



Paidéia

ISSN: 0103-863X

paideia@usp.br

Universidade de São Paulo

Brasil

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Paidéia, vol. 23, núm. 54, enero-abril, 2013, pp. 43-52

Universidade de São Paulo

Ribeirão Preto, Brasil

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Criterion Validity of the Child Abuse Potential Inventory (CAP)

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Abstract: Even though there is great interest in the field of child abuse, there are few methods to assess it, which hinders the development of interventions. The Child Abuse Potential (CAP) Inventory is considered effective in the early identification of parents at risk of physically abusing their children, and a good tool to evaluate interventions in the field of child abuse. This study's objective was to perform the CAP Inventory's criterion validity by comparing the results obtained by caregivers at a high risk of abusing their children with those obtained by caregivers at a low risk for child abuse. Two groups of parents participated in the study: a group of 20 parents reported for physically abusing their children and a group of 20 non-offending parents with the same socio-economic and educational levels. The results indicated the instrument is able to discriminate between the two groups, showing it to be a good tool for use in child protection services, to assess interventions, public policies, and research.

Keywords: child abuse, inventories, test validity, family violence, psychological assessment

Validade de Critério do Inventário de Potencial para Abuso Infantil (CAP)

Resumo: É grande o interesse pelo tema da violência contra a criança, porém são escassas suas formas de avaliação, dificultando o desenvolvimento de intervenções. O Inventário de Potencial de Abuso Infantil (CAP) é considerado eficaz na identificação precoce de pais considerados em risco de agredirem fisicamente seus filhos e uma boa ferramenta para avaliar intervenções na área dos maus-tratos contra crianças e adolescentes. O presente estudo objetivou realizar a validade de critério do Inventário CAP, por meio da comparação de seus resultados entre cuidadores considerados de alto risco para abuso infantil e cuidadores de baixo risco para o abuso infantil. Dois grupos de pais foram participantes, sendo um grupo composto por 20 pais denunciados por agressões físicas e o outro grupo de 20 pais não agressores de igual nível socioeconômico e educacional. Os resultados indicaram que o inventário é capaz de avaliar as diferenças entre os grupos propostos, demonstrando ser um bom instrumento para o trabalho de serviços de proteção à criança e para a avaliação de intervenções e políticas públicas ou pesquisas.

Palavras-chave: abuso da criança, inventários, validade do teste, violência na família, avaliação psicológica

Validez de Criterio del Inventario Child Abuse Potential (CAP)

Resumen: Existe gran interés en el tema de la violencia contra los niños, pero son raras las formas de evaluación, lo que dificulta el desarrollo de intervenciones. El Inventario *Child Abuse Potential* (CAP) se considera eficaz en la identificación temprana de padres considerados en riesgo de agredir físicamente a sus hijos y buena herramienta para evaluar las intervenciones en el área de abuso contra niños. Este estudio tuvo como objetivo realizar la validez de criterio del Inventario CAP, por una comparación de sus resultados con padres de alto riesgo y padres sin riesgo para el abuso contra los niños. Participaron dos grupos: un de 20 padres que habían practicado el abuso físico y otro de 20 no agresores, del mismo nivel socioeconómico y educativo. Los resultados indicaron que el instrumento es capaz de evaluar las diferencias entre los grupos propuestos y ha demostrado ser una buena herramienta para el trabajo de los servicios de protección de la infancia, evaluación de las intervenciones y políticas públicas o de investigación.

Palabras clave: abuso de niño, inventarios, validación de test, violencia doméstica, evaluación psicológica

Violence, abuse and maltreatment of children are prohibited in Brazil by the Federal Constitution and the Child and Adolescent Act (Law nº. 8,069, from 1990), which provide for the protection of children and adolescents up to the age of 18. Brazilian law is consistent with international standards established by the Convention of the Rights of the Child that establishes the rights of children to be free

from any kind of violence (Svevo-Cianci, Herczog, Krapmann, & Cook, 2011).

The World Health Organization and the International Society for the Prevention of Child Abuse and Neglect (World Health Organization & International Society for the Prevention of Child Abuse and Neglect, 2006) characterize maltreatment as physical, emotional or sexual abuse against children, neglect or commercial or other kind of exploitation, resulting in real or potential harm to the health, survival, development or dignity of children within a context of a relationship of responsibility, trust or power. This is the definition employed in this study because it

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contains in its underlying theory, the idea that the concept of violence involves a hierarchical pattern of relationship in which the aggressor (caregiver) would be in a higher position in relation to the victim (child), who would be vulnerable to any kind of aggression against his/her rights due to being in a special condition of development.

This study exclusively focused on the definition of physical abuse, which, according to the World Health Organization and the International Society for the Prevention of Child Abuse and Neglect (2006), can be characterized by the intentional use of physical strength against a child and results, or has the potential to result, in harm to the child's health, survival, development or dignity. This definition includes: spanking, beating, kicking, shaking, biting, strangling, scalding, burning, poisoning, and suffocating. Physical violence is generally used within the domestic context in which one seeks to punish or discipline a child for some misdeed (Carmo & Harada, 2006; Gomes, Deslandes, Veiga, Bhering, & Santos, 2002; Padilha & Williams, 2004).

It is assumed that the officially released number of cases of mistreatment is less than the actual number of cases (Bazon, 2008; Bringiotti, 1999). It is estimated that only 10% to 30% of cases are reported, showing the need to develop and improve interventions in the field of family violence in Brazil (Bazon, 2008; Bérigamo, 2007; Faleiros & Bazon, 2008). Therefore, one of the main problems posed to the development of interventions involves the low rate at which cases of violence are identified and then actually targeted in preventive actions, leading to an increased rate of violence, and consequently, to an increased number of fatalities (Conselho Nacional de Secretários de Saúde [CONASS], 2007).

Child Abuse Potential Inventory (CAP)

The adaptation of instruments to measure violence against Brazilian children is important because there are few instruments, developed or adapted, in the country either to assess interventions or to identify child abuse. The Child Abuse Potential (CAP) Inventory was developed by Milner (1986) in the United States based on a broad review of literature including more than 700 books and papers related to child abuse (Milner & Williams, 1978). It was developed to identify risk factors associated with maltreatment present in the family microsystem based on the Social Information Processing model (Milner, 1990, 1993, 1994, 2000, 2003), which integrates psychological and social factors linked to the occurrence of parents' physically abusive behavior.

In its current version, the CAP Inventory (Milner, 1986) is composed of 160 items (e.g. "I never feel sorry for others"; "I enjoy having pets"; "I have always been strong and healthy"; "I like most people" and "I am a confused person"), for which the respondent has to check with an "X" whether s/he "agrees" or "disagrees"

with each item. The inventory's items are grouped into subscales. The subscale Abuse is considered the main scale and is composed of 77 items. The scale Abuse is itself subdivided into six subscales: (1) Distress; (2) Rigidity; (3) Unhappiness; (4) Problems with child and self; (5) Problems with family; and (6) Problems from others. Additionally, the CAP has three validity scales: Lie (18 items), Random response (18 items) and Inconsistency (20 pairs of items). The scores of the three validity scales generate three indexes of response distortion: Random response index, Faking-good index and Faking-bad index.

The CAP Inventory is useful as a screening instrument, assessing the potential or risk of parents maltreating their children through the identification of psychosocial characteristics correlated to the violence against children phenomenon with greater emphasis placed on physical abuse. Compared to other measures (such as interviews, direct observation and tests, scales and inventories), the CAP inventory serves both to map differences among groups of individuals and to individually classify cases (Milner, 1986). The instrument's relevance is demonstrated by its adaptation in various continents such as Europe, Asia and South America.

A study conducted in Belgium (Grietens, De Haene, & Uytendaele, 2007) sought to verify the reliability and convergent validity of the CAP Inventory and obtained high indexes of internal consistency and correlation between the CAP Inventory and other instruments addressing childcare and parental stress. Researchers (Pecnik & Ajdukovic, 1995) in Croatia performed discriminant analysis and verified the internal consistency of the CAP. The discriminant analysis indicated a correct classification of the subscale Abuse at 87.59% and an internal consistency coefficient of .91. In Spain, researchers (De Paul, Arruabarrena, & Milner, 1991) found an index of 91.7% of the correct classification of cases for the discriminant analysis, and the factor analysis presented a factor structure similar to that of the original CAP, composed of six factors. A study conducted in Greece (Diareme, Tsiantis, & Tsitoura, 1997) reported that the CAP Inventory showed an index of reliability of .91, a factor structure similar to the original version and an index of correct classification of 78.1% for the discriminant analysis. The results of a study conducted in China (Chan, Lam, Chun, & So, 2006) revealed a reliability index of .90 according to the alpha coefficient, a factor structure of six factors (similar to the instrument's original version) and good concurrent valid indicators.

The results of a study conducted in Argentina (Bringiotti, Barbich, & Del Paul, 1998) indicate the CAP has a high index of reliability (.94) and positive indication of its predictive and discriminant capacity. In another study, conducted in Chile (Haz & Ramirez, 2002), the CAP Inventory presents high internal consistency (.95) according to Cronbach's alpha and the discriminant

analysis presented a moderated index of 70% for the correct classification of cases.

In Brazil, Rios (2010) performed the cross-cultural adaptation of the CAP Inventory to specifically determine and assess the instrument's semantic equivalence, its content validity and construct validity. In regard to the inventory's construct validity, 135 caregivers (selected through simple random sampling) answered the CAP Inventory and a socio-demographic questionnaire. In relation to the score for 'potential for child physical abuse', the average score for the Brazilian sample was 180.1 ($SD = 102.5$), higher than the result found in the American sample ($A = 91.0$ and $SD = 75.0$), and the Cronbach's alpha coefficient was .95.

Bérgamo, Pasian, Mello and Bazon (2009) verified the internal consistency of the CAP's Brazilian version (Ávila de Mello et al., 2008) and also its capacity to discriminate a clinical group of caregivers ($n = 60$), reported to Child Protection Services (CPS), from a group of caregivers ($n = 60$) with no history of child abuse. According to analysis of Cronbach's alpha coefficient, the reliability for the total sample ($n = 120$) was higher than .90. Discriminant analysis was performed by comparing the distribution of results for each item of the CAP inventory, using the Chi-square test or Fisher's Exact test ($p \leq .05$). The results from the discriminant analysis showed that 35 out of the 77 items in the Abuse subscale distinguished the clinical group from the comparison group.

The master's dissertation of Bérgamo (2007) sought to verify the relationship between risk factors associated with the figure of the caregiver and physical maltreatment. The CAP Inventory (Ávila de Mello et al., 2008) was applied to two groups ($n = 30$ in each group), a clinical and a comparison group. In addition to the application of the CAP Inventory, other instruments were applied to the sample (Parenting Stress Index, Parenting Styles Inventory, Social Support Questionnaire, Adult's Childhood History Interview and Socio-demographic Characterization). Descriptive statistics were used in data analysis, Student's t test, Rank-sum Mann-Whitney test, Chi-square and Fisher's Exact test. The clinical group presented significant differences ($p \leq .05$) in relation to the comparison group for the variables *distress*, *rigidity*, *problems with the child and self*, and *problems with others*.

Ávila de Mello (2008) verified risk factors related to the figure of the caregiver that would be related to neglect. Two groups of parents/caregivers were compared with the CAP Inventory (Ávila de Mello et al., 2008): a group composed of 30 parents/caregivers reported to CPS for neglect and a comparison group composed of 30 parents/caregivers from the community without a history of neglect, that is, a convenience group. Data from the CAP Inventory showed significant differences ($p \leq .05$) in the scores obtained by the clinical and comparison groups, indicating that the clinical group had a high potential risk for child abuse.

Finally, Piñon (2008) sought to characterize a representative sample ($n=433$) in the city of Ribeirão Preto, SP, Brazil in terms of its potential risk for maltreatment and a potential association with the variables indicated in the literature as risk factors. In addition to the CAP Inventory (Ávila de Mello et al., 2008), other instruments were applied (Parenting Stress Index, Parenting Styles Inventory, Social Support Questionnaire, Adult's Childhood History Interview and Socio-demographic Characterization). Descriptive statistics were used to analyze data, Student's t test and the Pearson R correlation. The socio-demographic variables and variables concerning parenting styles and parenting stress were related with the results from the CAP Inventory.

The main results indicate that: (a) caregivers with a high potential for physical abuse presented a reasonable negative correlation with level of education ($r = -.36$; $p < .001$); (b) caregivers with a high potential for physical abuse presented reasonable positive correlation with number of children ($r = .32$; $p < .001$); (c) male caregivers presented an average score for potential child abuse above that observed among female caregivers ($p = .008$); (d) single caregivers presented an average score for potential child abuse above the average score observed among married caregivers ($p < .001$); (e) unemployed caregivers presented an average score for potential child abuse above the average score obtained by employed caregivers ($p < .001$); (f) caregivers with a high potential for physical abuse presented a reasonable positive correlation with the parenting style characterized by inconsistent punishment ($r = .31$; $p < .001$); (g) caregivers with a high potential for physical abuse presented reasonable positive correlation with the parenting style characterized by neglect ($r = .33$; $p < .001$); (h) caregivers with a high potential for physical abuse presented reasonable positive correlation with the parenting style characterized by permissive discipline ($r = .34$; $p < .001$); and (i) caregivers with a high potential for physical abuse presented positive correlation with perceived parental stress ($r = .50$; $p < .001$).

Studies using the CAP Inventory (in Brazil and internationally) presented results showing the validity of this instrument, enabling the identification of groups of parents who mistreat and do not mistreat their children and a convergence of data when compared to other instruments related to family violence. In this context, this study sought to assess the criterion validity of the CAP Inventory by comparing two groups of parents: a group composed of 20 parents reported for physical aggression and another group of 20 non-offender parents with similar socioeconomic and educational levels.

Method

Participants

Two groups of caregivers, a clinical group and a comparison group, participated in this study. The

clinical group (CPS) was composed of 20 caregivers who, in the six months prior to data collection, had been reported to CPS in the city of São Carlos, SP, Brazil due to physical abuse. Two caregivers in the CPS group were male and 18 were female, aged 34 years old on average ($SD = 9.8$), with 7.1 years of schooling on average ($SD = 3.1$); 12 caregivers were married, with an average of 2.8 children per family while the average age of the children was 10.35 ($SD = 2.3$). The comparison group (S as in School) was composed of 20 caregivers selected from two municipal public schools: one male caregiver and 19 female caregivers, aged 38.6 years on average ($SD = 6.0$), with an average of 8.6 years of schooling ($SD = 2.7$); 18 caregivers were married, with an average of 1.9 children per family ($SD = 2.7$) where the children's average age was 10.6 ($SD = 2.2$) years old. Significant differences were found between the two groups only for the variables age ($t(39) = 1.22$; $p < .24$) and marital status ($\chi^2 = 5.7$; $p < .32$).

Instruments

1) *The original CAP Inventory* was developed by Milner (1986). The Portuguese (Brazil) version of the CAP Inventory, developed and validated by Ávila de Mello et al. (2008), was used. Even though the instrument is standardized in the form of a self-reported questionnaire, in this study it was applied in the form of an interview. The researcher read the CAP's items out loud and the participant indicated the alternatives to be chosen. The reason the instrument was applied in the form of an interview is due to the participants' low educational level, which hindered the comprehension of items.

2) *Checklist to identify non-abused children*: adapted from the Epidemiological Booklet (Bringiotti, 2000) translated into Brazilian Portuguese and adapted by Faleiros and Bazon (2008) and Matias and Bazon (2005). It was designed for teachers to identify non-abused children. The checklist presents a definition of each type of maltreatment (physical maltreatment, physical neglect, sexual abuse, emotional maltreatment, emotional neglect, begging, child labor, corruption, involvement of the child in the family's criminal activity, and lack of parental control over the children's behavior). The instrument contains 26 statements that describe the children's characteristics (e.g. trust in others and developing affective relationships with others – seems to have no attachment difficulties) and 18 statements concerning the family's characteristics (e.g. caretakers unemployment/job instability).

3) *Brazilian Economic Classification Criterion (CCEB)*: The CCEB was developed by the National Research Enterprises Association (ANEP) based on a database built from a socioeconomic survey conducted in 2000 by the Brazilian Institute of Public Opinion and Statistics (IBOPE). The CCEB seeks to

characterize individuals according to their purchasing power, that is, to classify individuals into socioeconomic classes according to their possession of consumer goods and the educational level of the household head. Classes range from A1 to E and individuals are classified according to total points scored, which vary from 0 to 34.

Procedure

Data collection. Before initiating data collection, the research team contacted the city's CPS to screen the participants in the group of parents at a high risk for child abuse. CPS agents deliberated about the choice of participants since the researcher was not allowed to consult files or contact the families. Hence, the agents provided names and telephones of caregivers reported for having committed physical abuse against a child under their care. The research team then contacted each potential participant by phone, explaining the study's objectives and verifying their availability and interest to participate in the study, until reaching the expected number of participants. If the individuals agreed to be part of the study, they were asked to provide their addresses and a date was scheduled for a visit. Data were collected in the participants' homes. At the time of data collection, an Informed Consent Form was read and its content was verbally explained. After the caregiver was asked whether any doubts or comments remained, their consent was formalized by obtaining their signatures. Finally, the CAP Inventory was applied in the form of an interview with the caregiver who had been reported to CPS.

Concomitantly with contacting CPS, and after authorization was provided by the city's Department of Education, the research team contacted two schools selected for data collection. These schools were chosen because most of the children in the CPS group attended these schools. The teachers of students in the same age group as those in the CPS were contacted and the researchers asked the teachers to identify children in their classrooms who did not seem to suffer physical aggression from their caregivers, which was determined through the *Checklist to Identify Non-Abused Children*. The reason the comparison (S) group was selected with the help of teachers is that most cases of maltreatment are identified in the school context (Vagostello, Oliveira, Silva, Donofrio, & Moreno, 2003). After these children were identified, the school provided their caregivers' data, such as age, gender, educational level, and an address, and the researchers could contact them and verify their interest in participating in the study. The research team contacted the caregivers until the group of participants was composed. The data collection procedure employed with these caregivers was the same used with the CPS group, that is, phone contact and visit, signature on written consent, followed by application of

the CAP Inventory. In both groups, the average duration of data collection with each participant was 60 minutes.

Data analysis. The CAPSCORE software, provided by the CAP Inventory's author for the researchers' exclusive use, was employed in the analysis of the instrument's results. The CAPSCORE sums up the weight of each of the items, providing a general score for the potential for child abuse, scores for each of the subscales and for the validity scales. The general score of potential abuse ranges from 0 to 486, while 215 is the cutoff point in the American standardization. After the score was computed for all the scales, the average and standard deviation of scores were computed for the studied sample. The Mann-Whitney U test was used to verify differences of scores obtained by the two groups in the CAP Inventory. Considering an absence of Brazilian standards in this study, as well as in other Brazilian studies (Bérgamo, 2007; Bérgamo et al., 2009; Piñon, 2008; Rios, 2010; Rios, Williams, Schelini, Bazon & Piñon, 2013), we used cutoff points standardized in the United States of America for the purpose of comparison.

Ethical Considerations

The study was approved by the Institutional Review Board, which reviews research involving human subjects, at the Federal University of São Carlos (CEP/UFSCar Protocol No. CAAE 3268.0.000.135-07).

Results and Discussion

In relation to the scores obtained in the CAP Inventory by the two groups, a higher average was observed in the CPS group ($A = 265.5$; $SD = 93.1$) in comparison to the S group ($A = 103.4$; $SD = 53.1$). This difference between the

groups' scores was statistically significant according to the Mann-Whitney U test ($p = .0001$; $z = -4.49$).

According to the CAP Inventory manual (Milner, 1986), the American cutoff point is 215. Based on this normative parameter, the CPS group presented higher average values (265.5), suggesting this group had a high potential risk for physically abusing their children. The S group, in turn, presented values below the cutoff point suggested in the CAP Inventory manual, indicating the low potential risk of this group of caregivers to physically abuse their children. In relation to Brazil, data from the study performed by Bérgamo (2007), who verified the inventory's discrimination capacity applying it to two different groups (clinical and comparison, both with $n=30$), also revealed significant differences between the groups (the average total score of the clinical group was 166.90 [$SD = 83.34$] and the comparison group's score was 223.87 [$SD = 99.30$]).

Bérgamo (2007) also analyzed each of the subscales and found significant differences ($p \leq .05$) for the following subscales: distress, rigidity, problems with the child and self, and problems with others, which corroborates the initial hypothesis of her study about the instrument's ability to discriminate groups in terms of potential for maltreatment. International studies addressing the CAP Inventory's criterion validity in countries such as Croatia (Pecnik & Ajdukovic, 1995), Spain (De Paul et al., 1991), Argentina (Bringiotti et al., 1998), and Chile (Haz & Ramirez, 2002), show statistically significant differences between the average scores obtained by the caregivers considered to be at a high risk for child abuse and the caregivers considered to be at a low risk, indicating that the CAP Inventory is sensitive to discriminate groups of caregivers at a high and low risk for child abuse.

Table 1

Average Scores and Standard Deviation Obtained by Clinical (CPS) and Comparison (S) groups in the CAP Inventory's Scales

Scales	Cutoff point ^a	S <i>n</i> = 20		CPS <i>n</i> = 20	
		<i>A</i>	<i>SD</i>	<i>A</i>	<i>SD</i>
Abuse	215	103.4*	53.1	265.5*	93.1
Distress	152	50**	37.3	50**	37.3
Rigidity	30	29.9**	17.6	29.9**	17.6
Unhappiness	23	8.95**	7.2	8.95**	7.2
Problems with the child	11	3.05**	4.17	1.6**	3.52
Problems with the family	18	1.6**	3.52	3.05**	4.17
Problems with others	20	9.95**	6	9.95**	6.0
Lie	7 or 8	11.2**	2.73	9.57**	3.31
Random response	6	3**	1.41	2.67**	1.59
Inconsistency	6	4.45**	2.06	6.43**	2.18

Note. ^aAccording to the American cutoff point. * $p = .0001$; ** $p < .05$

Additionally, one study among Brazilian studies with randomly selected samples of the general population reports a general average score of 180.1 ($SD = 102.5$) for a sample of 135 caregivers (Rios et al., 2013). Another study reports an average score of 182 ($SD = 96.46$) for a sample of 433 caregivers (Piñon, 2008).

According to the Mann-Whitney U test, the difference in scores obtained by this study's groups was statistically significant in all subscales ($p = .05$). When the average scores obtained by the CPS group were compared to the scores obtained by the S group, the first group presented higher psychological distress ($A = 161.0$ and $SD = 68.4$; $A = 50.0$ and $SD = 37.3$), higher rigidity ($A = 43.9$ and $SD = 19.5$; $A = 29.9$ and $SD = 17.6$), greater unhappiness ($A = 17.8$ and $SD = 11.9$; $A = 8.95$ and $SD = 7.2$) and had more problems with family ($A = 9.35$ and $SD = 6.61$; $A = 1.6$ and $SD = 3.52$), problems with others ($A = 19.6$ and $SD = 5.7$; $A = 9.95$ and $SD = 6.0$) and problems with child and self ($A = 13.9$ and $SD = 13.5$; $A = 3.05$ and $SD = 4.17$).

Note that the average scores obtained by the CPS for the subscales distress, rigidity, and problems with child and self were above the American cutoff points. In turn, the average scores obtained by the S group were below the cutoff points used in the USA. Such data indicate the validity of the CAP Inventory, as it proves to be empirically capable of discriminating groups of abusive parents from non-offender parents.

In the same direction of the results obtained in this study, Bérnago (2007) identified that the clinical group presented average scores for the subscales distress and rigidity above those obtained by the comparison group. The comparison group did not present scores above the cutoff point proposed by Milner (1986), while the clinical group presented values above the American cutoff points only in the Rigidity subscale ($A = 42.53$; $SD = 16.37$).

Another study conducted in São Carlos, SP, Brazil with a representative sample of the population, Rios et al. (2013), found indexes above the American cutoff points for the Rigidity subscale with average score of 41.8 ($SD = 15.2$), in a universe of 135 caregivers. Piñon (2008) also found indexes above the American cutoff points for the Rigidity subscale, with an average score of 34 ($SD = 16.67$) for a representative sample of 433 caregivers from a neighborhood in the city of Ribeirão Preto, SP, Brazil.

Data concerning the Rigidity subscale, obtained in this study and also in the studies by Bérnago (2007), Piñon (2008) and Rios et al. (2013), draw attention because the average scores obtained in this scale are relatively higher in both groups of caregivers when compared to the other subscales. These data can be analyzed from the perspective of the Social Information Processing model (Milner, 2003), the basis of the CAP Inventory, which integrates psychological and social factors linked to the occurrence of abusive behavior on the part of parents. According to the cognitive theory, details from the social context are internalized by the

individual in the form of schemes. These internalized information structures would influence subsequent perceptions, interpretations, and reactions in the individuals' social lives (Farc, Crouch, Skowronski, & Milner, 2008). Hence, we suppose that Brazilian caregivers present more rigid perceptions of their children due to their cultural view of their possession of the child or due to the violence disseminated by the media (Cecconnello, De Antoni, & Koller, 2003). Future studies could deepen such statements.

In regard to the CAP Inventory's validity scales, the average score obtained by the S group on the Lie scale was higher ($A = 11.2$; $SD = 2.73$) than that obtained by the CPS group ($A = 9.57$; $SD = 3.31$). The same occurred with the average score obtained on the Random Answer scale when the results of the S group ($A = 3$; $SD = 1.41$) were compared to those obtained by the CPS one ($A = 2.67$; $SD = 1.59$). In relation to the scale Inconsistency, however, the average score obtained by the S group was lower ($A = 4.45$; $SD = 2.06$) than that obtained by the CPS one ($A = 6.43$; $SD = 2.18$). According to the cutoff points proposed in the CAP Inventory manual (Milner, 1986), both the CPS and the S groups presented average scores above the American cutoff points for the Lie scale, and only the CPS group presented an average score above the cutoff point for the scale Inconsistency. Similar to the studies conducted by Bérnago (2007), Piñon (2008) and Rios (2010), the average scores obtained by both the CPS and the S groups on the Lie scale were above the cutoff points proposed by Milner (1986).

The hypothesis is that the high scores obtained for the Lie scale are due to the fact that the CAP Inventory was applied in the form of an interview, that is, the researcher read each item and the respondent verbally agreed or disagreed with the statement. Afterwards, the researcher herself checked the participants' answers on the form. Because it is an instrument that assesses the respondents' perceptions and beliefs, we hypothesize that applying the instrument in the form of an interview led the participants to adopt a defensive position, giving socially acceptable answers instead of revealing their real perceptions and avoiding the researcher's judgment. Such a hypothesis could be tested in a study comparing this validity scale with groups in which different forms of application would be used.

In relation to the application of the inventory in the form of an interview, even though there are no empirical data concerning the effects of reading the CAP Inventory's items, Milner (1986) states that when necessary, the inventory can be applied in the interview form in a private room, when items should be read out loud, without explanations, advice, or comments. Despite the fact that the recommendations provided by the instrument's authors were complied with in this study, the scores obtained on the Lie scale were high. We suggest that, given the peculiarities of the application of the inventory in Brazil,

studies be conducted to standardize the CAP Inventory, developing cutoff points for each subscale based on the Brazilian culture.

The three indexes of answer distortion can be computed based on the validity scores: Faking-good index (when the Lie scale is scored equal to or above 7 and the Random response scale is scored equal to or below 5), Faking-bad index (when the Random response is scored equal to or above 6 and the Inconsistency scale is scored equal to or below 5), and the Random Response (when the Random scale is scored equal to or above 6 and the Inconsistency scale is scored equal to or below 6). In this study, the Faking-good index distortion was higher in both groups, with the clinical group scoring 13 and the comparison group scoring 16, suggesting that the participants provided socially acceptable answers.

An interesting fact was that, both in this study and in the study conducted by Bérghamo (2007), the S group presented higher scores for the Lie scale and a higher Fake-good index distortion when compared to the scores obtained by the CPS group. Such fact may indicate that the group considered not to have potential for child abuse provided more socially acceptable answers.

Final Considerations

This study's data indicate that the differences in the scores obtained by the CPS and the S groups were statistically significant and reinforce data presented by Milner (1986), corroborated in Brazil by Bérghamo (2007), constituting empirical evidence of the criterion validity of the CAP Inventory. This means that the instrument is sensitive and robust to assess potential differences between the studied groups.

The study's limitations include the small sample size and also the fact that both groups were composed of extreme cases, that is, the method used to screen the sample favored the selection of participants considered to be at a high risk for child abuse for the CPS group and participants considered to be at a low risk for child abuse for the S group. We suggest future studies with a larger number of participants and more homogeneous samples concerning the variable child abuse to verify how sensitive the instrument is to discriminate groups composed of more moderate cases, which are the most difficult to identify. Finally, we suggest further studies be conducted with the CAP Inventory to verify its validity and later standardization in Brazil.

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Received: Mar. 20th, 2012

1strevision: Aug. 21st, 2012

2ndrevision: Oct. 16th, 2012

Approved: Nov. 28th, 2012

How to cite this article:

Patrian, A. C. A., Rios, K. S. A., Williams, L. C. A. (2013).

Validade de critério do Inventário de Potencial para Abuso Infantil (CAP). *Paidéia (Ribeirão Preto)*, 23(54), 43-51.

doi:<http://dx.doi.org/10.1590/1982-43272354201306>