Article

Validation of the Child Abuse Potential Inventory in Italy: A Preliminary Study

Sarah Miragoli[1], Elena Camisasca[2], and Paola Di Blasio[1]

Abstract

The aim of this study was to provide preliminary findings on the reliability and the validity of the Italian Child Abuse Potential (CAP) Inventory, a screening tool that measures parents' potential for child physical abuse. The CAP Inventory and measures on parenting stress (Parenting Stress Index–Short Form [PSI-SF]) and parents' perceptions of child adjustment (Child Behavior Checklist [CBCL]) were administered in a nonclinical sample of Italian parents ($N = 551$) with a 2- to 6-year-old child. The Abuse scale showed adequate internal consistency ($\alpha = .87$), with significantly negative correlations between socioeconomic status and educational level of the parents. Also, the Abuse scale scores were significantly predicted by high levels of parenting stress and by parental negative perceptions of the child's behavior. Finally, using a cut score for the English version of the Abuse scale (where 95% of parents would be expected to be classified), 93.8% of Italian parents were classified as nonabusive by the Abuse scale. These results supported the cross-cultural generalizability of the Abuse scale. However, complementary studies with abusive samples are needed to verify the ability of the instrument to discriminate between abusive and nonabusive parents also in the Italian population.

Keywords

physical abuse, child maltreatment, risk assessment, parenting, CAP Inventory

Over the past 20 years, Italian society, institutions, and media have begun to consider child abuse as a serious social problem and to adopt preventive and protective strategies. A recent study (Authority for Children and Adolescents, CISMAI, & Terre des Hommes, 2015) reported that 9.5% of the Italian population of children/adolescents is subject to some form of violence and that 91.272 children/adolescents who are victims of child abuse are in charge of social services. Physical abuse represents 6.9% of these cases referred to child protection units. Intervention programs have been developed, but they generally undertake when the abuse has already occurred. In dealing with the problem of child maltreatment, a screening tool for risk assessment of child physical abuse represents a first step toward improving the preventive and clinical practices. Indeed, early identification and intervention are necessary to prevent vulnerable children from abuse and to help potential abusers get appropriate treatments.

In Italy, there is a lack of reliable and valid instruments to screen for risks on child maltreatment, although in the international context there are several useful tools to prior assessment of child abuse. In particular, the Child Abuse Potential (CAP) Inventory is a 160-item questionnaire widely used as a child physical abuse screening tool (Milner, 1986, 1994; Milner & Crouch, 1999). The CAP Inventory includes an Abuse scale (77 items), which is based on an extensive literature review (Milner, 1986) about child maltreatment and significantly discriminates between abusive and nonabusive parents, six descriptive factor scales (Distress, Rigidity, Unhappiness, Problems With Child and Self, Problems With Family, and Problems From Others), and three validity scales (Lie scale, Random Response [RR] scale, and Inconsistency scale).

The CAP Inventory has been extensively researched and many studies support the reliability and validity of this instrument as a screening practice for child potential abuse (Haskett, Scott, & Fann, 1995; Milner, 1986, 1994; Milner & Crouch, 1999). In addition, it shows high predictive validity (Chaffin & Valle, 2003; Ethier, Couture, Lacharite, & Gagnier, 2000; Meezan & O'Keefe, 1998). Several concurrent validity studies report that it correlates significantly with several factors associated with physical child abuse, such as a childhood history of abuse (Milner, Robertson, & Rogers, 1990), high levels of personal stress (Haskett et al., 1995; Milner, Charlesworth, Gold, Gold, & Friesen, 1988), physiological reactivity to child-related stimuli (Pruitt & Erickson, 1985), and low self-esteem (Anderson & Lauderdale, 1982).

[1]Catholic University of the Sacred Heart, Milan, Italy
[2]e-Campus University, Novedrate, Italy

Corresponding Author:
Sarah Miragoli, C.R.I.d.e.e., Department of Psychology, Catholic University of the Sacred Heart, Largo Gemelli 1, 20123 Milan, Italy.
Email: sarah.miragoli@unicatt.it

The validation work has generally shown that translated versions of the Abuse scale have adequate reliability and validity in different countries and cultures: There are approximately 150 reports that have used translated versions of the inventory (Milner & Crouch, 2012). On the European continent, there are Spanish, Croatian, Greek, Turkish, Finland, German, and Dutch versions (e.g., Agathonos-Georgopoulou, 1997; de Paúl & Arruabarrena, 1995; de Paúl, Arruabarrena, & Milner, 1991; de Paúl & Domenech, 2000; de Paúl, Milner, & Múgica, 1995; de Paúl & Rivero, 1992; Diareme, Tsiantis, & Tsitoura, 1997; Grietens, Haene, & Uyttebroek, 2007; Haapasalo & Aaltonen, 1999; Kutsal et al., 2011; Pečnik & Ajduković, 1995). Furthermore, the CAP Inventory has been translated and studied in Taiwan, Japan, Brazil, Argentina, and Chile (e.g., Bringiotti, Barbich, & De Paúl, 1998; Haz & Ramirez, 1998; Huang, Chang, Chen, Tsai, & Wang, 1992; Kawamura, Takahashi, Akiyama, Sasaki, & Kako, 2009; Mari & Rami, 2002). Some studies are based exclusively on general population parents, others on abusive parents (physical abusers and neglectful parents) or on combined groups (abusive vs. nonabusive parents). From these studies, data indicate that the internal consistency of the Abuse scale is adequate and relatively stable across the translations and ranges from .89 to .94, with classification rates ranging from 86.5% to 100% for general population/comparison parents (Milner & Crouch, 2012).

Child Physical Abuse, Stress, and Perceptions of Parents

Many reviews indicate that a range of social, personal, interpersonal, and environmental factors can increase child physical abuse risk. Parental risk factors highlighted include parental age, education level, socioeconomic status, parenting stress, and parenting perceptions (Azar & Wolfe, 1998; Black, Heyman, & Smith-Slep, 2001). In particular, the social information processing model (Milner, 1993, 2000, 2003) considers child physical abuse as an extreme manifestation of parenting problems and focuses on high levels of parenting stress and negative perceptions of children's behavior as precursors of child physical maltreatment (see, for reviews, Ammerman, 1990; Azar, 1997, 1998, 2002; Becker-Lausen & Mallon-Kraft, 1997; Milner, 1986, 1993). In effect, studies illustrate that maltreating parents, compared with nonabusive and low-risk parents, have higher levels of parenting stress (Holden & Banez, 1996; Sprang, Clark, & Bass, 2005; Whipple & Webster-Stratton, 1991). In addition, the parent–child relationship is impaired by negative mental representations: The parent fails to objectively interpret the child's behavior (Bugental et al., 2002; Bugental & Happaney, 2004; Dopke & Milner, 2000; Haskett, Scott, Grant, Ward, & Robinson, 2003; Montes, de Paul, & Milner, 2001; Runyon, Deblinger, Ryan, & Thakkar-Kolar, 2004), where abusive and high-risk parents view the child's behaviors as more problematic than it actually is (Caselles & Milner, 2000; Crouch, Skowronski, Milner, & Harris, 2008;

McElroy & Rodriguez, 2008; McGuigan, Vuchinich, & Pratt, 2000). Furthermore, studies have linked these negative views of children to parental attributions of child-related hostile intent (Wilson, Rack, Shi, & Norris, 2008) and to use of harsh parenting behaviors, which can include acts of physical abuse (Timmer, Borrego, & Urquiza, 2002; Whipple & Richey, 1997).

In addition, the research conducted in the Italian context showed that parental stress and attitudes are important risk factors in the maltreating dynamics (Cheli et al., 2012; Di Blasio, 2005; Milani & Gagliardi, 2013; Miragoli & Verrocchio, 2008). Similar to studies conducted in other countries, studies in Italy (e.g., Camisasca & Di Blasio, 2002; Miragoli & Di Blasio, 2012) have shown that maltreating and at-risk parents, compared with non-maltreating and low-risk parents, have higher levels of parenting stress, less gratifying and more negative parent–child relationships, and high perceptions of problematic behaviors in the child (in terms of internalizing and externalizing symptoms).

Objectives and Hypotheses

As illustrated above, some important theoretical constructs underpinning the CAP Inventory appear to be equally applicable to the Italian population. Therefore, the purpose of the present study was to provide preliminary data on the reliability and validity of the CAP Inventory in a nonclinical sample of Italian parents. The main objectives were to evaluate the use of CAP Inventory in assessing the risk for physical child abuse in Italian parents by (a) administering an Italian translation of the CAP Inventory to a sample of Italian parents (mothers and fathers) to establish data on Italian scores, (b) presenting preliminary findings on validity indexes (Lie scale, RR scale, and Inconsistency scale), (c) examining the distribution of Abuse scale scores and its relationships with demographic characteristics of parents (age, sex, marital status, educational level, and socioeconomic status), (d) examining the construct validity of the Abuse scale by analyzing its factorial structure and its relationships with self-reported parenting stress and parents' perceptions of child psychological maladjustment (internalizing and externalizing symptoms), and (e) comparing the Abuse scale cutoff of U.S. parents, which are reported at the instrument's manual, with Abuse scale scores of Italian parents.

Given that other translations of the CAP Inventory in Europe and in languages similar to Italian have demonstrated adequate reliability and validity, we hypothesized that the psychometric characteristics of an Italian translation of CAP Inventory would not differ substantially from the original English version and the other translated versions. Finally, regarding construct validity, we hypothesized that the Abuse scale scores would be positively associated with parenting stress and with parental perceptions of maladjustment of children (in terms of internalizing and externalizing symptoms).

Method

Participants

Participants were recruited from some kindergartens and nursery schools in the province of Milan. Respondents were mothers and fathers, who all had at least one child between the age of 2 and 6 years. We chose to study this specific age group because previous studies have indicated preschool age as particularly vulnerable to physical abuse (Black et al., 2001; Kirschner & Wilson, 2001). A total of 952 questionnaire sets were distributed to parents, with 602 (63.2%) sets returned. After removing 51 questionnaire sets that were not fully completed (in particular, 46 CAP Inventory, 3 Parenting Stress Index–Short Form [PSI-SF], and 2 Child Behavior Checklist [CBCL] had not been completed), there were a total of 551 respondents who completed the questionnaires of which 284 were filled out by the mothers (59.7% response rate) and 267 by the fathers (56.1% response rate).

For mothers, the mean age was 37 years (*SD* = 4.5, range = 24-66) and the majority of them were married (90.1%), with an average level of education (56.6% high school diploma) and an average economic level (57.1%; annual income: 20,000-30,000 euro). Similarly, for fathers, the mean age was 39 years (*SD* = 5, range = 27-64) and the majority of them were married (90.7%), with an average level of education (54.2% high school diploma) and an average economic level (57.9%; annual income: 20,000-30,000 euro).

Procedure

The respondents were asked to complete a set of structured questionnaires on a voluntary and anonymous basis. The questionnaires were presented in randomized order for each participant and each set included (a) an instrument requesting basic demographic information, (b) the Italian translation of the CAP Inventory Form VI (Milner, 1986), (c) the PSI-SF (Abidin, 1995; Italian validation by Guarino, Di Blasio, D'Alessio, Camisasca, & Serantoni, 2008), and (d) the CBCL 1½ to 5 or 4 to 18 (Achenbach, 1991; Achenbach & Rescorla, 2000; Italian version: Frigerio, 2001a, 2001b). With the help of the teachers, the questionnaires were delivered to parents in a sealed and anonymous envelope, with a request that they be completed at home. The envelope also contained a letter explaining the purpose of the study and inviting the parents to complete the questionnaires on a voluntary basis. The parents were assured of the anonymity and confidentiality of the data obtained and that they were completely free to choose whether or not to take part in the study. The Catholic University Ethics Committee provided ethical review of this study.

Measures

CAP Inventory Form VI. The CAP Inventory (Milner, 1986) is a self-report questionnaire of 160 items with a forced-choice format ("agree" vs. "disagree") and it includes the Abuse scale (77 items), constituted by six factors: Distress (e.g., "I often feel very frustrated"), Rigidity (e.g., "Children should always be neat"), Unhappiness (e.g., "I am an happy person"), Problems With Child and Self (e.g., "I have a child who is slow"), Problems With Family (e.g., "My family fights a lot"), and Problems From Others (e.g., "Other people have made my life hard"). The first three factors are related to psychological difficulties while the remaining three factors are suggestive of relational problems experienced by the respondent. In addition, the CAP Inventory includes three validity scales: Lie scale, RR scale, and Inconsistency scale. These three validity scales are used to assist in the detection of respondents who attempt to misrepresent themselves: Lie scale (18 items) evaluates an individual's tendency to lie or to give socially desirable responses (e.g., "I am always a good person"), RR scale (18 items) evaluates an individual's tendency to give random responses (e.g., "I always try to check on my child when it's crying"), and Inconsistency scale (20 item-pairs) evaluates an individual's tendency to give inconsistent responses (e.g., "I like most people" vs. "I do not trust most people"). The internal consistency for the Abuse scale ranges from .91 to .96 (Milner, 1986). The discriminant validity of the CAP was supported with the correct classification rates for physical child abuse between 70% and 100% (Milner, 1986, 1989): In particular, an Abuse scale cutoff point of 215 (or higher) is indicative of high potential for abuse and leads to a correct classification of 80% to 90% of maltreating parents, with a correct classification rate of 95% of general population parents (Hall, Sachs, & Rayens, 1998; Milner, 1986).

For this study, the CAP Inventory was translated into Italian by a bilingual Italian-English speaker and it was translated with the permission of the author. To ensure meaning equivalence, the Italian translation was then translated back into English by a native speaker. Then the researchers compared each item of the translation to see if there were any differences in meaning: Two items were divergent and the researchers discussed these with the translator until a full consensus on the translation was reached.

PSI-SF. PSI-SF (Abidin, 1995; Italian validation by Guarino et al., 2008) is a 36-item questionnaire that assesses parenting stress. The items are rated on a 5-point scale, ranging from *strongly agree* to *strongly disagree*. It consists of four subscales: Parental Distress (PD, 12 items), Difficult Child (DC, 12 items), and Parent–Child Dysfunctional Interaction (P-CDI, 12 items), as well as a defensive responding subscale that consists of 7 items drawn from the PD subscale. The sum of the scores of the three subscales (PD + P-CDI + DC) supplies the value of Total Stress, which gives an indication of the overall level of the specific parental stress, not deriving from other roles or other events. The values of internal consistency of the Italian validation of the PSI-SF (Guarino et al., 2008) were α = .91 for the Total Stress scale, α = .91 for the PD subscale, α = .95 for the P-CDI subscale,

and α = .90 for the DC subscale. Alphas in our sample for the Total Stress scale were .89 for mothers and .91 for fathers.

CBCL (CBCL 1½-5, 4-18). CBCL (CBCL 1½-5 and 4-18; Achenbach, 1991; Achenbach & Rescorla, 2000; Italian version: Frigerio, 2001a, 2001b) is one of the most extensively used measures of children's internalizing and externalizing problems by using the perceptions of parents of their child's psychological adjustment. Items of this scale describe possible child problem behaviors and are rated on a 3-point scale for the target child: 0 (*not true*), 1 (*sometimes or somewhat true*), and 2 (*very or often true*). Child problem behaviors are clustered in the two broader categories of externalizing and internalizing problems. A Total score summary provides information on the general level of psychological adjustment of the child. Two equivalent versions of this scale were provided by Achenbach (1991) and Achenbach and Rescorla (2000) for two different age-samples: the CBCL 1½ to 5 for children from 1½ to 5 years (100 items) and the CBCL 4 to 18 for children from 4 to 18 years (113 items). Both versions of this scale were used in the current study according to the age of the child about which the parents filled in the measure. Achenbach has reported a scale mean test-retest reliability of .95 (CBCL 1½-5) and of .87 (CBCL 4-18), as well as evidence for content and criterion-related validity with samples similar to the current one. Alphas in our sample for the Total score were .86 for mothers and .92 for fathers (CBCL 1½-5), and .79 for mothers and .84 for fathers (CBCL 4-18).

Results

Mean Scale Score and Italian Sample Characteristics

To establish preliminary data on Italian scores of the CAP Inventory, mean scale score and standard deviations were calculated for the Abuse scales, three validity scales, and six factor scales. Mean scale scores and standard deviations are presented as a function of marital status, education, and socioeconomic status (SES) in Table 1 for total sample, in Table 2 for mothers, and in Table 3 for fathers.

Reliability

The reliability of the Italian translation of the CAP Inventory was tested by using the internal consistency reliability check, Cronbach's alpha coefficient, for the Abuse scale, six factor scales, and three validity scales. The internal consistencies of the Abuse scale (α = .87) and Distress scale (α = .90) were excellent and adequate for Rigidity scale (α = .70), whereas the internal consistencies of the other scales were poor: Lie scale (α = .18), RR scale (α = .09), Inconsistency scale (α = .65), Unhappiness scale (α = .26), Problems With Child and Self (α = .10), Problems With Family (α = .39), and Problems From Others (α = .49).

Validity Indexes

To analyze the use of validity indexes (Lie scale, RR scale, and Inconsistency scale) cutoff points of the scales were made. As suggested by Milner (1986), on the Lie scale (*M* = 8.07, *SD* = 3.31), the RR scale (*M* = 4.05, *SD* = 1.69), and the Inconsistency scale (*M* = 3.67, *SD* = 2.18) the 95th percentile of the frequency distribution was used as the cutoff point. In the U.S. samples, the 95th percentile of the Lie scale scores was determined at 7, for RR at 6, and Inconsistency scale at 6, whereas in our sample, the 95th percentile for Lie scale was 13, for RR was 7, and for Inconsistency scale it was 8.

Distribution of Abuse Scale Scores and Relationships With Demographic Characteristics

The mean score on the translated version of the Abuse scale was 88.33 (*SD* = 62.97). The Abuse scale correlated significantly positively with parent's sex (*r* = .114, *p* < .01) and marital status (*r* = .143, *p* < .01) and negatively with educational level (*r* = −.195, *p* < .001) and socioeconomic status (*r* = −.151, *p* < .001). Therefore, in our study, mothers and married parents with low education and low socioeconomic levels showed higher scores of abuse potential. In contrast, the Abuse scale did not correlate significantly with age (*r* = .027, *p* = .522) and sex (*r* = .020, *p* = .642) of child, age of parent (*r* = −.040, *p* = .371), number of children in the family (*r* = −.030, *p* = .529), and birth order of child (*r* = −.008, *p* = .887). There are not parents who filled out questionnaires for more than one child.

Finally, to examine the independent contributions of each demographic variable on the Abuse scale scores, a stepwise multiple linear regression was used with socioeconomic status, education, and marital status as the independent variables. Due to the small number of participants who were not married, marital status was grouped into two categories (married vs. nonmarried parents). At the first step, the socioeconomic status entered the equation while education and marital status entered the equation at the second and third step, respectively (see Table 4). The final model explained 5.3% of the Abuse scale variance, R^2 = .053, $F(543)$ = 5.36, *p* < .001. More specifically, the socioeconomic status and the education level were significant predictors of Abuse scale: Parents of low socioeconomic status and with low education had higher scores than other parents.

Construct Validity: Factorial Structure of the Abuse Scale

The construct validity of the CAP Inventory was tested by examining the factorial structure of the 77 items of the Abuse scale. In the original version, Milner, Gold, and Wimberley (1986) found that six factors were the most significant: Distress, Unhappiness, Rigidity, Problems With Child and Self, Problems With Family, and Problems From Others. In

Table 1. Mean Scores and Standard Deviations of CAP Inventory Scales as a Function of Demographic Variables for Total Sample.

	Abuse scale	Lie scale	RR scale	Inconsistency scale	Distress scale	Rigidity scale	Unhappiness scale	Problems With Self/Child scale	Problems With Family scale	Problems From Others scale
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Total sample (n = 551)	88.33 (62.97)	8.07 (3.31)	4.05 (1.69)	3.67 (2.18)	43.43 (45.68)	15.24 (12.07)	16.35 (11.58)	0.93 (2.78)	5.05 (7.35)	5.05 (7.35)
Marital status										
Married (n = 498)	86.31 (59.61)	8.13 (3.33)	3.84 (1.70)	3.49 (2.07)	41.49 (43.65)	15.33 (12.29)	16.12 (11.70)	1.01 (3.07)	5.40 (6.60)	5.40 (6.60)
Separated (n = 32)	108.84 (66.97)	6.32 (3.22)	4.26 (1.49)	4.47 (2.01)	55.68 (47.11)	19.42 (13.00)	13.68 (6.40)	0.47 (1.43)	10.95 (11.36)	10.95 (11.36)
Single (n = 21)	81.92 (54.19)	8.38 (3.48)	3.92 (1.85)	3.31 (1.70)	38.46 (48.95)	15.00 (5.93)	13.69 (7.32)	0.00 (0.00)	8.54 (9.77)	8.54 (9.77)
Education										
Elementary/middle school (n = 76)	110.92 (80.83)	9.26 (3.27)	4.58 (1.70)	4.62 (2.15)	54.08 (54.74)	20.57 (14.88)	18.91 (14.51)	1.45 (3.64)	5.83 (9.38)	5.83 (9.38)
High school (n = 305)	83.74 (57.03)	7.99 (3.30)	4.12 (1.65)	3.53 (2.12)	40.20 (42.46)	14.75 (11.40)	16.50 (11.54)	0.93 (2.91)	4.43 (6.79)	4.43 (6.79)
University (n = 170)	74.77 (50.04)	7.68 (3.14)	3.99 (1.56)	3.23 (2.01)	37.34 (39.46)	11.83 (9.95)	15.10 (10.18)	0.66 (2.04)	4.56 (6.00)	4.56 (6.00)
SES										
Higher (n = 197)	79.03 (53.41)	7.89 (3.26)	3.93 (1.62)	3.36 (2.12)	38.60 (42.18)	13.02 (10.79)	15.96 (10.83)	0.70 (2.31)	4.85 (5.56)	4.85 (5.56)
Middle (n = 317)	84.73 (58.47)	8.06 (3.32)	4.13 (1.71)	3.61 (2.14)	39.67 (41.03)	15.37 (12.13)	16.90 (11.69)	0.84 (2.76)	4.59 (7.44)	4.59 (7.44)
Lower (n = 37)	128.88 (87.02)	8.97 (3.24)	4.47 (1.40)	4.88 (1.90)	71.03 (61.97)	22.24 (16.02)	13.82 (13.05)	2.38 (3.97)	7.91 (9.77)	7.91 (9.77)

Note. CAP = Child Abuse Potential; RR = Random Response; SES = socioeconomic status.

5

Table 2. Mean Scores and Standard Deviations of CAP Inventory Scales as a Function of Demographic Variables for Mothers.

	Abuse scale	Lie scale	RR scale	Inconsistency scale	Distress scale	Rigidity scale	Unhappiness scale	Problems With Self/Child scale	Problems With Family scale	Problems From Others scale
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Overall mothers (n = 284)	95.29 (67.36)	7.94 (3.20)	4.01 (1.59)	3.76 (2.12)	50.85 (49.86)	14.22 (11.25)	16.28 (12.11)	1.11 (3.04)	5.17 (7.49)	8.10 (6.50)
Marital status										
Married (n = 256)	93.10 (64.38)	7.95 (3.16)	3.79 (1.65)	3.58 (1.88)	48.70 (48.96)	14.36 (11.38)	16.55 (12.41)	1.10 (3.29)	5.15 (6.67)	8.03 (6.11)
Separated (n = 15)	114.00 (73.22)	7.11 (3.26)	4.33 (1.58)	5.11 (1.97)	63.00 (51.05)	19.67 (10.98)	13.33 (7.40)	0.33 (0.71)	9.11 (11.44)	8.56 (6.44)
Single (n = 13)	78.00 (36.06)	9.13 (3.36)	4.25 (2.19)	3.38 (2.07)	34.00 (30.53)	15.38 (5.71)	12.25 (6.56)	0.00 (0.00)	10.13 (11.19)	6.25 (6.04)
Education										
Elementary/middle school (n = 28)	144.33 (94.46)	9.04 (3.70)	4.79 (2.04)	5.21 (2.19)	81.83 (65.78)	20.33 (13.88)	20.83 (16.29)	2.13 (4.12)	7.83 (11.17)	11.38 (7.52)
High school (n = 161)	91.02 (61.69)	7.90 (3.10)	4.12 (1.52)	3.65 (2.03)	47.83 (46.41)	13.42 (10.70)	16.77 (11.83)	1.10 (3.33)	4.43 (7.10)	8.15 (6.37)
University (n = 95)	78.28 (52.21)	7.89 (3.06)	3.78 (1.37)	3.26 (1.92)	41.48 (42.14)	11.62 (9.60)	14.55 (10.77)	0.74 (1.90)	4.56 (5.75)	5.64 (5.25)
SES										
Higher (n = 101)	84.41 (58.66)	7.97 (3.06)	3.91 (1.44)	3.60 (2.11)	44.97 (47.31)	11.87 (10.33)	15.55 (11.22)	0.96 (2.71)	4.48 (5.51)	6.66 (5.85)
Middle (n = 162)	90.30 (61.47)	7.91 (3.27)	4.05 (1.63)	3.62 (2.06)	46.07 (44.15)	14.70 (11.10)	16.56 (11.92)	0.94 (3.07)	4.70 (7.43)	8.10 (6.33)
Lower (n = 21)	140.00 (93.61)	8.63 (3.17)	4.79 (1.48)	4.95 (1.51)	83.00 (68.14)	19.68 (15.80)	14.26 (14.69)	2.32 (3.16)	8.47 (10.45)	12.26 (7.79)

Note. CAP = Child Abuse Potential; RR = Random Response; SES = socioeconomic status.

Table 3. Mean Scores and Standard Deviations of CAP Inventory Scales as a Function of Demographic Variables for Fathers.

	Abuse scale	Lie scale	RR scale	Inconsistency scale	Distress scale	Rigidity scale	Unhappiness scale	Problems With Self/ Child scale	Problems With Family scale	Problems From Others scale
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Overall fathers ($n = 267$)	80.93 (57.14)	8.20 (3.43)	4.09 (1.79)	3.58 (2.25)	35.54 (39.35)	16.32 (12.81)	16.43 (11.01)	0.74 (2.47)	4.92 (7.20)	7.17 (5.96)
Marital status										
Married ($n = 242$)	79.16 (53.43)	8.32 (3.50)	3.89 (1.76)	3.42 (2.27)	33.88 (35.87)	16.35 (13.15)	15.65 (10.92)	0.93 (2.83)	5.66 (6.54)	7.03 (5.58)
Separated ($n = 17$)	104.20 (64.45)	5.60 (3.17)	4.20 (1.48)	3.90 (1.96)	49.10 (44.95)	19.20 (15.19)	14.00 (5.74)	0.60 (1.90)	12.60 (11.61)	8.70 (7.60)
Single ($n = 8$)	88.20 (80.33)	7.20 (3.70)	3.40 (1.14)	3.20 (1.10)	45.60 (73.85)	14.40 (6.91)	16.00 (8.63)	0.00 (0.00)	6.00 (7.35)	6.20 (7.53)
Education										
Elementary/middle school ($n = 48$)	91.37 (65.28)	9.39 (3.02)	4.46 (1.49)	4.27 (2.07)	37.83 (39.66)	20.71 (15.61)	17.78 (13.45)	1.05 (3.32)	4.66 (8.08)	9.34 (6.41)
High school ($n = 144$)	75.58 (50.32)	8.10 (3.52)	4.11 (1.80)	3.42 (2.23)	31.63 (35.82)	16.24 (12.01)	16.20 (11.24)	0.74 (2.36)	4.43 (6.46)	6.72 (5.38)
University ($n = 75$)	70.21 (47.09)	7.41 (3.25)	4.25 (1.75)	3.19 (2.32)	31.97 (35.28)	12.11 (10.46)	15.81 (9.41)	0.56 (2.23)	4.56 (6.37)	5.21 (5.47)
SES										
Higher ($n = 96$)	73.33 (46.90)	7.80 (3.47)	3.94 (1.81)	3.11 (2.12)	31.87 (35.00)	14.23 (11.18)	16.39 (10.44)	0.44 (1.78)	5.24 (5.61)	5.71 (5.65)
Middle ($n = 155$)	78.84 (54.74)	8.21 (3.37)	4.22 (1.78)	3.62 (2.24)	32.89 (36.39)	16.09 (13.13)	17.26 (11.48)	0.74 (2.40)	4.46 (7.48)	7.41 (5.74)
Lower ($n = 16$)	114.80 (78.76)	9.40 (3.40)	4.07 (1.22)	4.80 (2.37)	55.87 (51.39)	25.47 (16.25)	13.27 (11.11)	2.47 (4.93)	7.20 (9.13)	10.53 (6.39)

Note. CAP = Child Abuse Potential; RR = Random Response; SES = socioeconomic status.

Table 4. Multiple Linear Regression Analysis for the Effect of Demographic Variables.

Variable	R^2	B	SE B	β
Step 1	.036			
Socioeconomic status		−18.78	5.72	−.189**
Step 2	.050			
Socioeconomic status		−12.33	6.46	−.124
Education		−13.17	6.28	−.136*
Step 3	.053			
Socioeconomic status		−12.04	6.47	−.121
Education		−13.41	6.29	−.139*
Marital status		13.35	15.05	.051

*p < .05. **p < .01.

Table 5. Percentage of Variance Explained by the Factors of the Abuse Scale.

Factors	Eigenvalue	% of variance	% cumulative
Factor 1—Loneliness and Distress	12.1	15.7	15.7
Factor 2—Rigidity	3.3	4.3	20.0
Factor 3—Impulsiveness and Anxiety	2.6	3.4	23.4
Factor 4—Unhappiness	2.1	2.7	26.1
Factor 5—Problems With Self, Child, and Family	1.9	2.5	28.6
Factor 6—Interpersonal Difficulties	1.8	2.4	31.0

this study, the 77 items were subjected to a principal components analysis using an Oblimin rotation because the factors were expected to be correlated. The exploratory factor analysis was performed by extracting six factors, accounting for 31% of the variance (see Table 5).

Factor 1 was denominated "Loneliness and Distress" (16 items) and it included items that belong to the "Distress" and "Unhappiness" dimensions, as specified by Milner; Factor 2 was denominated "Rigidity" (10 items) and it included almost all items of the original "Rigidity" dimension; Factor 3 was denominated "Impulsiveness and Anxiety" (13 items) and it included items that belong to the "Distress" and "Unhappiness" dimensions; Factor 4 was denominated "Unhappiness" (7 items) and it included almost all items of the original "Unhappiness" dimension; Factor 5 was denominated "Problems with Self, Child, and Family" (10 items) and it included some items of the Problems dimensions (Problems With Child and Self, Problems With Family, and Problems With Others) of the original version; finally, Factor 6 was denominated "Interpersonal Difficulties" (6 items) and it included items belonging to the "Distress" and "Problems With Others" dimensions.

Construct Validity: Relationships Between the Abuse Scale Scores and Parenting Stress/ Perceptions of Child Adjustment

A multiple regression analysis was conducted to determine if parenting stress (PSI-SF Total score) and perceptions of child psychological adjustment (CBCL *T*-Total score) made

unique (independent) contributions to the Abuse scale scores. Scores on the Total PSI-SF ($M = 68.03$, $SD = 16.16$) and the *T*-Total CBCL ($M = 39.16$, $SD = 4.93$) were entered as independent variables in the linear multiple regression analysis. Parenting stress and perceptions of child psychological adjustment were both significant predictors of Abuse scale scores, $R^2 = .314$, $F(543) = 123.95$, $p < .001$: More specifically, in our study, more stressed parents (β = .433, $t = 10.87$, $p < .001$) with perceptions of having a child with increased internalizing and externalizing problems (β = .212, $t = 5.34$, $p < .001$) had higher scores on Abuse scale.

Comparing Italian Scores With U.S. Scores

To verify if the Italian CAP Inventory Abuse scale identified participants as nonabusive (at least in theory, this study did not include abusive parents, but we do not have the absolute certainty), Italian participants were classified using Milner's cutoff score of 215 (1986), that represents the outer 5% of the comparison group. For the Italian sample ($N = 551$), 93.8% ($n = 514$) had a score of less than 215 and 6.2% ($n = 37$) higher than 215. These data are consistent with data from U.S. samples.

Discussion

This study provided preliminary data on the psychometric characteristics of the CAP Inventory for use with Italian parents and contributed to its validation by analyzing a nonclinical sample. First, our data showed that the Italian translation

of the CAP Inventory had an excellent internal consistency for the Abuse scale (α = .87), comparable with those reported by Milner (1986) in general population parents (α = .92) and by other translations of the CAP Inventory (Milner & Crouch, 2012). In particular, in the European context, for general population parents, the internal consistency of the Abuse scale is very adequate and ranges from .89 to .91: for Croatian translation α = .89 (Pečnik & Ajduković, 1995), for Dutch translation α = .90 (Grietens et al., 2007), for Greek translation α = .91 (children's hospital parents, Diareme et al., 1997), and for Spanish translation α = .89 to .90 (respectively, de Paúl & Rivero, 1992, and de Paúl et al., 1991).

Regarding the validity indexes, the internal consistencies of the Lie scale (α = .18), the RR scale (α = .09), and the Inconsistency scale (α = .65) were poor. In particular, the Lie scale is problematic even for the cutoff score, which in our sample is much higher (13) than the original version (8). Milner and Crouch (2012), in a review on psychometric characteristics of translated versions of the CAP Inventory, revealed that the means and cut scores for translated versions of the Lie scale are substantially and uniformly above the Lie scale means and cut scores for the English original version of the Lie scale. Therefore, also for the Italian context, the translation of the Lie scale needs some adjustments and revisions.

The mean and the standard deviation of the Abuse scale (*M* = 88.33, *SD* = 62.97) were comparable with the means and standard deviations of norms parents (*M* = 91.00, *SD* = 75.00) indicated in the manual of the original version (Milner, 1986). Moreover, similar to Milner's study (1986) and other studies using the CAP Inventory, we found a significantly negative association between Abuse scale scores and the socioeconomic status and educational level of the parents although this effect is modest in our study. Specifically, Italian parents with low socioeconomic status and low education level tended to have higher scores than other parents. These data are consistent with the literature that identifies the unfavorable socioeconomic conditions and the low level of education as important risk factors for the child physical abuse (Ammerman, 1990; Azar, 2002; Black et al., 2001; Di Blasio, 2005; Haskett et al., 1995; Luthar, 1999; Miragoli & Verrocchio, 2008).

Regarding the construct validity, the factorial structure of the Italian translation of the Abuse scale showed factors consistent with the original version. In effect, the exploratory factor analysis, performed by extracting six factors (accounting for 31% of the variance), has revealed factors comparable with six dimensions identified by Milner (1986). These factors are as follows: "Loneliness and Distress" (16 items), "Rigidity" (10 items), "Impulsiveness and Anxiety" (13 items), "Unhappiness" (7 items), "Problems With Self, Child, and Family" (10 items), and "Interpersonal Difficulties" (6 items).

Finally, our results supported views that the dynamics of parenting play a role of predictors of parents' potential for child physical abuse. Numerous studies reported significantly positive relationships between the Abuse scale and problematic parenting, in particular high levels of parenting stress and negative evaluations of the child's behavior (Holden & Banez, 1996; Rodriquez & Green, 1997; Sprang et al., 2005; Whipple & Webster-Stratton, 1991). The present study supported these findings by showing that high levels of parenting stress and perceptions of child psychological maladjustment significantly predicted parents' potential physical abuse.

The present study has some limitations. First, unlike previous studies (e.g., de Paúl & Arruabarrena, 1995; Milner, Gold, Ayoub, & Jacewitz, 1984), the present study reported on a nonclinical sample and did not include a comparison with data from a clinical sample. Thus, future research is needed to assess the reliability and validity of the Abuse scale to detect abusive parents. Second, the long-term predictive validity of the Italian CAP Inventory needs to be studied by using longitudinal designs, where the relationship between Abuse scores and future abuse can be determined. Third, this study considered only a limited age range of children (between the age of 2 and 6 years), whereas the CAP Inventory has been used with parents of children with a wide range of ages. More research is needed to investigate the validity of the Italian CAP Inventory with school-age children and adolescents. Finally, further analysis about the internal structure and the construct validity of the instrument is needed: A new validation study could examine the discriminant properties of items, include new items, and replace the others.

Declaration of Conflicting Interests

Funding

Reference

Abidin, R. (1995). *The Parenting Stress Index* (3rd ed.). Charlottesville, VA: Psychological Assessment Resources.

Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist 4-18*. Burlington: Department of Psychiatry, University of Vermont.

Achenbach, T. M., & Rescorla, L. (2000). *Manual for the Child Behavior Checklist 1½-5 and 2000 profile*. Burlington: Department of Psychiatry, University of Vermont.

Agathonos-Georgopoulou, H. A. (1997). The prediction of child maltreatment in Greek families. *Child Abuse & Neglect*, *21*, 721-735. doi:10.1016/S0145-2134(97)00034-3

Ammerman, R. T. (1990). Etiological models of child maltreatment: A behavioral perspective. *Behavior Modification*, *14*, 230-254. doi:10.1177/01454455900143002

Anderson, S. C., & Lauderdale, M. L. (1982). Characteristics of abusive parents: A look at self-esteem. *Child Abuse & Neglect*, *6*, 285-293. doi:10.1016/0145-2134(82)90031-X

Autorità Garante per l'Infanzia e l'Adolescenza [Authority for Children and Adolescents], CISMAI, & Terre des Hommes. (2015). *Indagine nazionale sul maltrattamento dei bambini e*

degli adolescenti in Italia. [National survey on abuse of children and adolescents in Italy] Retrieved from http://www.terredeshommes.it/dnload/Indagine-Maltrattamento-bambini-TDH-Cismai-Garante.pdf

Azar, S. T. (1997). A cognitive behavioral approach to understanding and treating parents who physically abuse their children. In D. Wolfe, R. McMahon, & K. Peters (Eds.), *Child abuse: New directions in prevention and treatment across lifespan* (pp. 79-101). Thousand Oaks, CA: SAGE.

Azar, S. T. (1998). A framework for understanding child maltreatment: An integration of cognitive behavioral and developmental perspectives. *Canadian Journal of Behavioural Science*, *18*, 340-355.

Azar, S. T. (2002). Parenting and child maltreatment. In M. H. Bornstein (Ed.), *Handbook of parenting: Social conditions and applied parenting* (pp. 361-388). Mahwah, NJ: Lawrence Erlbaum.

Azar, S. T., & Wolfe, D. A. (1998). Child physical abuse and neglect. In E. J. Mash & R. A. Barkley (Eds.), *Treatment of childhood disorders* (2nd ed., pp. 501-544). New York, NY: Guilford Press.

Becker-Lausen, E., & Mallon-Kraft, S. (1997). Pandemic outcomes: The intimacy variable. In G. K. Kantor & J. S. Jasinski (Eds.), *Out of the darkness: Current perspectives on family violence* (pp. 49-57). Newbury Park, CA: SAGE.

Black, D. A., Heyman, R. E., & Smith-Slep, A. M. (2001). Risk factors for child physical abuse. *Aggression and Violent Behavior*, *6*, 121-188. doi:10.1016/S1359-1789(00)00021-5

Bringiotti, M. I., Barbich, A., & De Paúl, J. (1998). Validacion de una version preliminar del Child Abuse Potential Inventory para su uso [Validation of a preliminary version of Child Abuse Potential Inventory for use]. *Child Abuse & Neglect*, *22*, 881-888. doi:10.1016/S0145-2134(98)00067-2

Bugental, D., Ellerson, P., Rainey, B., Lin, E., Kokotovic, A., & O'Hara, N. (2002). A cognitive approach to child abuse prevention. *Journal of Family Psychology*, *16*, 243-258. doi:10.1037/2152-0828.1.S.84

Bugental, D., & Happaney, K. (2004). Predicting infant maltreatment in low-income families: The interactive effects of maternal attributions and child status at birth. *Developmental Psychology*, *40*, 234-243. doi:10.1037/0012-1649.40.2.234

Camisasca, E., & Di Blasio, P. (2002). Una ricerca di follow-up su famiglie maltrattanti e abusanti. Fattori di rischio e di protezione [A follow-up study on maltreating and abusing families. Risk and protective factors]. *Età Evolutiva*, *72*, 89-96.

Caselles, C., & Milner, J. (2000). Evaluations of child transgressions, disciplinary choices, and expected child compliance in a no-cry and crying-infant condition in physically abusive and comparison mothers. *Child Abuse & Neglect*, *24*, 477-491. doi:10.1016/S0145-2134(00)00115-0

Chaffin, M., & Valle, A. L. (2003). Dynamic prediction characteristics of the Child Abuse Potential Inventory. *Child Abuse & Neglect*, *27*, 463-481. doi:10.1016/S0145-2134(03)00036-X

Cheli, M., Campieri, M., Fini, A., Montenegro, M. E., Piccioni, A., Pincanelli, F., & Ricciutello, C. (2012). Esperienze traumatiche in età evolutiva e fattori di rischio familiari: un'indagine sugli esiti nello sviluppo [Traumatic experiences in childhood and family risk factors: A survey of the impact on development]. *Maltrattamento e abuso all'infanzia*, *14*, 91-103. doi:10.3280/MAL2012-003006

Crouch, J., Skowronski, J., Milner, J., & Harris, B. (2008). Parental responses to infant crying: The influence of child physical abuse risk and hostile priming. *Child Abuse & Neglect*, *32*, 702-710. doi:10.1016/j.chiabu.2007.11.002

de Paúl, J., & Arruabarrena, M. I. (1995). Behavior problems in school-aged physically abused and neglected children in Spain. *Child Abuse & Neglect*, *19*, 409-418. doi:10.1016/0145-2134(95)00009-W

de Paúl, J., Arruabarrena, M. I., & Milner, J. S. (1991). Validacion de una version Espanola del Child Abuse Potential Inventory para su uso en Espana [Validation of the Spanish version of Child Abuse Potential Inventory for use in Spain]. *Child Abuse & Neglect*, *15*, 495-504. doi:10.1016/0145-2134(91)90033-A

de Paúl, J., & Domenech, L. (2000). Childhood history of abuse and child abuse potential in adolescent mothers: A longitudinal study. *Child Abuse & Neglect*, *24*, 701-713. doi:10.1016/S0145-2134(00)00124-1

de Paúl, J., Milner, J. S., & Múgica, P. (1995). Childhood maltreatment, childhood social support, and child abuse potential in a Basque sample. *Child Abuse & Neglect*, *19*, 907-920. doi:0.1016/0145-2134(95)00053-B

de Paúl, J., & Rivero, A. (1992). Spanish version of the Child Abuse Potential Inventory: Convergent validity and social support. *Revista de Psicologia General y Aplicada*, *45*, 49-54.

Diareme, S., Tsiantis, J., & Tsitoura, S. (1997). Cross-cultural validation of Child Abuse Potential Inventory in Greece: A preliminary study. *Child Abuse & Neglect*, *21*, 1067-1079. doi:10.1016/S0145-2134(97)00066-5

Di Blasio, P. (2005). *Tra rischio e protezione. La valutazione delle competenze parentali* [Risk and protection. The assessment od parental skills]. Milano, Italy: Unicopli.

Dopke, C., & Milner, J. (2000). Impact of child noncompliance on stress appraisals, attributions, and disciplinary choices in mothers at high and low risk for child physical abuse. *Child Abuse & Neglect*, *24*, 493-504. doi:10.1016/S0145-2134(00)00110-1

Ethier, L. S., Couture, G., Lacharite, C., & Gagnier, J. (2000). Impact of a multidimensional intervention programme applied to families at risk for child neglect. *Child Abuse Review*, *9*, 19-36.

Frigerio, A. (2001a). *Child Behavior Checklist 1½-5 Manuale* [Child Behavior Checklist 1½-5 Manual]. Milano, Italy: Editore Ghedini Libraio.

Frigerio, A. (2001b). *Child Behavior Checklist 4-18 Manuale* [Child Behavior Checklist 4-18 Manual]. Milano, Italy: Editore Ghedini Libraio.

Grietens, H., Haene, L., & Uyttebroek, K. (2007). Cross-cultural validation of the Child Abuse Potential Inventory in Belgium (Flanders): Relations with demographic characteristics and parenting problems. *Journal of Family Violence*, *22*, 223-229. doi:10.1007/s10896-007-9074-2

Guarino, A., Di Blasio, P., D'Alessio, M., Camisasca, E., & Serantoni, G. (2008). *Parenting Stress Index–Short Form*. Firenze, Italy: Organizzazioni Speciali.

Haapasalo, J., & Aaltonen, T. (1999). Child abuse potential: How persistent? *Journal of Interpersonal Violence*, *14*, 571-585. doi:10.1177/088626099014006001

Hall, L. A., Sachs, B., & Rayens, M. K. (1998). Mothers' potential for child abuse: The roles of childhood abuse and social resources. *Nursing Research*, *47*, 87-94.

Haskett, M. E., Scott, S. S., & Fann, K. D. (1995). Child Abuse Potential Inventory and parenting behavior: Relationships with

high-risk correlates. *Child Abuse & Neglect*, *19*, 1483-1495. doi:10.1016/0145-2134(95)00107-4

Haskett, M. E., Scott, S., Grant, R., Ward, C., & Robinson, C. (2003). Child-related cognitions and affective functioning of physically abusive and comparison parents. *Child Abuse & Neglect*, *27*, 663-686. doi:10.1016/S0145-2134(03)00103-0

Haz, A. M., & Ramirez, V. (1998). Preliminary validation of the Child Abuse Potential Inventory in Chile. *Child Abuse & Neglect*, *22*, 869-879. doi:10.1016/S0145-2134(98)00071-4

Holden, E., & Banez, G. (1996). Child abuse potential and parenting stress within maltreating families. *Journal of Family Violence*, *11*, 1-12. doi:10.1007/BF02333337

Huang, H. L., Chang, Y. Y., Chen, S. F., Tsai, C. H., & Wang, S. Y. (1992). Low social economic status family and child maltreatment. *The Kaohsiung Journal of Medical Sciences*, *8*, 35-44.

Kawamura, Y., Takahashi, Y., Akiyama, T., Sasaki, T., & Kako, M. (2009). Reliability and validity of the Japanese version of the Child Abuse Potential Inventory Abuse scale. *Asia-Pacific Psychiatry*, *1*, 138-142.

Kirschner, R. H., & Wilson, H. (2001). Pathology of fatal child abuse. In R. M. Reece & S. Ludwig (Eds.), *Child abuse: Medical diagnosis and management* (2nd ed., pp. 467-516). Philadelphia, PA: Lippincott Williams & Wilkins.

Kutsal, E., Pasli, F., Isikli, S., Sahin, F., Yilmaz, G., & Beyazova, U. (2011). Preliminary validation of the Child Abuse Potential Inventory in Turkey. *Journal of Interpersonal Violence*, *26*, 2856-2865. doi:10.1177/0886260510390952

Luthar, S. (1999). *Poverty and children's adjustment*. Newbury Park, CA: SAGE.

Mari, A., & Rami, V. (2002). Adaptacion del Child Abuse Potential Inventory en Chile: Analisis de las dificultades y desafios de su aplicacion a partir de dos estudios Chilenos [Adaptation of Child Abuse Potential Inventory in Chile: Analysis of the difficulties and challenges of its application from two Chilean studies]. *Child Abuse & Neglect*, *26*, 481-495. doi:10.1016/S0145-2134(02)00324-1

McElroy, E., & Rodriguez, C. (2008). Mothers of children with externalizing behavior problems: Cognitive risk factors for abuse potential and discipline style and practices. *Child Abuse & Neglect*, *32*, 774-784. doi:10.1016/j.chiabu.2008.01.002

McGuigan, W., Vuchinich, S., & Pratt, C. (2000). Domestic violence, parents' view of their infant, and risk of child abuse. *Journal of Family Psychology*, *14*, 613-624. doi:10.1037/0893-3200.14.4.613

Meezan, W., & O'Keefe, M. (1998). Evaluating the effectiveness of multifamily group therapy in child abuse and neglect. *Research on Social Work Practice*, *8*, 330-353. doi:10.1177/104973159800800306

Milani, L., & Gagliardi, G. (2013). Fattori di rischio e di protezione nella valutazione delle competenze parentali di famiglie italiane e famiglie immigrate [Risk and protective factors in the evaluation of parenting skills: a comparison between Italian and immigrant families]. *Maltrattamento e abuso all'infanzia*, *15*, 59-80. doi:10.3280/MAL2013-001004

Milner, J. S. (1986). *The Child Abuse Potential Inventory: Manual* (2nd ed.). Webster, NC: Psytec.

Milner, J. S. (1989). Additional cross-validation of the Child Abuse Potential Inventory. *Psychological Assessment*, *1*, 219-223. doi:10.1037/1040-3590.1.3.219

Milner, J. S. (1993). Social information processing and physical child abuse. *Clinical Psychology Review*, *13*, 275-294. doi:10.1016/0272-7358(93)90024-G

Milner, J. S. (1994). Assessing physical child abuse risk: The Child Abuse Potential Inventory. *Clinical Psychology Review*, *14*, 547-583. doi:10.1016/0272-7358(94)90017-5

Milner, J. S. (2000). Social information processing and physical child abuse: Theory and research. In D. Hansen (Ed.), *Motivation and child maltreatment* (Nebraska Symposium on Motivation, Vol. 46, pp. 39-84). Lincoln: University of Nebraska Press.

Milner, J. S. (2003). Social information processing in high-risk and physically abusive parents. *Child Abuse & Neglect*, *27*, 7-20. doi:10.1016/S0145-2134(02)00506-9

Milner, J. S., Charlesworth, J. R., Gold, R. G., Gold, S. R., & Friesen, M. R. (1988). Convergent validity of the Child Abuse Potential Inventory. *Journal of Clinical Psychology*, *44*, 281-285. doi:10.1002/1097-4679(198803)44:2<281::AID-JCLP2270440232>3.0.CO;2-J

Milner, J. S., & Crouch, J. L. (1999). Child maltreatment evaluations. *International Journal of Child & Family Welfare*, *4*, 6-23.

Milner, J. S., & Crouch, J. L. (2012). Psychometric characteristics of translated versions of the Child Abuse Potential Inventory. *Psychology of Violence*, *2*, 239-259. doi:10.1037/a0026957

Milner, J. S., Gold, R. G., Ayoub, C. A., & Jacewitz, M. M. (1984). Predictive validity of the Child Abuse Potential Inventory. *Journal of Consulting and Clinical Psychology*, *52*, 879-884. doi:10.1037/0022-006X.52.5.879

Milner, J. S., Gold, R. G., & Wimberley, R. C. (1986). Prediction and explanation of child abuse: Cross-validation of the Child Abuse Potential Inventory. *Journal of Consulting and Clinical Psychology*, *54*, 865-866. doi:10.1037/0022-006X.54.6.865

Milner, J. S., Robertson, K. R., & Rogers, D. L. (1990). Childhood history of abuse and adult child abuse. *Journal of Family Violence*, *5*, 15-34. doi:10.1007/BF00979136

Miragoli, S., & Di Blasio, P. (2012). Propensione al maltrattamento fisico in padri e madri di bambini in età prescolare [Potential physical abuse in preschool children fathers and mothers]. *Maltrattamento e abuso all'infanzia*, *14*, 59-78. doi:10.3280/MAL2012-001005

Miragoli, S., & Verrocchio, M. C. (2008). La valutazione del rischio in situazioni di disagio familiare: il protocollo sui fattori di rischio e sui fattori di protezione [Risk assessment in family prejudice: the Protocol of risk and protective factors]. *Maltrattamento e abuso all'infanzia*, *10*, 25-43.

Montes, M., de Paul, J., & Milner, J. (2001). Evaluations, attributions, affect, and disciplinary choices in mothers at high and low risk for child physical abuse. *Child Abuse & Neglect*, *25*, 1015-1036. doi:10.1016/S0145-2134(01)00254-X

Pečnik, N., & Ajduković, M. (1995). The Child Abuse Potential Inventory: Cross-validation in Croatia. *Psychological Reports*, *76*, 979-985. doi:10.2466/pr0.1995.76.3.97

Pruitt, D. L., & Erickson, M. T. (1985). The Child Abuse Potential Inventory: A study of concurrent validity. *Journal of Clinical Psychology*, *41*, 104-111. doi:10.1002/1097-4679(198501)41:1<104::AID-JCLP2270410119>3.0.CO;2-V

Runyon, M., Deblinger, E., Ryan, E., & Thakkar-Kolar, R. (2004). An overview of child physical abuse: Developing an integrated parent-child cognitive-behavioral treatment approach. *Trauma, Violence, & Abuse*, *5*, 65-85. doi:10.1177/1524838003259323

Sprang, G., Clark, J., & Bass, S. (2005). Factors that contribute to child maltreatment severity: A multi-method and multidimensional investigation. *Child Abuse & Neglect*, *29*, 335-350. doi:10.1016/j.chiabu.2004.08.008

Timmer, S. G., Borrego, J. J., & Urquiza, A. J. (2002). Antecedents of coercive interactions in physically abusive mother-child dyads. *Journal of Interpersonal Violence*, *17*, 836-853. doi:10.1177/0886260502017008003

Whipple, E. E., & Richey, C. A. (1997). Crossing the line from physical discipline to child abuse: How much is too much? *Child Abuse & Neglect*, *21*, 431-444. doi:10.1016/S0145-2134(97)00004-5

Whipple, E. E., & Webster-Stratton, C. (1991). The role of parental stress in physically abusive families. *Child Abuse & Neglect*, *15*, 279-291. doi:10.1016/0145-2134(91)90072-L

Wilson, S., Rack, J., Shi, W., & Norris, A. (2008). Comparing physically abusive, neglectful, and non-maltreating parents during interactions with their children: A meta-analysis of observational studies. *Child Abuse & Neglect*, *32*, 897-911. doi:10.1016/j.chiabu.2008.01.003

Author Biographies

Sarah Miragoli, PhD, researcher in Developmental Psychology at the Faculty of Psychology, Catholic University of Milan, Italy. Research interests: child abuse and maltreatment, traumatic narratives, parenting stress, sexualized behaviours, trauma related symptoms in childbirth, and child legal involvement.

Elena Camisasca, PhD, associate professor in Developmental Psychology at the Faculty Psychology, e-Campus University, Italy. Research interests: marital adjustment and marital conflict, parenting alliance, parenting stress, attachment, trauma related symptoms in childbirth, child abuse and maltreatment.

Paola Di Blasio, PhD, full professor in Developmental Psychology at the Faculty of Psychology, Catholic University of Milan. Director of the Research Center for Developmental and Educational Dynamics (C.R.I.d.e.e.) and of the Research Unit for the Psychology of Trauma. Research interests: child abuse and maltreatment, trauma related symptoms in childbirth, marital adjustment, and parenting stress.