



ISSN: 2230-9926

Available online at <http://www.journalijdr.com>

IJDR

International Journal of Development Research

Vol. 11, Issue, 06, pp. 47928-47934, June, 2021

<https://doi.org/10.37118/ijdr.22156.06.2021>



RESEARCH ARTICLE

OPEN ACCESS

VALIDITY EVIDENCE OF THE BRAZILIAN VERSION OF THE INVENTORY YOUNG PEOPLE'S LOVE JOURNEY

Mariana Rocha da Silva Campos^{1,*}, Maria Conceição Oliveira Costa², Katia Santana Freitas³, Magali Teresópolis Reis Amaral⁴, Ohana Cunha do Nascimento⁵, Martine Hébert⁶, Marcos Antônio Oliveira de Santana⁷ and Naysa Farias Barros⁸

¹Master's Degree in Public Health, State University of Feira de Santana, State University of Feira de Santana – UEFS, Feira de Santana-Bahia; ²Professor of the Graduate Program in Public Health, State University of Feira de Santana – UEFS, Feira de Santana-Bahia; ³Professor of the Graduate Program in Public Health, State University of Feira de Santana – UEFS, Feira de Santana-Bahia; ⁴Professor of Undergraduate Courses in the Health Area, State University of Feira de Santana – UEFS, Feira de Santana-Bahia; ⁵Professor of the Undergraduate Nursing Course, State University of Feira de Santana – UEFS, Feira de Santana-Bahia; ⁶Doctorate in Psychology, Université du Québec à Montréal – UQÀM, Canada; ⁷Professor of the Undergraduate Course in Physical Education, Faculdade Nobre de Feira de Santana – FAN and Colégio Modelo Luiz Eduardo Magalhães - CMLEM, Feira de Santana-Bahia; ⁸Master's Student of the Graduate Program in Public Health, State University of Feira de Santana – UEFS, Feira de Santana-Bahia

ARTICLE INFO

Article History:

Received 20th March, 2021
Received in revised form
06th April, 2021
Accepted 11th May, 2021
Published online 26th June, 2021

Key Words:

Intimate partner violence; Adolescent;
Validity of the tests; Reliability.

*Corresponding author:

Mariana Rocha da Silva Campos

ABSTRACT

Objective: to analyze the dimensional validity and internal consistency of the Brazilian version of the inventory "Love Journey of young people - YPLJ", which investigates violent events in the relationships of dating and friendship between adolescents and young adults, family, social factors and consequences of these events. **Materials and Methods:** a cross-sectional study conducted with 380 young people enrolled in the public school system of Feira de Santana-Bahia, Brazil. Exploratory factor analysis was used for the analysis of dimensional validity and Cronbach's alpha coefficient was used for the evaluation of internal consistency. **Results:** most of the questions of the YPLJ presented more than one factor, corroborating the multidimensionality of the phenomenon. The analysis of internal consistency was satisfactory for most factors, ranging from 0.95 to 0.72. **Discussion:** the Brazilian version of the YPLJ presented evidence of validity and satisfactory internal consistency, which allow its applicability in studies that investigate violence in the relationships of dating and friendship of young people.

Copyright © 2021, Mariana Rocha da Silva Campos et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Mariana Rocha da Silva Campos, Maria Conceição Oliveira Costa, Katia Santana Freitas, Magali Teresópolis Reis Amaral et al. "Evidências de validade da versão brasileira do inventário "percurso amoroso dos jovens - yplj"", *International Journal of Development Research*, 11, (06), 47928-47934.

INTRODUCTION

Violence in relationships among young people has been considered a relevant social problem, considering the vulnerability of this population category and the fact that at this stage of development, in addition to physical and psychological sequelae, violence can cause psychosocial imbalance in the short and medium term (López-Cepero et al., 2015; Matos et al., 2006).

A study on dating violence among university students in the state of São Paulo showed that 21% of young people recorded at least one episode of aggression during the last year of the relationship (Murta et al., 2019). Another study conducted in public schools in Brazil on psychological violence in affective-sexual relationships among adolescents showed the increase in these events, being associated with the presence of psychological violence in family life and in previous relationships (Oliveira, 2014).

Regarding international literature, the Center of Disease Control (CDC) in 2000 found that approximately 12% of high school students reported situations of physical violence in their relationships. Studies showed that violent behaviors were frequent in dating relationships, presenting a prevalence rate between 22% and 56% (Matos *et al.*, 2006). Despite the social relevance of violent events in love relationships in youth, this theme is still little discussed in different contexts, whether family, educational or political. National studies that seek to evaluate juvenile violence and identify factors associated with the phenomenon through appropriate questionnaires from the conceptual and psychometric point of view are still scarce.

Regarding the research instruments that evaluate these events, bibliographical research conducted in the national databases Scielo, VHL and CAPES showed some international instruments in this theme, such as the Conflict Tactics Scale and the Conflict in Adolescent Dating Relationships Inventory (Straus, 1996; Wolfe, 2001), still limited to investigate the multiple aspects of violence in relationships between young people, such as risk factors, consequences and resilience mechanisms related to this event. In this perspective, we highlight the option for the inventory "*Parcours Amoureux des Jeunes - YPLJ*" (Youth Love Journey), developed by the Research Group "Violence and Health/EVISSA", from the University of Québec to Montréal/UQAM, for being broad and investigating the various dimensions of violence in the loving and friendly relationships of adolescents and young people, considering family and personal factors, psychosocial consequences, linked to violent events. In a previous study, the original YPLJ inventory was submitted to cross-cultural adaptation, the results of which showed 80% in the clarity and equivalence indexes and 95% in the Content Validation Index/CVI above 95% (Nascimento *et al.*, 2015). Results of the application of the YPLJ in the Canadian context indicated that approximately 60% of the young people reported having experienced at least one situation of violence in their loving relationships, with psychological violence being the most reported (52%), followed by physical and sexual violence that presented similar proportions, around 15% each (Hébert *et al.*, 2015). In order to use the YPLJ in Brazil, this inventory was submitted to systematic methodological procedures, which involved cross-cultural adaptation to the national context. This procedure covered the stages of translation and back-translation, which involved Brazilian researchers qualified in the French language. The analysis of the equivalences of items, conceptual and semantic of the questions was performed by a committee of experts in the areas of psychometrics, violence, adolescence and youth. For semantic equivalence, a pre-test was performed with a group of adolescents enrolled in the schools of the municipality. The results showed that the YPLJ presented proportions of clarity and equivalence above 80%, as well as the General Content Validation Index with proportions above 95%, results considered adequate (Nascimento *et al.*, 2015). With regard to the analysis of dimensional validity, it concerns the ability to measure the content that is being studied, while reliability correlates with the accuracy of an instrument in measuring the phenomenon to be studied. The lack of these attributes can compromise the quality of the instrument, and as a consequence, produce distorted results of reality (Silveira *et al.*, 2013).

The present study aims to analyze evidence of validity through the dimensional validity and internal consistency of the YPLJ, a process that reinforces the quality of the instrument and, consequently, the results obtained, with the purpose of its application in the Brazilian context.

MATERIALS AND METHODS

Methodological study that comprised analysis of validity and reliability of the Brazilian version of the YPLJ inventory. A sample of 380 students enrolled in public schools in Feira de Santana-BA, of both genders, adolescents aged between 14 and 18 years and young adults between 19 and 24 years old were used. The sample size followed the recommendations of the literature that indicates in these procedures a number greater than or equal to 100 individuals, for

exploratory factor analysis (Hair *et al.*, 2005). For the selection of the sample, five small, medium and large schools were elected in different locations of the city. Data were collected in the morning, evening and night shifts, aiming to reach the highest possible plurality of the desired sample. Data collection was performed by a team of eight trained researchers regarding the ethical and methodological aspects related to the application of the YPLJ. This inventory consists of 64 questions, distributed in seven sections. The YPLJ questions are predominantly closed, present in dichotomous format and in graduated scales, Likert type. The scores of the questions do not follow a pattern, since the questions have a grouping of items with different weights and scales and each will be analyzed according to the theoretical basis that sustains the question. The administration mode was self-applied. The YPLJ evaluates violence in loving and friendly relationships, factors related to family and friends, as well as psychosocial consequences, related to violent events, however each question assesses a sub dimension of violence and related factors, evidencing the independence of each inventory issue. Some questions of the YPLJ assess situations of violence in which the young person may have been a victim and/or aggressor, being subdivided in part A (when evaluated as victim) and part B (when evaluated as aggressor) and distributed in seven sections.

Section 1, with 19 questions (dichotomous, with only one item), brings General Information: sex; age; level of education of the young person and the family; naturalness; religion. In section 2, (11 questions, with graduated, dichotomous and open scales) affective and loving relationships are addressed: data on friends; information about the relationship with boyfriend/girlfriend; difficult situations with boyfriend/girlfriend; previous love relationships; homosexual relationships. Section 3 (9 questions, with graduated scales; dichotomous; questions with only one item) addresses difficult experiences: indication of situations of violence and their frequency; strategies to deal with the problem; conception of one's own sexuality; suicide attempt; feelings in the face of situations. In Section 4 (3 questions, with only one item, open; dichotomous; only one question with scale), it treats Sexual Behaviors: number of partners; type of relationship of the moment; initiation and sexual life; frequency of condom use; pregnancy; prostitution. Section 5 - Family (3 questions, with graduated scales): support from parents and family members in difficult situations; parents' behavior with their children. In Section 6 (7 questions, in graduated scales; dichotomous; open) behaviors and life habits are addressed: life habits; use/consumption of psychoactive substances. Finally, section 7 (5 questions, on graduated scales; open; question with only one item) covers Feelings and Emotions: thoughts and feelings; friends, confiding people. The data were stored and processed using the Statistical Package for Social Science SPSS Program, version 17.0 for Windows. Initially, a descriptive analysis of the sociodemographic information of the studied population was carried out.

For the analysis of dimensional validity, the factorability of the questions was initially evaluated, through the Kaiser-Meyer-Olkin Measure of Samplingly (KMO) test, which indicates the adequacy of the data for factor analysis, where acceptability is directly proportional to the approximation of values to numeral one (1), being considered acceptable from 0.50 (Hair *et al.* 2005; Pereira, 2004).

Exploratory factor analysis, using the principal component analysis technique, with varimax orthogonal rotation, was used in order to identify the factors, identify the factorial load of each item in the respective inventory questions, in order to verify the degree of affinity between the item and the factor. Factor loadings were considered significant when they exceeded the absolute value of 0.30. To determine the number of factors to be extracted, the latent root criterion (Eigenvalue >1) (Hair *et al.* 2005) was used; Pereira, 2004). Exploratory analysis was performed due to the lack of previous psychometric analyses that supported a confirmatory study. Statistical and theoretical criteria were used to exclude items (Menezes, 2006): 1) items with factorial load lower than 0.30; 2) items with values of cross factor loadings with a difference lower than 0.10; and 3) in the absence of conceptual theoretical similarity between the content of the item and the theory of the underlying construct of the question

under analysis. For the analysis of the reliability of the YPLJ, the internal consistency of the questions was performed, through the calculation of Cronbach's alpha coefficient, considered satisfactory the minimum value of 0.70, and values above 0.60 in exploratory research (Hair *et al.* 2005; Pereira, 2004).

Regarding ethical aspects, the project was approved by the Research Ethics Committee (CEP) of UEFS, CAAE protocol 05799512.5.0000.0053. The Municipal and State Departments of Education and directors of public schools in the municipality authorized the research and the Informed Consent Form (TCLE), which was signed by the research subjects.

RESULTS

Sociodemographic data showed that 59.2% of the students were female (n=218, out of 368); 51.8% were in the age group from 14 to 17 years (n=187, of the total of 361), 45.2% lived with both parents (n=171, of the total of 378); 50.5% were in the middle level of schooling (n=189, out of 374). In addition, 98.2% of the students did not have same-gender parents (n=373 out of 380); 44.5% were adherents of the Evangelical religion (n=167, out of a total of 375); 67.3% did not perform cultural activity (n=253, out of 376).

The analysis of the factorability of the questions through the KMO showed adequacy of most data, with values between 0.64 and 0.93. Factor analysis indicated multidimensionality in nine questions, while the others showed only one factor, presented in Table 1. Due to the high number of questions of the YPLJ and editorial restrictions, we chose to present the results of the factor analysis of the questions that presented multidimensionality and strong theoretical coherence with the respective section. This data will be presented considering the original sequence of the YPLJ sections. In Section 2 that deals with Affective and Loving Relationships, in the question entitled "Violence suffered or perpetrated in the last year", which evaluates the types of violence in the course of love relations of the last 12 months has two aspects of analysis, the young person as a victim and as an aggressor. Loving violence suffered that represents the young person in the condition of victim, which showed three factors, which accounted for a total explained variance of 48.4%. Factor 1 – "Physical and psychological violence" composed of eight items, with loads ranging from 0.459 to 0.747. Factor 2 – "Sexual violence, with psychological and physical", formed by four items, whose loads ranged from 0.412 to 0.824; Factor 3 – "Sexual violence induced by drugs and physical violence", formed by three items, with loads ranging from 0.385 to 0.937 (Table 2). The part that considers the young person as an aggressor was called "Perpetrated love violence", also obtained three factors, which corresponded to a percentage of the total variance of 52.7%. F1 – "Physical and psychological violence",

Table 1. Distribution of questions, respective factors and Cronbach's alpha, according to YPLJ sections

Questions	Factor	Cronbach's Alpha
Section - Affective and loving relationships		
Behavior offriends	F1 - Vulnerability (health and social); F2 - Delinquency; F3 - Use of hard drugs	0.86
Love violence suffered or perpetrated in the last year	F1 - Victim (Physical and psychological violence); F2 - Victim (Sexual, psychological and physical violence); F3 - Victim (Drug-induced sexual violence, physical)	0.79
	F1 - Aggressor (Physical and psychological violence); F2 - Aggressor (Drug-induced sexual violence, physical); F3 - Aggressor (Sexual and psychological violence)	0.79
Post-traumatic stress disorder due to romantic violence	F1 - Isolation, irritability; F2 - Nightmares, fear	0.82
Physical violence suffered in the last year	F1 - Physical violence	0.64
Security in social relationships	F1 - Physical violence in homosexual love relationships	0.99
Self-efficacy against love violence	F1 - Support network	0.95
Section - Difficult Experiences		
Traumatic experience	F1 - Harassment, discrimination	0.68
Adaptation strategies	F1 - Positive attitude; F2 - Risk behavior; F3 - Problem escape	0.69
Post-traumatic stress symptoms	F1 - Sadness, bad mood, isolation, nightmares, insomnia	0.89
Section - Sexual Behaviors		
Love relationship experience	F1 - Sexual contact with acquaintances/unknowns; F2 - Sexual contact with boyfriend or ex-boyfriend	0.90
Section - Family		
Family life (support/conflict)	F1 - Family support; F2 - Family conflict	0.75
Exposure to parental conflict	F1 - Physical and psychological violence perpetrated by the father against the mother F2 - Physical and psychological violence perpetrated by the mother against the father	0.88
Parental supervision	F1 - Parental supervision	0.88
Section - Behaviors and Life Habits		
Delinquent behavior	F1 - Delinquent, antisocial behavior	0.74
Use of psychoactive substances	F1 - Alcohol and other PAS	0.72
Section - Feelings and Emotions		
Psychic suffering in the last week	F1 - Depression, sadness; F2 - Nervousness, tiredness, agitation	0.93
Self-concept	F1 - Strengthened self-esteem; F2 - Individual resilience; F3 - Insecurity, conflict of feelings	0.83
Support network	F1 - Social support network (friends, family, boyfriend)	0.72

consisting of eight items, with loads between 0.443 and 0.775; F2 – "Drug-induced sexual violence and physical violence", consisting of five items, loads from 0.507 to 0.851; F3 – "Sexual and psychological violence", composed of three items, with loads between 0.718 and 0.837 (Table 2). From the question entitled "Posttraumatic stress

resulting from love violence" two factors were extracted with a percentage of total variance of 54.5%. The first F1 factor – "Isolation, irritability", consisting of four items with values between 0.619 and 0.765 and F2 – "Nightmares, fear", also formed by four items, with loads between 0.547 and 0.757 (Table 3).

Table 2. Distribution of factors and respective items of the question Love violence suffered or perpetrated in the last year, belonging to the "Affective and loving relationships" section of the YPLJ

Question - Love violence suffered or perpetrated in the last year (DV)							
Item	A – Victim			B – Aggressor			
	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3	
A	Said things that provoked anger	0,459			0.443		
B	Punched or kicked	0,698			0.757		
C	Slapped or pulled the hair	0,716			0.768		
D	Threatened to do harm or hurt	0,633			0.711		
E	Threatened to hit or throw objects	0,620			0.640		
F	Pushed, shook or strangled	0,689			0.775		
G	Mocked, ridiculed in front of other people	0,747			0.495		
H	He went on to find out who he would meet	0,535			0.504		
HUGGED, STROKE OR FELT WITHOUT YOUR CONSENT							
I	Using arguments or pressure		0.729			0.718	
J	Using physical force	0.337	0.445	0.402	0.556		
K	Giving you drink or drug			0.385	0.851		
TRIED TO KEEP A SEXUAL RELATIONSHIP WITHOUT CONSENT							
L	Using arguments or pressure		0.824			0.794	
M	Using physical force			0.937	0.929		
N	Giving you drink or drug			0.936	0.804		
MAINTAINED SEXUAL RELATIONSHIP WITH PENETRATION WITHOUT CONSENT							
O	Using arguments or pressure		0.679			0.837	
P	Using physical force		0.412		0.507		
Q	Giving you drink or drug	-0.043	0.212	0.080	0.165	-0.032	
<i>Eigenvalue</i>		4.326	2.129	1.773	4.139	3.002	
% explained variance (accumulated)		25.449	37.972	48.402	24.346	42.002	
<i>Cronbach's Alpha</i>						0.79	

Table 3. Distribution of factors and respective items in the question Post-traumatic stress disorder due to romantic violence, section "Affective and romantic relationships" of the YPLJ

Question - Post-traumatic stress resulting from love violence			
Item		Factor 1	Factor 2
A	Do you have nightmares about what happened to you?		0.666
B	Even without meaning to, you think about what happened to you?		0.747
C	When something reminds you of what happened to you, try to think of something else?	0.497	0.422
D1	Do you feel distant from other people?	0.696	
D2	Have you lost interest in things?	0.619	
E	Do noisy or unexpected sounds bring you fear and fright?	0.765	
F	Do you always feel irritated and your nerves are on edge?	0.754	
G	What happened shook you a lot?		0.757
H	You were afraid.		0.547
<i>Eigenvalue</i>		3.786	1.116
% explained variance (accumulated)		42.068	54.463
<i>Cronbach's Alpha</i>			0.82

Table 4. Distribution of factors and respective items of the question Adaptation strategies of the "Difficult experiences" section of the YPLJ.

Question – Adaptation strategies			
Item		Factor 1	Factor 2
A	You try not to think about the problem.		
B	You try to solve the problem with the help of your friends	0.685	
C	You think about the problem and try to find different solutions	0.616	
D	You try to forget about the problem with drinking or drug help		0.630
E	You purposely hurt yourself (cut or burn yourself, pull out tufts of hair, bite nails, etc.)		0.743
F	You cry		0.627
G	You release your anger by hitting or screaming		0.669
H	You wish this never happened	0.511	
I	You let it go, because you can't do anything and nothing would change		
J	Do you discuss the problem with your parents or with other adults	0.653	
K	You try to get help from other people who are in the same situation.	0.729	
L	You act like nothing happened		
<i>Eigenvalue</i>		2.908	1.651
% accumulated		24.237	37.997
<i>Cronbach's Alpha</i>			0.69

In Section 3 that addresses Difficult Experiences and evaluates adaptation strategies, three factors were extracted, whose percentage of total variance was 49.9%, were: Factor 1 – "Positive attitude", composed of five items, with loads between 0.511 and 0.729. Factor 2 – "Risk behavior", presented four items, with factor loadings ranging between 0.630 and 0.743; Factor 3 – "Problem escape" consisted of three items, with factor loadings between 0.534 and 0.811 (Table 4). Section 5, which deals with the Family, through a question, such as "Family coexistence support/conflict", in which factor analysis extracted two factors, which represented a variance of 65.8%: Factor 1 called – "Family Support", formed by six items, with a variation of factor loadings from 0.598 to 0.883; F2–"Family conflict", consisting of only two items, with loads of 0.701 and 0.727 (Table 5).

with Feelings and Emotions, in the question called "Self-concept", three factors were extracted, which corresponded to a variance of 62.2% of the construct: F1 – "Strengthened self-esteem", with four items with factor loadings ranging between 0.795 and 0.849; Factor 2– "Individual resilience", consisting of four items, with loads considered satisfactory between 0.764 and 0.783; F3 – "Insecurity, conflict of feelings", formed by four items, and factor loadings between 0.600 and 0.835 (Table 6).

The analysis of internal consistency using Cronbach's alpha coefficient of the 19 questions of the YPLJ with Likert scales showed satisfactory alpha in 14 questions with values between 0.95 and 0.72 (Table 1).

Table 5. Distribution of items with respective factors and factor loadings from the YPLJ "Family" section

Question - Family life (support/conflict)			
Item		Factor 1	Factor 2
A	Your mother is available when you need her	0.631	
B	Your father is available when you need him	0.864	
C	Your mother cares about you	0.598	
D	Your father cares about you	0.883	
E	You can count on your mother to solve your problems	0.665	
F	You can count on your father to solve your problems	0.869	
G	Your mother says offensive or demeaning things to you		0.701
H	Your father says offensive or humiliating things to you		0.727
<i>Eigenvalue</i>		3.621	1.641
% accumulated		45.262	65.769
<i>Cronbach's Alpha</i>			0.75
Question – Exposure to parental conflict			
Item		A- Father/mother	B- Mother/father
		Factor 1	Factor 1
A	Insult, curse, scream, insult	0.745	0.736
B	Threaten to hit, destroy one object from another	0.920	0.870
C	Pulling, pushing, slapping, twisting the arm, throwing an object capable of injuring	0.882	0.854
D	Threatening with a knife or weapon, punching or kicking, brutally pushing against the wall	0.886	0.818
<i>Eigenvalue</i>		2.966	2.698
% accumulated		74.140	67.462
<i>Cronbach's Alpha</i>			0.88

Table 6. Distribution of items with respective factors and factor loadings of the Self-Concept question, section "Feelings and emotions" of YPLJ.

Question - Self-concept				
Item		Factor 1	Factor 2	Factor 3
A	You find it hard to find the right words to describe your emotions			0.600
B	When you're upset, you don't know if you're sad, afraid, or angry			0.788
C	Do you feel emotions that you cannot clearly identify			0.835
D	You are always confused by the emotions you feel			0.808
E	In general you like yourself	0.795		
F	In general, you have many reasons to be proud of yourself.	0.843		
G	Youhavemanyqualities	0.849		
H	When you do something, do it well	0.810		
I	Do you like your physical appearance	0.485	0.484	
J	You are able to adapt to changes		0.764	
K	You have a habit of turning around after a difficult event		0.758	
L	You see the future with hope and enthusiasm		0.751	
M	When you think about the future, expect to be happier than now		0.783	
N	The future seems vague and uncertain to you	-0.286	0.293	0.275
<i>Eigenvalue</i>		5.001	2.349	1.357
% accumulated		35.724	52.502	62.196
<i>Cronbach's Alpha</i>				0.83

The question called "Exposure to parental conflict" was subdivided into two parts A and B, being extracted only one factor from both parts: part A –F1– "Physical and psychological violence perpetrated by the father against the mother", which represented 74.1% of the total variance, formed by four items, with factor loadings between 0.745 and 0.920; part B – F1– "Physical and psychological violence perpetrated by the mother against the father", which showed 67.46% of the total variance, consisting of four items and loads between 0.736 and 0.870. Although this question presented only one factor, it was chosen for discussion, because of its theoretical relevance with the section in which it is inserted (Table 5). In Section 7, which deals

DISCUSSION

Violence in relationships between young people has been taking on a growing role in assessing the possible biopsychosocial repercussions of the phenomenon. This has fostered a growing interest of the scientific community in the elaboration of proposals for action for the prevention and monitoring of their victims and aggressors. Immediate actions are indisputable priorities, which leads to the need to encourage the development of lines of research in this area. Consequently, it requires emphasis on the improvement of

tools/measurement instruments to be applied in research aimed at detecting and monitoring young people. In the evaluation of the dimensional structure of the Brazilian version of the YPLJ inventory, through the analysis by main components of the questions, in the different sections, it was possible to determine the adequacy of the items in relation to the factors found. The groupings of items were analyzed from the theoretical framework that supported the construction of the YPLJ, resulting in new denominations for the factors, which corroborated the construct validity of the instrument.

After the evaluation of the theoretical coherence of the factorial structure of the questions, as well as the items that composed each factor, these questions and their respective factors were named. According to the content examined, the items were grouped according to the co-occurrence of different types of violence, based on the literature in this area, according to the typology (physical, sexual, psychological), since, in most cases, it does not occur in isolation, which justifies the factorial groupings of the various issues of the YPLJ. In the Affective and Loving Relationships section, the analysis of the issue "Loving violence suffered or perpetrated in the last year" showed that, both in the part directed to the victims and to the aggressors, three factors were found whose items strongly represent the various forms of violence, psychological, physical and sexual, as well as the induction to the use of drugs (Silva, 2017).

The analysis of "Posttraumatic stress resulting from love violence" showed two factors related to isolation, irritability, nightmares and fear. The literature characterizes as "Post Traumatic Stress" the development of symptoms, after exposure to an extreme stressor, being the central characteristics of this disorder, exposure to traumatic event, which may involve threat of death, serious injuries, associated with a response of fear, helplessness and horror. In response to posttraumatic stress, the victim may develop three dimensions of symptoms, such as the re-experiencing of the traumatic event, the flight of stimuli associated with it and the persistent presence of symptoms of autonomic nervous system hyperstimulation, with release of hormones related to stress, adrenaline and norepinephrine (Hübner *et al.*, 2018). It can then be inferred that, in the present study, the factor related to isolation and irritability refers to the dimension of avoiding stimuli associated with trauma, whose responses are symptoms resulting from the release of these hormones, while the factor related to nightmares and fear refers to the symptom of experiencing one more time the traumatic event. Although the literature mentions three dimensions of symptoms of posttraumatic stress, in the present study only two factors were identified in the analysis of the aforementioned question. This fact can be justified by the type of event experienced and the manifested symptomatology: victims who experienced unique events tend to present detailed and complete memories of trauma; on the other hand, victims exposed to chronic events present symptoms of denial and psychic numbness, dissociation, feelings of anger and irritability (Borges *et al.*, 2010).

To deal with difficult experiences and stressful events, the subject develops coping processes, or "coping", which means "dealing with", "facing", "fighting". The strategies used to adapt to adverse situations of stress allow the development of coping, however, in adolescence, high vulnerability requires a social support network to prevent the consequences of trauma and negative effects. Resilient adolescents are able to overcome adversities and seek satisfactory alternatives for coping with conflicts (Brito *et al.*, 1999). In the present study, in the section of difficult experiences, the question "Adaptation strategies" showed three factors related to the behaviors developed by the subject, in view of a traumatic experience. The first factor concerns coping, through resilience, defined as the ability to overcome adversities, considering that the individual interacts with numerous factors of promotion of this ability. Among these factors stand out the family, institution and school, which may have diverse influences on development (Poletto and Koller, 2008). The second factor, identified as risky behavior, refers to conduct developed after experiencing a situation of violence, such as aggressiveness, alcohol and drug abuse and tendency to delinquent behavior, as adults (Miranda *et al.*, 2020). Still discussing difficult experiences, given their relevance in the age group in question, coping methods can be classified into direct

patterns, when they are related to the use of skills to solve problems and indirect patterns, when they include strategies that do not modify the demands in reality, but they alter the way in which the person experiences this demand (palliative coping), which functions as a time interval in which the individual elaborates direct coping. These strategies include the mechanisms of denial, repression, isolation, or leakage. These aspects were represented by the items of the third factor, escape from the problem. In family relationships, the analysis of "Family coexistence support/conflict" showed two factors, which deal with parental support and parental conflict. Parental support is based on the positive family environment, the positive relationship between parents and child, supervision, consistent discipline and communication of family values. Effective family support is one of the powerful strategies to reduce behavior problems in adolescents. It is worth noting that family environment can be a positive or negative factor, so that young people present or not delinquent or healthy behaviors.

The question "Exposure to parental conflict" was the only one that presented one-dimensionality, addressing physical and psychological violence, in the bidirectional sense – father versus mother and vice versa. One of the most important factors for the perpetuation of violence in relationships between young people is the presence of conflict in the family nucleus, indicating interparental violence as a direct predictor of violent events in dating. The relationship between exposure to parental family violence and dating violence can be understood from the perspective of intergenerational transmission of violence, i.e., adolescents living in violent homes tend to reproduce this violence in their affective-loving relationships, either as aggressor or victim (López-Cepero *et al.*, 2015; Matos *et al.*, 2006; Mendes, 2015). In the section "Feelings and Emotions" stands out the question "Self-concept", represented by three factors: strengthened self-esteem, individual resilience and insecurity/conflict of feelings. The self-concept refers to the representation of the subject about himself, a personal evaluation of one's own behavior, as an individual construction, based on values of the reference group, on how it relates to the social group, families, friends and how he/she sees him/herself, through the manifestations of others (Martins, 2006). The items related to insecurity and conflict of feelings, in the question of "self-concept", confirm violence as one of the main causes of psychological sequelae in victims, making the individual feel unworthy of love, insecure, confused and with a negative image of himself (Martins, 2006). However, three fundamental aspects are pointed out as protective factors for adequate coping: social support networks and affective support; and individual characteristics, such as autonomy and self-esteem. In the findings of the present study, the items that refer to strengthened self-esteem ratify this concept (Brito *et al.*, 1999). Regarding the individual resilience factor, the literature emphasizes the importance of personal resources helping the individual to interact with stressful events and achieve good results, rather than negative consequences. The consensual precepts on resilience point to these processes of coping and positive overcoming in crises and adversities (Antunes, 2011).

In the current research, the results of the analyses showed satisfactory internal consistency of the factors, evidenced in the different constructs that are part of the YPLJ inventory. The main limitation of the study concerns the extension of the inventory, consisting of 64 questions, presented in various formats, with categories of diverse answers, in addition to open and multiple choice questions. However, it is emphasized that this limitation can be justified by the broad objective of the YPLJ, which is to analyze multiple aspects related to violence in the loving and friendly relationships of young people, highlighting risk factors, consequences and factors that promoter resilience. Another limitation is due to the fact that it is a pioneering study of psychometric evaluation of the instrument, since the original Canadian YPLJ is in the verification phase of these properties, which prevented us from confronting the data between the contexts in the two countries. However, these findings are important because they confirm the ability of this inventory to expand and deepen knowledge about the construct "violence among young people" in different realities and cultures, at the regional level and between countries,

considering the different rates of development and lifestyles. Thus, the interest in validity studies has intensified, which, in turn, has been demanding greater rigor, regarding the quality and adequacy of the adapted and validated measures, for the use of the instrument in different contexts. Since violence is a public health problem of high magnitude in the Brazilian reality, but difficult to measure, the occurrence and perpetuation of violent events among young couples and the factors related to this behavior is an emerging theme that justifies the deepening, through research, so that the indicators raised can contribute to strategies for prevention and health promotion of this population group. The factor analysis performed with the objective of evaluating dimensional validity, as well as the analysis of internal consistency, to test the reliability of the questions of the YPLJ indicate that the inventory adapted to the Brazilian reality has validity and reliability evidence, which points to the possibility of its use as a tool for investigating different types of violence and its consequences among young people in their friendly and loving relationships, seeking to contribute to expand and deepen knowledge, as well as to support intervention prevention strategies in this area. It is noteworthy that this study aims to contribute to the application of a research instrument that evaluates multiple dimensions of violence in youth relationships, in the Brazilian context, as well as to promote new studies, with applicability in diverse regions, enabling exchanges of experiences and intervention strategies, which can support policies to overcome violence in youth, encouraging peaceful and healthy relationships for this and other generations of citizens and their families of the present and future.

ACKNOWLEDGMENTS

We would like to thank the National Council for Scientific and Technological Development (CNPq in Portuguese) for the financial support for the development of this research.

REFERENCES

- Antunes CMV 2011. Abuso sexual na infância e adolescência: uma leitura narrativa do impacto e dos processos conducentes à resiliência.
- Borges JL *et al.* 2010. Transtorno de estresse pós-traumático TEPT na infância e na adolescência: prevalência, diagnóstico e avaliação. *Aval. Psicol.*,91: 87-98.
- Brito RC *et al.* 1999. Desenvolvimento humano e redes de apoio social e afetivo. *O mundo social da criança: Natureza e cultura em ação.* São Paulo: Casa do Psicólogo, pp. 115-129.
- Hair JF *et al.* 2005. *Análise multivariada de dados.* Porto Alegre: Bookman. Editora.
- Hébert M *et al.* 2015. *Flash YPLJ, La violence subiedans les relations amoureuses chez les jeunes. Équipe des IRSC surles traumas interpersonnels, Universitédu Québec à Montréal, Montréal, Canadá.*
- Hübner CV K *et al.* 2018. Transtorno do estresse pós-traumático. *Revista da Faculdade de Ciências Médicas de Sorocaba*, v. 20Supl..
- López-Cepero J *et al.* 2015. *Percepción y etiquetado de la experiencia violenta en las relaciones de noviazgo juvenil.* *Gaceta Sanitaria, Espanha*, 291: 21–26.
- Martins GA2006. Sobre Confiabilidade e Validade. *RBGN*, 820: 1-12.
- Matos M *et al.* 2006. Prevenção da violência nas relações de namoro: intervenção com jovens em contexto escolar. *Psicol teor prat*, 81.
- Mendes ARF 2015. Fatores de risco e fatores de proteção na infância. 102 f. *Dissertação Mestrado em Medicina legal.* Instituto de Ciências Biomédicas Abel Salazar da Universidade do Porto - Portugal.
- Menezes, IG2006. Escala de intenções comportamentais de comprometimento organizacional: concepção, desenvolvimento, validação e padronização. *Dissertação de Mestrado.* Universidade Federal da Bahia, Salvador.
- Miranda MHH *et al.* 2020. Violência sexual contra crianças e adolescentes: uma análise da prevalência e fatores associados. *Revista da Escola de Enfermagem daUSP*, v. 54.
- Murta, SG *et al.* 2019. Intimidade e apego no namoro: implicações de estudos de caso para prevenção à violência. *Contextos Clínicos*, 121: 204-225.
- Nascimento OC*et al.* 2015 Adaptação transcultural do inventário “*ParcousAmoureux des Jeunes – YPLJ*” de origem canadense para o contexto brasileiro. *Ciência e Saúde Coletiva*, 20: 3417-3426.
- Oliveira QBM 2014. Violência de gênero no namoro entre adolescentes sob a ótica dos adolescentes, educadores e profissionais da saúde. *Tese de Doutorado, Escola Nacional de Saúde Pública Sergio Arouca, Rio de Janeiro.*
- Pereira JCR 2004. *Análise de dados qualitativos: estratégias metodológicas para as ciências da saúde, humanas e sociais.* São Paulo: EDUSP.
- Poletto M, KollerSH 2008. Contextos ecológicos: promotores de resiliência, fatores de risco e de proteção. *Estudos de psicologia*, 253.
- Silva JV 2017. As faces da violência contra infância e adolescência: um estudo no ambulatório de atendimento a vítimas de violência e acidentados AMVIVA.
- Silveira MF *et al.* 2013. Propriedades psicométricas do instrumento de avaliação da qualidade de vida: 12-item healthsurvey *SF-12.* *Ciênc. saúdecoletiva*, 187: 1923-1931.
- Straus MA. *et al.* 1996. *The revised Conflict Tactics Scales CTS2 development and preliminary psychometric data.* *Journal of Family Issues*, 173:283-316.
- Wolfe DA. *et al.* 2001. *Development and validation of Conflict in Adolescent dating Relationships Inventory.* *Psychological Assessment*,132:277-293.
