when I feel that others do not accept me,» «I care when I am not included in the plans of others»). The confirmatory factor analysis replicated the model of two factors (Need to Belong and Fear of Rejection). The core of the NB is based on the fact that people have a strong and permanent motivation to start and maintain a certain minimum number of social relationships. As stated earlier, if belonging is a motivation and a need, its impediment must produce a variety of negative, defensive and/or adaptive reactions, fear of being rejected or not accepted.

Jones 1996 describes the matter asserting that a great number of youths are "suffocating" due to lack of human connections and have been protected under "the blanket of despair". The findings about the effects of social exclusion (Fear of Rejection) indicate the importance of building an inclusive society and that allows ways to feel connected with others. For Baumeister [7] social exclusion generates the increase of aggression, reduces mutual aid and cooperation, which combined with low self-control produces self-defensive behaviors and may generate inequalities in the intellectual area. In our context, the NB is manifested as a mere Need to Belong (which has also been obtained by the authors of the scale), including Fear of Rejection (Factor I and II).

In relation to sex and age, there have been some interesting results that deserve discussion and provide data in terms of external validity of the inventory. Adolescent women have obtained higher values than men in total NB, in Factor I and Factor II. Thus, consistent with what is found in international literature, young women show a greater need for stable ties

and for feelings of acceptance by significant others. We agree with Leary et al. [9] in that age and NB this relationship is very poor. While the NB had not been studied previously in our environment, some results obtained with constructs related to the NB variable show the importance of considering gender in psychological phenomena strongly influenced by the socio-cultural context [22].

In a study with children and pre-adolescents, it was found that social acceptance (the degree to which the subject perceives that he is accepted by his peers, he has friends and feels popular) was a stronger predictor of self-esteem in girls than in boys [23]. Specifically, it was noted that the domains that predict self-esteem for them (boys and girls) are the same, but for women the main predictors of global self-esteem were the self-perception of social acceptance and behavior, while for men the main predictor of self-esteem was the self-perception of physical appearance [24]. In another study aimed at investigating adolescent personality, it was found that women are more friendly and sociable than men and this is a characteristic trait of our context, since this difference was not found in other cultures [25]. In a study in which gender differences in relation to the perceived emotional intelligence were studied, it was found that women scored higher on those factors that were more associated with individual and social welfare. Women have the ability to perceive their own emotions more clearly, which is supposed to enable them to better understand the moods of others and thus develop satisfying relationships [26]. In a recent study, NB was associated to heavy episodic drinking only in women.

These results prove the relevance that the social dimension has for female adolescents, as it can be erected as risk factor or protector factor of alcohol consumption, strong determinant of the concept of oneself in the academic world and global self-esteem and protector factor of fear of rejection by the peer group. An interesting fact is found in relation to age. While the NB remains stable for women as they grow older, for men this variable decreases with age, when considering the total NB and when considering the factors separately (Factor I: Positive feelings and emotions in relation to the NB; Factor II: negative thoughts and feelings about not being accepted). Since the sample is up to 20 years, the behavior of this variable in other stages of the life cycle is yet unknown.

We agree with Rodríguez [27] that the NB becomes a field to elaborate the changes and the unique challenges of adolescence. Belonging to a peer group as an element of identifying differentiation plays a central evolutionary role. The differences in the amount of desire to belong are related to a wide variety of traits, values, emotions and behaviors in a particular socio-cultural context. Coinciding with Baumeister & Leary [4], all individuals wish to be socially accepted. Leary et al. [9] clarify that all individuals want to be accepted and belong to a social group; people differ in the amount of their desire for acceptance and belonging. We propose the version here suggested for its use

in research, in Hispanic speaking contexts. We believe that this adaptation evaluates the NB in a valid and reliable manner in school adolescents. It is an additional contribution to be taken into account in any adolescent assessment due to the weight or role this variable plays in the evaluation made by the adolescent of the look of his significant-others in the formation of his personality [28-30].

In short, belonging to a peer group plays an identification role and becomes a need for young people. A good deal of human behavior is determined by the impressions and evaluations that others have of us. While the teacher-student relationship is clearly crucial, relationships with peers also have a significant impact on the emotional well-being of adolescents, and the extent of the relationships is not limited to the school context. An important consideration, and which should be taken into account, is that students transfer interpersonal skills and attitudes they learn at school to their relationships with other people and groups as members of society in general. We propose to continue in the study of the relationships of this concept with other psychological variables and incorporate the NB assessment in research with adolescents.

### References

1. Leibovich De, Figueroa NB (2010) Ecoassessment: an ecopsychological perspective in assessment. Family context and its assessment from an ecopsychological, Editorial Guadalupe, Buenos Aires, South America pp. 13-25.
2. Mellor D, Stokes M, Firth L, Hayashi Y, Cummins R (2008) Need for belonging, relationship satisfaction, loneliness, and life satisfaction. *Personality and Individual Differences* 45(3): 213-218.
3. Oliva A, Ríos M, Antolín L, Parra A, Hernando A, et al. (2010) Beyond the deficit: building a positive adolescent development model. *Infancia y Aprendizaje* 33(2): 1-10.
4. Baumeister RF, Leary MR (1995) The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin* 117(3): 497-529.
5. Osterman KF (2000) Students' need for belonging in the school community. *Review of Educational Research* 70(3): 323-367.
6. Delle FA, Massimini F, Bassi M (2011) Psychological selection and optimal experience across cultures. *Social empowerment through personal growth*. Springer, New York, USA.
7. Baumeister RF (2012) Need-to-belong theory. In PAM Van Lange, AW Kruglanski, ET Higgins (Edn). *Handbook of theories of social psychology* 2: 121-140.
8. Morrison KR, Matthes J (2011) Socially motivated projection: Need to belong inferences perceived opinion consensus on important issues. *European Journal of Social Psychology* 41(6): 707-719.
9. Leary MR, Kelly KM, Cottrell CA, Schreindorfer LS (2013) Construct validity of the need to belong scale: Mapping the nomological network. *Journal of personality assessment* 95(6): 610-624.
10. Baumeister YS (1997) What do men want? Gender differences and two spheres of belongingness: Comment on Cross and Madson. *Psychol Bull* 122(1): 38-44.
11. Massimini F, Delle FA (2000) Individual development in a bio-cultural perspective. *American Psychologist* 55(1): 24.
12. Calero A (2012) Optimal experiences (flow) in curricular and extracurricular activities during adolescence. Paper presented at the IV international Congress of Research and Professional Practice. Buenos Aires, Argentina, South America.
13. Casullo MM, Castro SA (2002) Personality patterns, clinicians syndromes and psychological well-being in adolescence. *Revista de Psicopatología y Psicología Clínica* 7(2).
14. Baumeister RF (2012) Need-to-belong theory. In PV Lange, AW Kruglanski, ET Higgins (Edn). *Handbook of theories of social psychology* 2: 121-140.
15. Schmidt VI, Messoulam N, Molina MF (2008) Academic self-concept in adolescents in middle schools: presentation of a tool for its assessment. *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica* 25(1): 81-106.
16. Tabachnick BG, Fidell LS (2001) *Using multivariate statistics*. Wiley Online Library, UK.
17. Lloret SS, Ferreres TA, Hernández BA, Tomás MI (2014) *Exploratory Item Factor Analysis: A practical guide revised and up-dated*. *Anales de Psicología* 30(3): 1151-1169.
18. Hair F, Anderson RE, Tatham RL, Black WC (1998) *Multivariate data analysis with readings*. Prentice Hall, New Jersey, USA.
19. Browne MW, Cudeck R (1993) Alternative way of assessing model fit. In KA Bollen, JS Long (Edn), *Testing Structural Equation Models*, Sage Publication, Newbury Park, USA, pp. 8136-8162.
20. Hu L, Bentler PM (1998) Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods* 3(4): 424-453.
21. Shumacker RE, Lomax RG (1996) *A beginner guide to structural equation modelling*. Erlbaum, Mahwah, USA.
22. Schmidt V, Messoulam N, Molina MF, Abal F (2006) Alcohol abuse among adolescents: family and dispositional factors triggers abuse. Gender considerations. *Faculty of Psychology Award University of Buenos Aires* 1(1): 9-29.
23. Molina MF, Raimundi MJ (2011) Global Self-esteem predictors in elementary school in Buenos Aires City. Differences according to sex and age. *Revista Argentina de Ciencias Del Comportamiento* 3(3): 1-7.
24. Molina MF, Raimundi MJ, Bugallo L (2014) The perception of parenting styles and their relationship with self-perceptions of children from Buenos Aires: differences by gender. *Manuscrito Presentado para su Publicación*.
25. Leibovich NB, Schmidt VI (2009) Personality characteristics form Another Observer Perspective. *Interamerican Journal of Psychology* 43(2): 405-413.
26. Calero A (2013) Argentina version of Trait Meta Mood Scale (TMMS) for adolescence. *Cuadernos de Neuropsicología- Panamerican Journal of Neuropsychology* 7(1): 104-119.
27. Rodríguez E (2002) Youth, social development and public policies in Latin America and the Caribbean: opportunities and challenges in Carlos Sojo (James & Editors) *Social Development in Latin America: Issues and Challenges for Public Policy*. Flasco-Banco Mundial, pp. 215-314.
28. Deci EL, Vallerand RJ, Pelletier LG, Ryan RM (1991) Motivation and education: The self-determination perspective. *Educational psychology* 26(3-4) : 325-346.
29. Schreindorfer L, Leary M (1996) Seeking acceptance versus avoiding rejection: Differential effects on emotion and behavior. Paper presented at the meeting of the Southeastern Psychological Association, Norfolk, UK.
30. Squillace M, Janeiro J, Schmidt V (2013) Local adaptation of the revised Eysenck Personality Questionnaire. *Evaluar* 13: 9-37.



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