Mothers’ Trait Verbal Aggressiveness and Child Abuse Potential

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Child physical abuse is a serious societal problem that communication scholars have been slow to address. This study explores whether a mother’s trait verbal aggressiveness (VA) is associated with her risk for child physical abuse. Participants were 42 women in predominately low-income families recruited from two social service agencies in a major metropolitan area. Participants completed Infante and Wigley’s (1986) Verbal Aggressiveness Scale (VAS) and Milner’s (1994) Child Abuse Potential Inventory (CAPI) as part of a larger data collection. Mothers with higher trait VA scored higher on the total CAPI, as well as on the distress, rigidity, and problems with others subdimensions. Discussion centers on implications for future research on communication and child maltreatment, as well as for treatment and prevention efforts.

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Child physical abuse is a serious, persistent social problem. On the basis of a survey of Child Protective Services agencies, Prevent Child Abuse America concluded that more than 1 million cases of child abuse and neglect were officially documented in the United States in 1999 (Peddle & Wang, 2001). These represent only officially documented cases, and nationally representative surveys of parents indicate that the actual prevalence of child physical abuse is much higher (e.g., Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). An estimated 1,356 children died as a result of abuse or neglect in 2000 (Peddle, Wang, Diaz, & Reid, 2002). Aside from immediate risk of injury or death, abused children suffer from a host of psychological and behavioral problems, including low self-esteem, low academic performance, poor interpersonal relationships, and juvenile delinquency (Kolko, 1996; Malinosky-Rummel & Hansen, 1993).

Communication scholars have been slow to address these statistics, even though our discipline’s work has relevance for understanding and responding to child maltreatment (Wilson, 1999; Wilson, Morgan, Hayes, Bylund, & Herman, 2004). This study assesses whether a mother’s trait verbal aggressiveness (VA), a widely studied communication predisposition, is associated with her child abuse potential. Child physical abuse arises from a complex interplay of individual, family, community, and cultural factors (Belsky, 1993; National Research Council, 1993); hence, no parental characteristic in isolation can offer a sufficient explanation for child abuse. Having said this, trait VA may be one parental predisposition that, in conjunction with other factors, places children at greater risk of being physically abused. To develop our rationale, we (a) review evidence linking verbally aggressive behavior in families to child physical abuse, (b) discuss trait VA as a parental characteristic that may heighten risk for child physical abuse, and (c) clarify our conception of child abuse potential and research questions.

VERBAL AGGRESSION AND CHILD PHYSICAL ABUSE

Verbally aggressive behaviors attack another person’s self-concept in an attempt to cause psychological pain (Infante & Rancer, 1996). Examples include parents attacking their child’s appearance, awareness, character, competence, or motivation (Infante, Sabourin, Rudd, & Shannon, 1990; Kinney, 1994; Vissing & Baily, 1996). Verbally aggressive behaviors can be distinguished from argumentation, in that the latter involves refuting another person’s position on an issue rather than attacking the person’s self-concept (Infante & Rancer, 1996). Verbally aggressive behavior is contextual: Most parents likely have said something verbally aggressive to their child at some point, even if they later regretted doing so (Knapp, Stafford, & Daly, 1986).

Although not entirely absent in nonmaltreating families, physically abusive parents communicate in verbally aggressive ways with their children more often
than nonabusive parents. In an observational study, Bousha and Twentyman (1984) compared home interactions in abusive, neglectful, and nonmaltreating families \((n = 12\) each). Across 3 days, physically abusive mothers on average engaged in 12.42 acts of verbal aggression, as compared to 4.58 and 0.08 for neglectful and nonmaltreating mothers. Drawing on the Second National Family Violence Survey, Straus and Smith (1990) showed that parents who reported engaging in 1 or more acts of verbal aggression (e.g., insulting or swearing at their child) in the previous year were far more likely also to report acts of physical abuse than those who did not. (Physical abuse is defined here as 1 or more acts of “severe violence” on the Conflict Tactic Scales.) Rates of physical abuse were 9 times higher (16.3% vs. 1.8%) for mothers who did report verbal aggression than those who did not. The same comparison was 3 times higher (14.3% vs. 4.2%) for fathers. These findings suggest that a predisposition toward verbal aggression may be associated with risk of child physical abuse, but to date no study has directly investigated this issue.

**Trait Verbal Aggressiveness**

Trait VA is defined as “the tendency to attack the self-concepts of individuals instead of, or in addition to, their positions on topics of communication” (Infante, 1987, p. 164). Persons high in trait VA do not always communicate aggressively, but they are thought to be extremely sensitive to situational stimuli (e.g., child noncompliance) that might elicit aggression (Infante, 1987; Rudd, Vogl-Bauer, Dobos, Beatty, & Valencic, 1998).

We can envision two reasons why trait VA may be one factor that places parents at greater risk for child physical abuse. First, trait VA, at least in some cases, is associated with an argumentative skill deficit (Infante, 1995). Parents high in trait VA may be unskilled at generating reasons to support their assertions or requests and responding relevantly to their children’s objections. Such parents may resort to verbal (and eventually physical) aggression, rather than argumentation, to overcome child resistance. Consistent with this thinking, parental trait VA is associated with a self-reported authoritarian, rather than authoritative, parenting style (Bayer & Cegala, 1992), as well as with child- and parent-recall of how frequently parents used corporal punishment as a means of gaining their child’s compliance (Kassing, Pearce, & Infante, 2000; Kassing, Pearce, Infante, & Pyles, 1999).

Reciprocal escalation is a second reason why trait VA may place parents at higher risk for child physical abuse. On the basis of home observations, Lorber, Felton, and Reid (1984) reported correlations between a mother’s rate of “total aversive behavior” (verbal aggression plus other negative verbal and physical acts) toward her child and the child’s rate of total aversive behavior toward the mother of \(r = .77\) in physically abusive families but only \(r = .44\) in nondistressed or nonviolent families (see Sabourin, Infante, & Rudd, 1993, for similar patterns of reciprocal verbal aggression in violent marriages). Thus, parents high in trait VA will
likely elicit substantial verbal aggression from their children and may get caught in prolonged episodes of reciprocated aggression. Some episodes may get out of hand, as high trait VA parents use violence in an ill-fated attempt to “regain control” (Reid, 1986).

Child Abuse Potential

One means of studying the role of trait VA would be to compare parents who have a documented history of child physical abuse (e.g., cases confirmed by Child Protective Services agencies) with parents from similar sociodemographic backgrounds with no history of child maltreatment. Because of complexities involved in gaining access to families with Child Protective Services involvement, and because we wanted to recruit parents similar to those who might participate in community-based prevention programs, we took a different tack in this study. Specifically, we recruited a sample of mothers who, on the basis of sociodemographic characteristics, would vary substantially in their risk for child physical abuse. We then assessed each mother’s potential for child physical abuse individually via the Child Abuse Potential Inventory (CAPI; Milner, 1986, 1994, 2004).

The CAPI is a self-report questionnaire used widely in child maltreatment literature; indeed, more than 300 publications report data on the measure (Milner, 2004). The CAPI has been used to evaluate treatment and prevention programs, screen parents for inclusion in nonmaltreating comparison groups, and evaluate theoretical explanations for child abuse. Developed from an extensive literature review of qualities that distinguish physically abusive parents, the CAPI contains 6 descriptive factors (see Appendix). Three of these factors pertain to psychological characteristics: (a) distress (e.g., feelings of frustration and loneliness), (b) rigid expectations (e.g., rigid beliefs about children’s appearance or behavior), and (c) unhappiness (e.g., believing that one does not have a good life). The remaining factors pertain to interactional characteristics: (d) problems relating to one’s child

1We recruited mothers as participants for several reasons. Women in contemporary American society still typically assume primary responsibility as caretakers (Wood, 1994). In addition, a substantial percentage of families in this study were either “single mother only” (29%) or “single mother with an unmarried partner” (21%). Women had virtually exclusive responsibility for childrearing in many of these families.

2Many mothers in this study possessed sociodemographic characteristics that, in general, place parents at higher risk for child physical abuse (National Research Council, 1993): 32% of participants were younger than 18 years of age when they gave birth to their first child, 19% had not completed high school or a GED equivalency, 69% were single mothers, and 45% were parenting 4 or more children. Slightly more than 50% of participants were recruited from a nonprofit health organization located in one of the poorest neighborhoods in the major metropolitan area. Although child maltreatment occurs at all socioeconomic levels, violence toward children is 2 to 3 times more likely in poor families than in upper-income families (Gelles, 1997; National Research Council, 1993). The remaining mothers were recruited from a nonprofit agency with the stated mission of preventing and treating child abuse.
(e.g., perceiving one’s child to have special problems or to be bad), (e) problems relating to one’s family (e.g., perceiving frequent family conflict), and (f) problems relating to others (e.g., perceiving relationships to be unreliable sources of support). Scores on the 6 factors are combined into a total score indicative of a parent’s level of risk. The higher the CAPI score, the greater the degree to which a mother reports qualities that typify physically abusive parents. On the basis of our earlier analysis of trait VA and this conception of potential for child physical abuse, we hypothesized that (H1): Mothers’ trait VA is positively associated with their child abuse potential.

We also explored whether trait VA is associated with multiple subdimensions of the CAPI. Our interest was whether maternal trait VA is associated with a variety of psychological and interactional qualities that typify physically abusive parents, as opposed to only one such quality. More specifically (RQ1): Are mothers’ levels of trait VA associated with specific subdimensions of the CAPI? Finally, we investigated whether trait VA is associated with risk for child abuse after controlling sociodemographic factors. Our position is that trait VA plays a unique role in the etiology of child abuse. A different position is that any relation between trait VA and child abuse potential is spurious because both reflect a mother’s socio-economic status. Thus, we ask (RQ2): Is mothers’ trait VA associated with their child abuse potential after controlling for sociodemographic factors such as their level of education and marital status?

METHOD

Participants and Research Sites

Forty-two mothers, each with at least 1 child between 3- and 8-years-old, participated in this study. Participating mothers were paid $50 for completing a 2-hr data collection, which included questionnaires plus observational and interview data (see following).

Participants on average were 31.05 years old ($Mdn = 29.00, SD = 7.89$, range = 19 to 58 years) at the time of the study. They were parenting between 1 and 7 children ($M = 2.86, Mdn = 2.00, SD = 1.54$ children), and on average they had been 21.66 years old ($Mdn = 19.00, SD = 7.01$, range = 15 to 41 years) when they gave birth to their first child. Twenty-nine participants (69%) described their ethnic background as “African American,” 8 (19%) as “Hispanic American (Latina),” 2 (5%) as “European American,” 1 (2%) as “Asian American,” and 2 (5%) as “Other.” Twenty-seven participants (64%) described their marital status as “unmarried,” 13 (31%) selected “married,” and 2 (5%) selected “divorced.” Household structure can be described as follows: 12 participants (29%) were single mothers with no other adult living in the household, 9 (21%) were single mothers living
with an unmarried partner, 8 (19%) were single mothers living with extended family (their own parents, in-laws, or adult siblings), 11 (26%) were married and living with their spouse, and 2 (5%) were married and living with a spouse and extended family. Participants on average had completed 12.99 years of schooling ($SD = 1.64$ years, range = 8 to 22 years). When asked about paid employment, 14 (34%) indicated “yes – 40 or more hours a week,” 5 (12%) selected “yes – 20 to 40 hours a week,” 3 (7%) selected “yes – fewer than 20 hours a week,” and 19 (45%) selected “no” (one participant did not respond to this question).

Participants were recruited from two social service agencies in a large metropolitan area. The first is a nonprofit, religiously based organization that operates a foster home for children removed by the state because of abuse or neglect, treatment programs for abusive parents, outpatient counseling for families at risk for child abuse, and a neighborhood day care center. At-risk families are referred to this agency by pre- or elementary schools because one of their children has displayed some type of conduct disorder, a condition that places children at higher risk for abuse at home (Gelles, 1997; National Research Council, 1993). Most mothers recruited from this agency were involved with the counseling program or the day care center. The second agency is a nonprofit, religiously based organization that offers health and counseling services in one of the poorest neighborhoods in the metropolitan area. Facilities and services include a pediatric clinic, an afterschool program for adolescents, a tuberculosis ward, and STD and prenatal counseling via a health support services department. Most participants from this site were recruited from the pediatric clinic or the health support services program.

Procedures

After receiving approval from the relevant Institutional Review Board, we posted flyers advertising a study of “mother-child communication” at the two social service agencies. Interested mothers left contact information with agency staff. Bylund then telephoned each participant and scheduled a data-collection session at their agency.

After arriving with their child at the social service agency, participants were informed that the purpose of the research was to study mothers’ thoughts and feelings during everyday conversations with their children. Mothers were told that they would be completing a 3-phase data collection: (a) a 10-min videotaped play-time interaction with their child, (b) a stimulated-recall interview immediately afterwards, and (c) a series of questionnaires about being a parent. Phase 3 included a questionnaire about sociodemographic information, as well as Infante and Wigley’s (1986) Verbal Aggressiveness Scale (VAS) and Milner’s (1986, 1994) CAPI. One of the authors always read the sociodemographic questionnaire aloud and marked the participant’s responses. Participants typically completed the VAS and the CAPI on their own, although one of the researchers always was pres-
ent to answer questions. In some cases, at the participant’s request, the researcher read the VAS aloud. Data from these questionnaires are the focus of this article.

Participants were assured that their individual responses would remain confidential, be used only for the purposes of the research, and not be shared with staff from their social service agency. The only stated exception to this promise of confidentiality was our legal obligation to report evidence of child abuse or neglect. After completing all 3 phases of the data collection, participants were debriefed, given the chance to ask questions, and paid $50 in cash.

Measures

**Trait verbal aggressiveness.** Trait VA was measured using the 10-item “aggressiveness” subscale from Infante and Wigley’s (1986) original 20-item VAS. The VAS has been used widely to tap people’s propensity for attacking others’ self-concepts in interpersonal, instructional, and organizational contexts (see Infante & Rancer, 1996). The VAS includes 10 negatively worded items and 10 positively worded items. Negatively worded items (e.g., “When individuals are very stubborn, I use insults to soften their stubbornness”) appear to tap the propensity for aggressiveness, as originally intended. Rather than assessing the simple absence of aggression, positively worded items (e.g., “I try to make people feel good about themselves even when their ideas are stupid”) appear to tap intentional attempts to support the other during disagreement. Although most studies have treated the 20-item VAS unidimensionally, recent research shows that the VAS factors into two dimensions (labeled aggressiveness and benevolence) and that these dimensions correlate differentially with other variables, as would be expected if they measured different constructs, as opposed to opposite ends of a single dimension (Beatty, Rudd, & Valencic, 1999; Levine et al., 2004). Because of this, we followed Levine et al.’s recommendation and scored trait VA based solely on the 10 aggressively worded items. Participants were instructed to indicate how often each item was true about them “when you try to influence other persons.” Thus, the scale taps a mother’s self-report of her verbally aggressive tendencies with people in general, rather than specifically with her child or family. When a participant did not complete an item, the mean score on that item for all other participants was substituted (no participant left more than two items blank). Internal consistency for the 10-item aggressiveness subscale of the VAS was .83.3

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3 Internal consistency for the 10-item aggressiveness subscale (α = .83) actually was higher than for the entire 20-item VA scale (α = .71), which is consistent with the claim that the VA scale is not unidimensional. We did exploratory analyses investigating relationships between the 10-item benevolence subscale of the VAS (i.e., the 10 positively-worded items) and the CAPI. Benevolence scores were not related to total scores on the CAPI nor to any CAPI subdimension; hence, we report results only for the 10-item aggressiveness subscale.
Child abuse potential. Mothers’ levels of risk for child physical abuse were assessed via Milner’s (1986, 1994, 2004) CAPI, a 160-item forced-choice questionnaire with an agree-or-disagree format. Written at a 3rd-grade readability level, the questionnaire contains a 77-item child physical abuse scale (referred to from this point on as the CAPI) and 3 validity scales (lie, inconsistency, and random-response measures). As noted, the CAPI contains 6 descriptive factors: distress, rigid expectations, unhappiness, and problems relating with one’s child, family, and others (see Appendix). To create a total CAPI score for each mother, responses to the 77 abuse items were weighted using a beta-regression formula based on each item’s relative ability to distinguish physically abusive and matched-comparison parents in a prior validity study (Milner, 1986). When a participant did not complete an item, the mean score for all other participants was substituted. On average, participants left less than 1 of the 77 items blank. Appropriate items were reversed, so that higher total CAPI scores reflect greater child abuse potential (possible range for total weighted scores = 0 to 486). We failed to copy both sides of the CAPI before administering it to one participant, which meant that 50% of the 77 abuse items accidentally were omitted. We deleted this participant’s responses; hence, analyses involving the CAPI involve \( N = 41 \) mothers.

Internal consistency for the 77-item CAPI was high (KR20 = .87). Milner (1986) reported test–retest correlations of .91, .90, .83, and .75 over 1-day, 1-week, 1-month, and 3-month intervals. Regarding construct validity, parents’ scores on the CAPI are associated with many known risk factors for child physical abuse (e.g., a history of abuse in the parent’s own childhood, social isolation, and low self-esteem; for a review, see Milner, 1994). Classification rates for distinguishing physically abusive from matched-nonmaltreating parents via the CAPI range from 80-90% (Milner, 1986; for more detail, see Note 4). Milner, Gold, Ayoub, and Jacewitz (1984) studied 200 at-risk parents and found that scores on the CAPI predicted confirmed reports of child maltreatment over the next 6 months.

Although classification rates for distinguishing physically abusive from matched-nonmaltreating parents with the CAPI are high (range = 80-90%), the CAPI produces more false negatives (failure to identify physically abusive parents as high risk) than false positives (incorrect classification of nonmaltreating parents as high risk; Milner 1986, 2004). Because of this, Milner developed a lie scale to help detect physically abusive parents who were responding in a socially desirable fashion. Higher scores on the lie scale indicate agreement with items such as “I always tell the truth” and “I never do anything that is bad for my health.” For similar reasons, validity scales to assess random and inconsistent responding were developed. The three validity scales are used to calculate three response-distortion indices: (a) faking good (high lie score/low random response score), (b) faking bad (low inconsistency score/high random response score), and (c) random response (high inconsistency and random response scores). No participant scored above the norm on the faking bad or random response indices; however, two thirds (28 of 41) scored above the norm on faking good. Although an elevated faking-good score is troubling when the CAPI is used to investigate a specific allegation of child maltreatment, it is less problematic for research drawing general conclusions about groups of parents who score relatively high versus low on the CAPI. The large number of faking-good responses suggests that our
Although internal consistency for the 77-item CAPI was high, reliability was much lower for 3 of the 6 subscales (unhappiness, problems with family, and problems with others; KR20 coefficients < .50). Milner (1986) also reported lower estimates for several subscales than for the total CAPI. Consequently, we deleted items from each of the 6 subscales if those items had low item-total correlations or low face validity. Only a few items were deleted from most subscales (e.g., 32 of the original 36 distress items were retained), but a large number were deleted for the unhappiness subscale (only 3 of the 11 items were retained). For each subscale, the number of items retained and corresponding reliability coefficients appear in Table 1. In most cases, these coefficients are .15-.20 points higher than the original subscales. Because the beta-regression weighting formula for each item was developed in an analysis that included all 77 items from the CAPI, we chose to use weighted scores when reporting total CAPI scores, but we chose to use raw scores instead when reporting scores for each of the 6 CAPI subscales. Table 1 describes the possible range both for total (weighted) CAPI scores as well as for raw subscale scores.

**Sociodemographic measures.** We analyzed several sociodemographic questions to create control variables for testing our second research question. Scores on a mother’s years of education, age at the time of the birth of her first child, and number of children all were moderately related (average $|r| = .38$ after $r$-to-$z$ transformation). Because all three of these factors have been identified as risk factors for child abuse (Gelles, 1997; National Research Council, 1993), we created an index of socioeconomic status (SES) by standardizing scores on all three variables and then subtracting number of children from years of education and age at first childbirth. Mothers with higher scores on this SES index had completed more schooling, were older when giving birth to their first child, and cur-

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5Some may question whether research findings for the CAPI subscales are “suspect” when estimates of internal consistency for some subscales are below .60. According to classic reliability theory, measurement error arises from random factors (e.g., fatigue) and is independent of a person’s true score. Because it is not patterned, low reliability attenuates relations between that measure and measures of other constructs (Hunter & Schmidt, 2004; Ree & Carretta, 2006). Cohen, Cohen, West, and Aiken (2003) state unequivocally that “unreliability in variables as classically defined is a sufficient reason for low correlations; it cannot cause correlations to be spuriously high” (p. 57, emphasis in original). Hence, low internal consistency may explain why mothers’ trait VA does not predict some dimensions of the CAPI, but low reliability should not lead readers to discount significant relations between trait VA and CAPI subdimensions. If significant relations are detected, despite low reliability, then the true parameters likely are even larger than the correlations reported here.
rently were parenting fewer children. We also recoded marital status into “no” (single or divorced) and “yes” (married) as a second control variable. Mothers in our sample who were married (n = 13) had completed more schooling (M = 14.5 years) and had been older when giving birth to their first child (M = 25.31 years), compared to those (n = 29) who were not married (Ms = 12.31 years and 19.96 years old), t(40) = –3.17 and –2.40, both ps < .03. The two groups did not differ in terms of the number of children they were parenting.

RESULTS

Descriptive data on the overall CAPI (using weighted total scores), as well as the 6 CAPI subscales (using raw scores), appear in Table 1. Mothers in our sample had an average total CAPI score of 112. This mean-weighted CAPI score is substantially below average scores for samples of parents with a documented history of abuse, but it is higher than the average (M = 91) for 836 parents with no known history of child abuse (see Milner, 1986, pp. 14-16). On the basis of a signal detection theory analysis from a prior validity study, Milner (1986) proposed the score of 166 as a cutoff point for classifying parents at “high risk” for child physical abuse. Twenty-two percent (9 of 41) of mothers in our sample had total CAPI scores exceeding 166.

The distribution of CAPI and trait VA scores approached normality; however, distributions for three of the six CAPI subscales (unhappiness, problems with

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of Items</th>
<th>Mean (SD)</th>
<th>Possible Range</th>
<th>Skew</th>
<th>Reliability^a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total CAPI (weighted)</td>
<td>77</td>
<td>111.58 (67.78)</td>
<td>0–486</td>
<td>0.67</td>
<td>.87</td>
</tr>
<tr>
<td>CAPI subscales (raw scores)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distress</td>
<td>32</td>
<td>8.26 (6.41)</td>
<td>0–32</td>
<td>0.72</td>
<td>.89</td>
</tr>
<tr>
<td>Rigidity</td>
<td>10</td>
<td>4.58 (2.85)</td>
<td>0–10</td>
<td>0.06</td>
<td>.79</td>
</tr>
<tr>
<td>Unhappiness</td>
<td>3</td>
<td>0.23 (0.59)</td>
<td>0–3</td>
<td>3.35 (2.33)^b</td>
<td>.54</td>
</tr>
<tr>
<td>Problems with child</td>
<td>3</td>
<td>0.34 (0.76)</td>
<td>0–3</td>
<td>2.53 (1.91)^b</td>
<td>.71</td>
</tr>
<tr>
<td>Problems with family</td>
<td>3</td>
<td>0.35 (0.70)</td>
<td>0–3</td>
<td>2.22 (1.61)^b</td>
<td>.55</td>
</tr>
<tr>
<td>Problems with others</td>
<td>4</td>
<td>1.33 (1.21)</td>
<td>0–4</td>
<td>0.71</td>
<td>.58</td>
</tr>
<tr>
<td>Verbal Aggressiveness Scale (VAS)</td>
<td>10</td>
<td>2.06 (0.80)</td>
<td>1–5</td>
<td>0.67</td>
<td>.83</td>
</tr>
</tbody>
</table>

Note. N = 41–42 mothers.

^aFor the CAPI, these are KR20 Reliability coefficients; for the VAS, this is Cronbach’s alpha.
^bLogarithmic transformations were computed for the Unhappiness, Problems with Child, and Problems with Family subscales to reduce the positive skew of these distributions. Numbers in parentheses are skews after transformation.
## TABLE 2
Correlations Among Trait VA, Total CAPI Scores, CAPI Subdimensions, and Socio-Demographic Factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Trait VA</td>
<td>1.00</td>
<td>.49***</td>
<td>.40**</td>
<td>.43**</td>
<td>.20</td>
<td>.23</td>
<td>.02</td>
<td>.57***</td>
<td>–.18</td>
<td>–.12</td>
</tr>
<tr>
<td>(2) CAPI: Total Score</td>
<td>1.00</td>
<td>.95**</td>
<td>.61**</td>
<td>.21</td>
<td>.32*</td>
<td>.53**</td>
<td>.61**</td>
<td>–.40**</td>
<td>–.24</td>
<td></td>
</tr>
<tr>
<td>(3) CAPI: Distress</td>
<td>1.00</td>
<td>.44**</td>
<td>.07</td>
<td>.24</td>
<td>.45**</td>
<td>.51***</td>
<td>–.23</td>
<td>–.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) CAPI: Rigidity</td>
<td>1.00</td>
<td>–.04</td>
<td>.24</td>
<td>.27</td>
<td>.31*</td>
<td>–.44**</td>
<td>–.32*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) CAPI: Unhappiness</td>
<td>1.00</td>
<td>.10</td>
<td>–.02</td>
<td>.30</td>
<td>–.32*</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) CAPI: Problems with Child</td>
<td>1.00</td>
<td>–.02</td>
<td>.06</td>
<td>–.13</td>
<td>–.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) CAPI: Problems with Family</td>
<td>1.00</td>
<td>.18</td>
<td>–.28</td>
<td>–.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) CAPI: Problems with Others</td>
<td>1.00</td>
<td>–.40**</td>
<td></td>
<td></td>
<td>–.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9) Married (no/yes)</td>
<td>1.00</td>
<td>.37*</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(10) SES Index</td>
<td>1.00</td>
<td></td>
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</tbody>
</table>

Note. $N = 41–42$ mothers. VA = Verbal Aggressiveness; CAPI = Child Abuse Potential Inventory. CAPI total scores are weighted; CAPI subscale scores are raw scores. Scores on the Unhappiness, Problems with Child, and Problems with Family subscales are log transformed.

*p < .05. **p < .01. ***p < .001, 2-tailed.
child, and problems with family) were highly skewed (see Table 1). As recommended by Winer (1971), logarithmic transformations were computed to reduce the positive skew of these distributions.

Hypothesis 1 predicted that mothers’ level of trait VA would be positively associated with their child abuse potential. Correlations between the VAS, total CAPI, six CAPI subscales, and sociodemographic factors are shown in Table 2. Assuming N = 41 and p < .05 (2-tail), statistical power was .66 to detect large effects (r = .37) but only .33 to detect effects of medium size (r = .24). As predicted, mothers’ trait VA scores were significantly associated with their total CAPI score, r = .49, p < .01, with the two measures sharing 24% common variance.

Our first research question asked whether trait VA scores are associated with particular subdimensions of child abuse potential. Inspection of Table 2 reveals that trait VA is significantly associated with three CAPI subscales (all ps < .01): feelings of distress (r = .40), rigid expectations about children and home life (r = .43), and problems relating to others (r = .59). Higher trait VA is associated with several characteristics that typify physically abusive parents.

Our second research question asked whether trait VA still is associated with child abuse potential after controlling sociodemographic factors. We conducted four separate hierarchical regression analyses to address this question. Given that trait VA was significantly associated with the total CAPI, as well as three CAPI subscales (distress, rigidity, and problems with others), one of these served as the criterion variable in each analysis. In each case, we entered the SES index and marital status (dummy coded 0 = no, 1 = yes) into the regression equation at Step 1. Trait VA then was entered at Step 2, to assess whether it still

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Total CAPI</th>
<th>Distress</th>
<th>Rigidity</th>
<th>Problems With Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married (N/Y)</td>
<td>−.34*</td>
<td>−.17</td>
<td>−.36**</td>
<td>−.38*</td>
</tr>
<tr>
<td>SES Index</td>
<td>−.12</td>
<td>−.14</td>
<td>−.17</td>
<td>−.05</td>
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<tr>
<td>Overall R</td>
<td>.40*</td>
<td>.26</td>
<td>.47*</td>
<td>.40*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trait VA</td>
<td>.41**</td>
<td>.33*</td>
<td>.33*</td>
<td>.54**</td>
</tr>
<tr>
<td>Overall R</td>
<td>.57**</td>
<td>.42</td>
<td>.57**</td>
<td>.67**</td>
</tr>
<tr>
<td>(R^2) Δ</td>
<td>.16**</td>
<td>.11*</td>
<td>.11*</td>
<td>.28**</td>
</tr>
</tbody>
</table>

Note. N = 40 mothers. Numbers for individual predictor variables are standardized regression coefficients (betas). CAPI = Child Abuse Potential Inventory; VA = Verbal Agressiveness; SES Index = \(z\) (years of education) + \(z\) (age when had first child) – \(z\) (number of children parenting).

\(*p < .05. \mbox{*}*p < .01.\)
explained a significant portion of variance in each CAPI subscale. Results of these analyses appear in Table 3.

Trait VA remains a significant predictor of the total CAPI and all three CAPI subdimensions at Step 2 in these regression analyses. Readers should note that trait VA continues to share substantial variance with child abuse potential, even after taking sociodemographic factors into account. For example, trait VA still predicted 16% of the variance in total CAPI scores at Step 2 in the regression equation (see Step 2 $R^2$ in Table 3), as opposed to 24% shared variance at the zero-order level. Similar results occurred for the distress, rigidity, and problems with others subdimensions of the CAPI.

**DISCUSSION**

This study provides initial evidence that a mother’s level of trait VA is associated with her child abuse potential. Participants in the study, 42 mothers from predominately low-income families, completed the VAS (Infante & Wigley, 1986) and the CAPI (Milner, 1986, 1994, 2004). Scores on the trait VA scale and the 77-item CAPI share a strong relation. More specifically, higher trait VA is associated with self-reports for 3 of the 6 characteristics that typify abusive parents: feelings of distress, rigid expectations about children and home life, and perceived problems relating with others (see Appendix). Trait VA has unique effects on child-abuse potential above and beyond sociodemographic factors such as marital status, education, and number of children.

Future research needs to explore why parents high in trait VA are at greater risk for child physical abuse. Drawing on prior work, we proposed two possible explanations: argumentative skill deficits and reciprocal escalation. The former account asserts that at least some parents high in trait VA lack skills at justifying their requests and refuting their children’s objections, and hence resort to verbal (and eventually physical) aggression as a substitute method of gaining their children’s compliance (Infante, 1995; Kassing et al., 1999). The latter asserts that verbally aggressive parents elicit high levels of verbal aggression from their children, and these parents are thus more likely to become trapped in cycles of reciprocated verbal aggression that escalate to violence (Reid, 1986). These accounts are not incompatible; parents who lack argumentative skills may be those least able to short-circuit escalating verbal aggression.

As part of the larger data collection, we videotaped 10 min of play-time interaction between each participating mother and 1 of her children, as well as conducted a stimulated recall interview with the mother immediately afterwards. Although there are published findings regarding how mothers’ child abuse potential predicts maternal and child behavior during the play period (Wilson et al., 2004), we are just now exploring mothers’ trait VA. Initial analyses indicate that a mother’s trait
VA is: (a) positively associated with her overall rates of directing behaviors (neutral and negative commands, suggestions) during the play period, and (b) inversely associated with the degree to which her child is rated as cooperative by trained observers (Wilson et al., 2006). Regarding the stimulated recall interview, a mother’s trait VA is: (a) positively associated with the percentage of negative thoughts she spontaneously recalls having had about her child during the play period, and (b) inversely associated with the percentage of negative thoughts she recalls about herself (Wilson, Bylund, Hayes, Morgan, & Herman, 2002). In sum, maternal trait VA is evident in maternal perceptions and behavior, as well as child behavior, even during short play-time interactions.

The etiology of child abuse is complex; hence, future work needs to explore relationships between trait VA and risk factors at the family, community, and cultural levels (Belsky, 1993). For example, both violent husbands and wives tend to be higher in trait VA and lower in trait argumentativeness than their nonviolent counterparts (Infante, Chandler, & Rudd, 1989). Thus, a mother’s trait VA may increase the risk of child maltreatment, not only by affecting two-party interactions between her and her child, but also because the child may witness or be drawn into interactions between adult partners or other extended family members (Margolin & Gordis, 2003).

Despite the complex etiology of child abuse, our findings have implications for prevention and treatment efforts. Community-based programs often include parent education within a multicomponent approach that also includes social-support groups and job training for parents, as well as social-skills training with children (e.g., Whipple & Wilson, 1996). Infante’s (1995) proposals for preventing verbal aggression from occurring or escalating offer important suggestions for parent-education curriculum. Parents can learn to identify various forms of verbal aggression (Infante et al., 1990; Kinney, 1994; Vissing & Bailey, 1996) and to distinguish such messages from more constructive forms of argumentation. To reduce the likelihood of verbal aggression, parents can practice behaviors that communicate involvement and respect, such as listening to their child without interruption, showing interest in their child’s views, explaining the rationale for requests, and reaffirming their child’s general competence in cases where they disagree with the child’s specific ideas. To prevent verbal aggression from escalating, parents can learn to use time-out as a means of short-circuiting escalation and to help their child distinguish verbally aggressive from argumentative responses.

These suggestions for skills training might seem futile from the perspective of communibiology, in which trait VA is conceptualized as reflecting individual differences in neurobiological functioning that are for the most part genetically determined (Beatty, Heisel, Hall, Levine, & LaFrance, 2002; Beatty & McCroskey, 1998). The communibiological perspective is skeptical about the degree to which skills training can override biological systems (McCroskey & Beatty, 2000). The communibiology perspective may suggest unique insights regarding the link between trait VA and child abuse potential, as physically abusive parents are more
physiologically reactive to child-related stimuli (as assessed via heart rate, diastolic blood pressure, and skin conductance) than nonmaltreating parents (for a review, see Milner & Dopke, 1997). In our view, however, the communibiology perspective oversimplifies the nature–nurture distinction (e.g., the variety of genetic–environment interactions) and overstates what can be claimed without genetic or chemical markers of trait VA (Condit, 2000; Morgan & Wilson, 2005). Equally important, several of our suggestions for intervention would teach parents high in trait VA to diagnose and short-circuit interactions that are likely to elicit verbally aggressive messages before the predisposition is enacted.

Our findings should be interpreted in light of limits of our research. First, results are based on a convenience sample of predominately African American single-parent mothers, which limits external validity. Having said this, our study offers insights about an understudied group of parents (Socha, Sanches-Hucles, Bromely, & Kelly, 1995) who vary substantially in terms of individual risk for child physical abuse. Shared methods variance is a second potential limit. Although both trait VA and child-abuse potential are assessed via self-report, they are distinct constructs at the conceptual level. It is true that both trait VA and the CAPI “problems with others” subdimension involve aspects of a mother’s relationships with others; however, the former construct is operationalized with statements such as “When individuals are stubborn, I use insults to soften the stubbornness,” whereas the latter is tapped by statements such as “Other people have made my life hard.” Third, we detected substantial associations between trait VA and three subdimensions of the CAPI, but our failure to find statistically significant relationships with other CAPI subdimensions (e.g., unhappiness, problems with child) could reflect a lack of statistical power because of the modest sample size, as well as low reliabilities for some CAPI subdimensions (see Note 5). A final limit is that our findings are based on mothers with varying child physical-abuse potential, rather than on mothers (or fathers) with a documented history of abuse. Despite these limits, this study provides initial insights about the role of trait VA in the etiology of child physical abuse and illustrates how communication research can contribute to interdisciplinary efforts aimed at understanding and responding to this social problem.

REFERENCES


### APPENDIX

Sample Items for the Child Abuse Potential Inventory (CAPI)

#### Psychological Subdimensions

**Distress**
- I often feel very frustrated.
- I have many personal problems.
- I am often lonely inside.

**Rigidity**
- Children should always be neat.
- A home should be spotless.
- Children should never disobey.

**Unhappiness**
- My life is good. (R)
- My life is happy. (R)
- I am a happy person. (R)

#### Interpersonal Subdimensions

**Problems with Child**
- I have a child who gets into lots of trouble.
- My child has special problems.
- I have a child who is slow.

**Problems with Family**
- My family fights a lot.
- My family has problems getting along.
- My family has many problems.

**Problems with Others**
- Other people have made my life very hard.
- You cannot depend on others.
- These days a person doesn’t really know whom one can count on.