



PAPER

PSYCHIATRY AND BEHAVIORAL SCIENCES

Maria Cristina Verrocchio,¹ Psy.D.; Amy J. L. Baker,² Ph.D.; and William Bernet,³ M.D.

Associations between Exposure to Alienating Behaviors, Anxiety, and Depression in an Italian Sample of Adults

ABSTRACT: The aim of this study was to examine associations between exposure to alienating behaviors (ABs) and anxiety and depression as mediated through psychological maltreatment and parental bonding in a sample of Italian adults in the community. Five hundred and nine adults were given a measure of exposure to ABs, the Baker Strategy Questionnaire; the Psychological Maltreatment Measure; the Parental Bonding Instrument; the State-Trait Anxiety Inventory-Y; and the Beck Depression Inventory-II. Exposure to ABs was associated with psychological maltreatment, which was associated with parental bonding, which was associated with each of the three mental health outcomes: depression, state anxiety, and trait anxiety. The authors conclude that exposure to ABs in childhood represents a risk factor for subsequent poor mental health.

KEYWORDS: forensic science, baker strategy questionnaire, state-trait anxiety inventory, beck depression inventory, alienating behaviors, parental alienation, child psychological abuse

It is universally accepted that the harmful psychological consequences of child maltreatment include both the short-term effects on child victims and the long-term sequelae for adults previously abused as children. The recent report from the National Academies summarized, "Childhood abuse and neglect have a profound and often lasting impact that can encompass psychological and physical health, neurobiological development, relational skills, and risk behaviors. ... The more often children experience abuse or neglect, the worse are the outcomes" (1, p. 5).

The long-term effects of physical abuse and neglect have been widely reported. Maxfield and Widom (2), Smith et al. (3), and Jonson-Reid et al. (4) found that physical abuse and neglect in childhood increased the risk for delinquency and violence in late adolescence and early adulthood. Fergusson et al. (5) and Gilbert et al. (6) found that abuse and neglect in childhood increased the risk for suicidality in adolescence and adulthood. The longterm consequences of child sexual abuse-typically, earlier initiation of sexual activity as adults and increased prostitutionwere described by Trickett et al. (7) and Wilson and Widom (8). The long-term sequelae of child psychological abuse (CPA), however, have been studied less intensively, perhaps because CPA itself seems harder to define and conceptualize than is physical abuse and sexual abuse. However, now that CPA has been included as a specific form of child maltreatment in the Diagnostic and Statistical Manual of Mental Disorders, Fifth

³Vanderbilt University, Nashville, TN.

Edition (9, p. 719), it will receive greater attention from both clinicians and researchers.

When researchers study abused children who have been identified by child protection services, the consequences of CPA are hard to separate from the effects of other forms of maltreatment that the children have experienced, such as physical abuse, sexual abuse, physical neglect. It is unusual for child protection personnel to classify a child as only a victim of CPA, without also experiencing physical or sexual abuse (10). However, when researchers study CPA using community samples, it is possible to compare adult subjects who report only CPA, only physical abuse, only sexual abuse, or some combination of those forms of maltreatment. For example, Teicher et al. found, "Parental verbal aggression [alone] was a potent form of maltreatment" (11). That phenomenon transcends cultures, in that individuals from many countries who recall verbal aggression (a form of psychological maltreatment) and psychological unavailability (another form of psychological maltreatment) by their parents are more likely to have mental health problems as adults (12). Interpersonal Acceptance-Rejection Theory predicts that "as much as 21% of the variability in adults' psychological adjustment can be explained by childhood experiences of caregiver acceptance-rejection" (13, p. 1).

The most elaborate research project that has addressed the long-term consequences of CPA is the study of adverse childhood experiences (ACEs) by the Centers for Disease Control and Prevention and the Kaiser Permanente healthcare system in California. That research program addressed a specific list of ACEs, which included two that reflect CPA: verbal abuse by a parent or other adult in the household and feeling threatened with physical injury. The ACE study established that the greater number of adverse events that the person experienced during childhood, the greater the likelihood the adult would have

¹Clinical Psychology, Department of Psychological Sciences, Humanities and Territory University of Chieti, Chieti, Italy.

²The Vincent J. Fontana Center for Child Protection, New York, NY.

Received 8 April 2015; and in revised form 16 July 2015; accepted 26 July 2015.

psychosocial problems, medical conditions, and even premature death (14). The ACE researchers were able to analyze the specific contribution of CPA on subsequent adult mental health functioning. Edwards et al. confirmed previous research, saying, "A dose-response relation was found between the number of types of maltreatment reported and mental health scores (15)." In addition, however, those authors found, "An emotionally abusive family environment accentuated the decrements in mental health scores." More recently, ACEs have been found to cumulatively impact lifespan development across a number of important domains (16).

Child psychological abuse typically includes a repeated pattern or extreme incidents of the following forms of maltreatment: spurning the child; terrorizing the child; isolating the child from peers or adults; exploiting or corrupting the child; denying emotional responsiveness; and failure to provide the necessary treatment for the mental health, medical, and educational needs of the child (17). This paper addresses the long-term effects of a particular form of CPA, that is, parental alienation (PA). PA refers to a family dynamic in which one parent engages in alienating behaviors designed to foster a child's unjustified rejection of the other parent. Alienation usually occurs in the context of a high-conflict separation or divorce. When the parent is successful, the child allies himself or herself strongly with that parent (the preferred parent) and rejects a relationship with the other parent (the alienated parent) without a good reason. Thus, alienation is brought about by the preferred or alienating parent, who employs alienating behaviors (ABs) to influence the child to dislike, distrust, and fear the alienated parent (18,19).

Writers in many countries have found that creating PA through the use of ABs is a form of CPA, and several examples are presented here. For instance, the Maltreatment Classification System that is used by the Consortium for Longitudinal Studies on Child Abuse and Neglect (LONGSCAN) has a category for "Emotional Maltreatment." That category includes the following type of maltreatment, which is consistent with the ABs addressed in this paper: "The caregiver undermines the child's relationships with other people significant to the child (e.g., makes frequent derogatory comments about other parents) [emphasis in original]" (20, p. 28). In a historic presentation in Washington, DC, Williams said, "A parentectomy is the most cruel infringement upon children's rights to be carried out against human children by human adults" (21). A prominent psychiatrist in South Africa wrote, "It is suggested that [parental alienation syndrome] be recognized as a form of child abuse" (22). A physician in Sweden wrote, "Severe cases of parental alienation must be considered a form of child abuse because the disruption of the child's trust in - and loving bond to - his or her alienated parent is capable of derailing the development of essential psychosocial functions, and even lead to their loss" (23). Finally, the federal legislature of Brazil passed a law that states, "The practice of parental alienation infringes upon a fundamental right the child or adolescent has in having a healthy family life, impairs affection in the relationship with the parent and other family members, and constitutes psychological abuse of the child or adolescent ..." (24).

The purpose of the current research was to identify in more detail the mechanisms by which ABs cause long-term psychological problems for the child victims of this form of CPA. This study was designed to assess the associations between childhood exposure to ABs and concurrent anxiety and depressive symptomatology in Italian adults. We aimed to extend the body of knowledge regarding the long-term effects of exposure to ABs by studying its impact on both depression and anxiety. Specifically, we asked (1) What are the rates of reported exposure to ABs? (2) With respect to internal validity, we asked whether rates of reported exposure to ABs were higher for those who endorsed the item "one parent tried to turn me against the other parent." (3) With respect to external validity, we asked whether rates of reported exposure to ABs were higher for those from nonintact families. (4) Also, with respect to external validity, we asked whether rates of reported exposure to ABs were associated with self-reported state and trait anxiety and depression.

Methods

Participants and Procedures

Participants were 509 individuals recruited in Southern Italy by a group of psychology students who promoted the study to their colleagues, friends, and family. Initial participants identified additional people via snowball sampling to participate. After giving informed consent, the subjects responded to the written questionnaire. In all, 570 people were invited to participate, 531 of whom agreed to participate (93.15% response rate), all of whom completed the survey. Of the 531 cases, 21 did not have two parents alive during childhood, and 1 had missing data. These 22 were excluded, and the remaining 509 cases were used for analyses. Three hundred and two were females, and 207 were males. About 20% of the sample had parents who had separated and/or divorced.

The mean age was 33.4 years (SD = 13.87). With respect to education, three-fourths (72.1%) of the participants had earned a high school degree or less, and the remaining (27.9%) had earned a bachelor degree or more. Thirty-eight percent of the participants were employed in part-time or full-time jobs, about 40 percent were students, and the remaining participants were unemployed.

Measures

The paper and pencil survey consisted of a series of demographic questions (age, gender, level of education, employment, parental divorce, or remarriage) and several standardized measures, five of which were examined for this study.

Baker Strategy Questionnaire (BSQ)

The BSQ is a 20-item measure comprised of a list of 19 specific behaviors and one general behavior that parents might engage in as ABs (25). The respondents answered separately for mother and father on a 5-point scale from never (0) to always (4). Total scores could range from 0 to 80 for each parent. In the present study, scores across parents were combined to create a "total exposure to parental alienation measure" which could range from 0 to 82 (Mean = 9.4, SD = 15.2). The measure demonstrated high internal consistency ($\alpha = 0.94$).

State-Trait Anxiety Inventory—Form Y (STAI-Y)

The STAI-1 is a 20-item questionnaire design to assess state anxiety defined as a transient, momentary emotional status that results from situational stress (26,27). Each item is rated from 1 (not at all) to 4 (very much so) to reflect the level of each affective statement. The STAI-2 also contains 20 items and is designed to assess participants' level of trait anxiety that represents a predisposition to react with anxiety in stressful situations. Each item is also rated from 1 (almost never) to 4 (almost always) to reflect participants' general affective tendencies. Total scores could range from 20 to 80 for each scale with higher scores indicating higher anxiety. In this study, the Cronbach's alpha was 0.94 for state version and 0.92 for trait version.

Beck Depression Inventory-II (BDI-II)

The BDI-II is a 21-item questionnaire for measuring the severity of depression during the past week (28,29). It was developed to assess symptoms corresponding to diagnostic criteria of depressive disorders listed in the *Diagnostic and Statistical Manual of Mental Disorder*, Fourth Edition (DSM-IV) (30). The questionnaire consists of 21 groups of affirmations about symptoms and depressive attitudes. For each group of affirmations, the subject is invited to respond by choosing the statement that best describes how they felt "in the last 2 weeks (including today)" and each group is followed by 4 response options, from 0 to 3, with higher scores reflecting greater depressive symptomatology. Total scores could range from 0 to 63. In this study, reliability was established with a Cronbach's alpha of 0.90.

Psychological Maltreatment Measure (PMM)

A 5-item measure of respondent exposure to behaviors by a parent that meets the definition of psychological maltreatment was developed by Baker and Festinger (31). The measure was modeled on the definition of psychological maltreatment endorsed by the American Professional Society on the Abuse of Children with one item each related to spurning, terrorizing, isolating, exploiting/corrupting, and denying emotional responsiveness (32). In prior research, the measure was validated against 4 already established measures of psychological maltreatment (including the Conflict Tactic Scale and the Childhood Trauma Ouestionnaire), with statistically significant correlations indicating good validity (31). In this study, we used the Italian version of the measure, which was translated and validated into Italian. Reliability and validity properties of the Italian version of the measure were demonstrated (33). Each of the 5 items was rated separately for mother/stepfather and father/stepmother on a 5-point scale from never (score of 0) to very often (score of 4). Total scores could range from 0 (score of 0 on all 5 items) to 40 (score of 4 on all 5 items for both parents). In this sample, total scores ranged from 0 to 30 (Mean = 3.6, SD = 5.3) and reliability was established with a Cronbach's alpha of 0.82.

Parental Bonding Instrument (PBI, Care Scale)

The PBI was developed by Parker et al. (34) and validated in Italian by Scinto et al. (35). The PBI is a widely used research tool for assessing adult retrospective accounts of two dimensions of the parent–child relationship: care and overprotectiveness. The Care Scale is comprised of 12 items, each rated on a 4-point Likert scale from very unlike (0) to very like (3). After reverse coding, a Care Scale was created for each parent and then summed to create an overall Care index. The score could range from 0 to 72. Total scores in this sample ranged from 13 to 67 (Mean = 46.1, SD = 11.5) and the Cronbach's alpha was 0.88. The Overprotection scale is comprised of 13 items, each rated on a 4-point Likert scale from very unlike (0) to very like (3).

After reverse coding, an Overprotection scale was created for each parent and then summed to create an overall Overprotection index. The score could range from 0 to 78. Total scores in this sample ranged from 0 to 64 (Mean = 26.4, SD = 11.4) and the Cronbach's alpha was 0.88. The overall Care score was created by summing the maternal and paternal Care scores. Likewise, the overall Overprotection score was created by summing the maternal and paternal data.

Results

To address the first research question, we began with a frequency distribution of each of the ABs. These data are presented in Table 1. As can be seen, one item was endorsed by more than half of the sample (badmouthed the other parent); five items were endorsed by between 21% and 30% of the sample (showed discomfort when child was positive toward the other parent, became upset when the child was affectionate with the other parent, confided in the child about private and adult matters pertaining to the other parent, required favoritism of the child, and encouraged the child to become reliant on himself or herself rather than the other parent); ten items were endorsed by between 11% and 20% of the sample including the item about one parent trying to turn the child against the other parent, and four items were endorsed by under ten percent of the sample (withheld or blocked messages, called parent by first name, made it hard for the child to be with the extended family of the other parent, and referred to a new spouse as "Mom" or "Dad." Sixty-one percent of the sample endorsed at least one item and on average the participants endorsed three items.

TABLE 1-Proportion who endorsed each Baker Strategy Questionnaire
item for total sample and by intact and nonintact families.

			Not			
Behavior	Total	Intact	Intact	X^2	Sig.	D
Made negative comments	53.2	45.8	81.1	42.1	0.001	0.60
Limited contact	10.8	04.2	35.8	86.9	0.001	0.91
Withheld or blocked messages	04.7	02.2	14.2	26.4	0.001	0.47
Made communication difficult	12.0	06.2	34.0	61.1	0.001	0.74
Discomfort at other parent	22.4	10.4	67.0	154.9	0.001	0.3
Upset at child's affection with other parent	21.8	11.9	58.5	107.1	0.001	0.0
Said parent was unloving	11.8	04.5	39.6	99.5	0.001	0.99
Made child choose	16.5	08.5	47.2	91.1	0.001	0.94
Said parent was unsafe	12.4	07.0	33.0	53.4	0.001	0.68
Confided in child	27.9	18.4	64.2	87.2	0.001	0.91
Required favoritism of child	25.9	17.7	56.6	66.5	0.001	0.78
Asked child to spy	14.7	08.2	39.6	65.8	0.001	0.77
Asked child to keep secrets	19.6	15.2	36.8	24.7	0.001	0.45
Called other parent by first name	06.7	03.2	19.8	36.9	0.001	0.56
Referred to New spouse as Mom/Dad	03.1	01.5	09.4	17.3	0.001	0.38
Encouraged reliance on him/ herself	29.5	22.6	29.5	43.9	0.001	0.61
Encouraged disregard of other parent	13.4	08.5	32.1	40.4	0.001	0.59
Hard to be with extended family	08.4	02.7	30.2	81.6	0.001	0.87
Fostered anger/hurt at other parent	15.3	08.0	43.4	81.0	0.001	0.87
Tried to turn against other parent	16.9	08.0	50.9	110.2	0.001	1.1

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Internal Validity

To examine the internal validity of the measure, we examined whether rates of exposure were higher, as would be expected, among participants who endorsed the item, "one parent tried to turn me against the other parent." These data are presented in Table 2. As expected, for each of the 19 variables, rates of reported exposure to ABs were statistically significantly greater for those who reported that one parent tried to turn them against the other parent than for those who had not. In each case, the size of the difference was at least double and for five variables, the percent in the "tried to turn" sample was ten times larger than the percent in the "did not try to turn" sample. With one exception, effect sizes were over 0.75.

External Validity

With respect to external validity, we asked whether rates were higher, as would be expected, for those whose parents were divorced or separated as compared to those whose parents were not. These data are presented in Table 1. As expected, for each variable the rates of endorsement were statistically significantly higher for those whose parents were divorced/separated. In each case, the difference in rates was at least two times and in eleven cases was 5 times as great. We conducted an independent t-test comparing number of behaviors by whether or not the parents had been divorced/separated or the marriage remained intact. Results revealed that, as expected, those with divorced/separated parents reported exposure to over 3 times as many ABs (Mean = 7.0, SD = 5.3) than those whose parents did not divorce/separate (Mean = 1.9, SD = 3.1), t (125) = 9.3, p < 0.001.

TABLE 2—Proportion of endorsers of "tried to turn" who endorsed each
alienating behavior on the Baker Strategy Questionnaire.

Behavior	Did not Try to Turn	Did Try to Turn	X^2	Sign.	D
Made negative comments	44.9	94.2	69.7	0.001	0.8
Limited contact	03.1	48.8	155.3	0.001	1.3
Withheld or blocked messages	01.2	22.1	69.6	0.001	0.8
Made communication difficult	04.5	48.8	133.2	0.001	1.2
Discomfort at other parent	11.8	74.4	161.1	0.001	1.4
Upset at child's affection with other parent	12.3	68.6	132.9	0.001	1.2
Said parent was unloving	04.0	50.0	145.3	0.001	1.3
Made child choose	06.6	65.1	177.5	0.001	1.5
Said parent was unsafe	04.7	50.0	135.1	0.001	1.2
Confided in child	17.3	80.2	140.9	0.001	1.2
Required favoritism of child	15.6	76.7	139.1	0.001	1.2
Asked child to spy	09.0	43.0	65.9	0.001	0.77
Asked child to keep secrets	12.3	55.8	85.7	0.001	0.90
Called other parent by first name	02.8	25.6	59.3	0.001	0.73
Referred to New spouse as Mom/Dad	01.9	09.3	12.9	0.002	0.32
Encouraged reliance on him/herself	20.8	72.1	90.5	0.004	0.93
Encouraged disregard of other parent	06.6	46.5	98.3	0.001	0.98
Hard to be with extended family	04.0	30.2	63.5	0.001	0.76
Fostered anger/hurt at other parent	04.0	70.9	246.6	0.001	1.9

The next research approach to establishing external validity of the measure involved examining the association with the three mental health outcomes: state anxiety, trait anxiety, and depression. In doing so, we controlled for whether the parents of the respondent had divorced/separated in order to test for the effects of ABs over and above the effects of dissolution of the marriage. Correlations among the study variables are presented in Table 3. With one exception, all of the correlates were associated with each other at a statistically significant level of p < 0.001.

Next, three path analyses were conducted with step 1 being the association between ABs and psychological maltreatment (controlling for parental divorce/separation), step 2 being the association between psychological maltreatment and Care (after parental separation/divorce parental alienation were entered), and step 3 being one of the 3 outcome measures: depression, state anxiety, and trait anxiety. Results are presented in the upper part of Fig. 1. In the final path, with all of the variables in the equation, the following betas were obtained, after controlling for whether the parents were separated/divorced: alienating behaviors to psychological maltreatment (beta = 0.56), psychological maltreatment to parental care (beta = -0.62), parental care to depression (beta = -0.15), parental care to state anxiety (beta = -0.22), and parental care to trait anxiety (beta = -0.27). All betas were statistically significant at alpha p < 0.01 or higher.

The three path analyses were run again, this time with Overprotection instead of Care entered into the equation as the second step (see lower part of Fig. 1). The beta weights obtained were as follows: for depression (beta = 0.10), state anxiety (beta = 0.16), and trait anxiety (beta = 0.19). All beta weights were statistically significant. ABs were associated with psychological maltreatment, which was associated with parental care and overprotection, which were then associated with depression, state anxiety, and trait anxiety.

Discussion

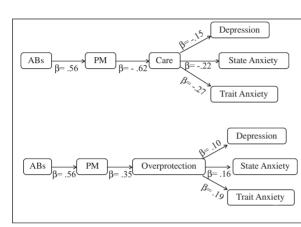
The present study assessed the associations between childhood exposure to ABs and concurrent anxiety and depressive symptomatology in adults in the community. Oriented by previous studies (36-44), these results add to the growing body of knowledge about the impact of ABs on children's well-being and social-emotional development. Baker demonstrated via adult retrospective self-report that exposure to ABs was perceived to be associated with a host of lifelong negative consequences such as poor self-image, depression, difficulties trusting others, and delayed self-sufficiency (36). Baker found that reports of exposure to ABs as measured in a single item were associated with several reliable and valid measures of psychological maltreatment (42). Baker and Ben Ami (43) and Ben Ami and Baker (37) found that reported exposure to AB in childhood was associated with adult low self-esteem, depression, and adult romantic relationship style. Baker and Brassard found that the greater number of ABs that teenage boys reported, the greater their reports of psychological maltreatment and depression (44). In a sample of Italian adults, Verrocchio and Baker found that greater exposure to ABs was related to greater reports of psychological maltreatment and reduced well-being (40). In Texas college students, Baker and Eichler found that greater reported rates of ABs were associated with higher rates of psychological maltreatment (42). For Italian college students, AB rates were associated with psychological maltreatment, depression, attachment, and

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TABLE 3—Correlations among study variables.

	1	2	3	4	5	6	7
1. Alienating Behaviors	_	0.51 ^c	-0.35 ^c	0.07	0.14 ^b	0.21 ^c	0.20 ^c
2. Psychological Maltreatment			-0.64°	0.30°	-0.21°	0.25 ^c	0.24 ^c
3. Parental Bonding—Care				-0.35°	0.23 ^c	-0.29°	-0.32°
4. Parental Bonding—Overprotection					0.14 ^c	0.21 ^c	0.23 ^c
5. BDI – Depression						0.63 ^c	0.70 ^c
6. State Anxiety							0.74 ^c
7. Trait Anxiety							_

 ${}^{b}_{c}p < 0.01.$ ${}^{c}_{p} < 0.001.$



Note.ABs: Alienating Behaviors; PM: Psychological Maltreatment.

FIG. 1—Path analyses for alienating behaviors, psychological maltreatment, care/overprotection, and outcome measures (depression, state anxiety, and trait anxiety).

alcoholism (38). In another sample of Italian adults, Bernet et al. found associations between ABs and ten specific psychological symptoms (40). Baker and Verrocchio also found that exposure to ABs was associated with psychological maltreatment even after controlling for quality of the parent–child relationship (39).

The current study extends this body of work by demonstrating that reported exposure to AB was associated with both psychological maltreatment (directly) and anxiety (directly and indirectly). The association between alienation and anxiety supports the notion that exposure to ABs is a specific form of psychological maltreatment and hence constitutes an adverse childhood experience. Prior research has consistently demonstrated that adverse childhood events compromise a child's ability to regulate his stress and emotions and hence can increase subsequent anxiety and other mood disorders (45). The current data demonstrate that exposure to ABs can also increase a child's risk of anxiety. This may be so for several reasons. First, when children are exposed to ABs, they are being given the message that one parent believes that the other parent is unloving toward the child and that the other parent is a bad person who is unworthy of the child's love. This can result in the child internalizing the belief that the child himself is bad (i.e., "If my father is bad, I must be bad as well") and internalizes the belief that he is unlovable ("If my mother does not love me, I must be unlovable") and experiences the love of the parent engaging in the ABs as conditional on the child's rejection of the other parent (i.e., "My parent only loves me if I reject my other parent."). Moreover, if the ABs are inconsistent with the child's own experience (i.e., one parent is telling him that the other parent is unsafe but the child's own experience with that parent does not suggest that the parent is unsafe), he can experience cognitive dissonance and confusion, leading to anxiety. Equally problematic, the child may feel pressure from the parent engaging in the ABs to confirm to that parent's worldview and behave in a way that betrays the other parent's trust (i.e., spy on that parent, keep secrets from the parent) or else risk loss of acceptance by that parent. This could result in increased conflict with that other parent, also inducing anxiety. Thus, exposure to ABs on the part of one parent can function as an adverse childhood experience that is associated with longterm reduction in well-being. Hovens et al. concluded, "Childhood maltreatment is a key environmental risk factor, inducing vulnerability to develop new and recurrent depressive and comorbid anxiety and depressive episodes" (46). It appears from our data that AB is also an adverse childhood event that increases risk for future depression and anxiety.

These data provide additional reasons why information about the problem of PA needs to be made universally available to mental health professionals working with children and families. Ideally, effective prevention and intervention programs should be made universally available to children and families affected by this particular form of psychological maltreatment.

There are also forensic applications for these data as well. The data, along with the body of research on the negative impact of PA on children, should be made available to the court so that the judge can factor that into his best-interest-of-the-child (BIC) analysis. In many jurisdictions, one BIC factor is each parent's ability to support the child's relationship with the other parent. Another factor mentioned in some jurisdictions is the parent's engagement of abusive behaviors. Although psychological maltreatment is not often singled out as a specific form of abuse, it is not ruled out either. Thus, the court could make use of these data when considering child custody disputes.

The data reported in this paper and the body of previously published research supports the acceptance of PA under the standards of both *Frye v. United States* and *Daubert v. Merrell Dow.* First, there is an enormous amount of qualitative research—in the form of hundreds of papers in professional journals, chapters, and books (47)—that establishes that the reality of PA has "gained general acceptance" among mental health and legal professionals who work with children of separated and divorced parents. Second, the quantitative research reported here and in previously published studies (36–44,48) illustrates how PA theory has been tested and subjected to peer review and publication. In practice, PA theory is commonly admitted in courts in U.S.A. and Canada without undergoing a *Frye* or *Daubert* challenge (49).

Several directions for future research suggest themselves from this study. First, the study should be replicated with samples from other countries to ensure the cross-cultural validity. Second, analyses could be conducted to ascertain the gender-specific nature of the findings. For example, data could be looked at by gender of the parent as well as gender of the participant to ascertain whether there are dyads (mother-daughter, mother-son, father-daughter, father-son) that have higher rates of exposure to ABs and whether patterns are similar or different across dyads.

References

- 1. Petersen AC, Joseph J, Feit M, editors. New directions in child abuse and neglect research. Washington, DC: National Academies, 2014.
- Maxfield MG, Widom CS. The cycle of violence: revisited 6 years later. Arch Pediatr Adolesc Med 1996;150(4):390–5.
- Smith CA, Ireland TO, Thornberry TP. Adolescent maltreatment and its impact on young adult antisocial behavior. Child Abuse Negl 2005;29 (10):1099–19.
- Jonson-Reid M, Kohl PL, Drake B. Child and adult outcomes of chronic child maltreatment. Pediatrics 2012;129(5):839–45.
- Fergusson DM, Boden JM, Horwood LJ. Exposure to childhood sexual and physical abuse and adjustment in early adulthood. Child Abuse Negl 2008;32(6):607–19.
- Gilbert R, Widom CS, Browne K, Fergusson D, Webb E, Janson S. Burden and consequences of child maltreatment in high-income countries. Lancet 2009;373(9657):68–1.
- Trickett PK, Noll JG, Reiffman A, Putnam FW. Variants of intrafamilial sexual abuse experience: implications for short- and long-term development. Dev Psychopathol 2001;13(4):1001–9.
- Wilson HW, Widom CS. The role of youth problem behaviors in the path from child abuse and neglect to prostitution: a prospective examination. J Res Adolesc 2010;20(1):210–36.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th edn. Arlington, VA: American Psychiatric Association, 2013.
- Schneider MW, Ross A, Graham JC, Zielinski A. Do allegations of emotional maltreatment predict developmental outcomes beyond that of other forms of maltreatment? Child Abuse Negl 2005;29:513–32.
- Teicher MH, Samson JA, Polcari A, McGreenery CE. Sticks, stones, and hurtful words: relative effects of various forms of childhood maltreatment. Am J Psychiatry 2006;163(6):993–1000.
- 12. Khaleque A, Rohner RP. Transnational relations between perceived parental acceptance and personality dispositions of children and adults: a meta-analytic review. Pers Soc Psychol Rev 2012;16(2):103–15.
- Rohner RP, Khaleque A, editors. Handbook for the study of parental acceptance and rejection, 4th edn. Storrs, CT: Rohner Research Publications, 2005.
- 14. Felitti VJ, Anda RF, Nordenberg DF, Williamson DF, Spitz AM, Edwards V, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: the Adverse Childhood Experiences (ACE) Study. Am J Prev Med 1998;14:248–58.
- Edwards VJ, Holden GW, Felitti VJ, Anda RF. Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: results from the Adverse Childhood Experiences Study. Am J Psychiatry 2003;160(8):1453–60.
- Nurius PS, Green S, Logan-Greene P, Borja S. Life course pathways of adverse childhood experiences toward adult psychological well-being: a stress process analysis. Child Abuse Negl 2015;45(1):143–53.
- Hart SN, Brassard MR, Davidson HA, Rivelis E, Diaz V, Binggeli NJ. Psychological maltreatment. In: Myers JEB, editor. The APSAC handbook on child maltreatment, 3rd edn. Los Angeles, CA: Sage, 2011;125–44.
- Lorandos D, Bernet W, Sauber SR. Overview of parental alienation. In: Lorandos D, Bernet W, Sauber SR, editors. Parental alienation: the handbook for mental health and legal professionals. Springfield, IL: Charles C Thomas, 2013;5–46.
- Baker AJL, Sauber SR, editors. Working with alienated children and families: a clinical guidebook. New York, NY: Routledge, 2012.
- English DJ. LONGSCAN Investigators. Modified maltreatment classification system (MMCS); http://www.unc.edu/depts/sph/longscan/pages/maltx/mmcs/LONGSCAN%20MMCS%20Coding.pdf (accessed January 24, 2015).
- Williams FS. Preventing parentectomy following divorce. Keynote Address at Fifth National Council for Children's Rights Annual Conference; 1990 Oct 20; Washington, DC; https://mkg4583.wordpress.com/

2009/05/07/preventing-parentectomy-following-divorce/ (accessed February 2, 2016).

- Szabo CP. Parental alienation syndrome. South African Psychiatry Review 2002;5(3):1.
- Areskoug N-G. Föräldraalienation och psykosocial barnmisshandel [Parental alienation and psychosocial child abuse] [Swedish]. In: Ott A, Steene A, Windahl G, editors. Inre och yttre verklighet [Inner and outer reality]. Strömstad, Sweden: Strömstad Akademi, 2011;36–49.
- Lei N° 12.318, de 26 de Agosto de 2010 [Brazilian law regarding parental alienation]. http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/ 2010/Lei/L12318.htm (accessed January 24, 2015).
- Baker AJL, Chambers J. Adult recall of childhood exposure to parental conflict: unpacking the black box of parental alienation. J Divorce Remarriage 2011;52(1):55–76.
- Spielberger CD, Gorsuch RL, Lushene RE. Manual for the state-trait anxiety inventory. Palo Alto, CA: Consulting Psychologists Press, 1970.
- Pedrabissi L, Santinello M. STAI, state-trait anxiety inventory, forma Y. Firenze, Italy: O. S. Organizzazioni Speciali, 1996.
- Beck AT, Steer RA, Brown GK. Manual for the beck depression inventory, 2nd edn. San Antonio, TX: Psychological Corporation, 1996.
- Ghisi M, Flebus GB, Montano A, Sanavio E, Sica C. Beck depression inventory-II: Italian ed. Firenze, Italy: Giunti Editore, 2006.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 4th edn. Washington, DC: American Psychiatric Association, 1994.
- Baker AJL, Festinger T. Adult recall of childhood psychological maltreatment: a comparison of five scales. J Aggress Maltreat Trauma 2011;20(1):70–89.
- Binggelli NJ, Hart SN, Brassard MR. Psychological maltreatment of children. Thousand Oaks, CA: Sage, 2001.
- Verrocchio MC, Marchetti D, Baker AJL. Assessment of psychological maltreatment: psychometric properties of the Psychological Maltreatment Measure – Italian version. Maltrattamento e abuso all'infanzia 2014;16 (1):57–75.
- Parker G, Tupling H, Brown LB. A parental bonding instrument. Br J Med Psychol 1979;52:1–10.
- 35. Scinto A, Marinangeli MG, Kalyvoka A, Daneluzzo E, Rossi A. The use of the Italian version of the Parental Bonding Instrument (PBI) in a clinical sample and in a student group: an exploratory and confirmatory factor analysis study. Epidemiol Psychiatr Sci 1999;8(4):276–83.
- Baker AJL. Adult children of parental alienation syndrome. New York, NY: Norton, 2007.
- Ben-Ami N, Baker AJL. The long-term correlates of childhood exposure to parental alienation on adult self-sufficiency and well-being. Am J Fam Ther 2012;40:169–83.
- Baker AJL, Verrocchio MC. Italian college student-reported childhood exposure to parental alienation: correlates with well-being. J Divorce Remarriage 2013;54:609–28.
- Baker AJL, Verrocchio MC. Parental bonding and parental alienation as correlates of psychological maltreatment in adults in intact and non-intact families. J Child Fam Stud 2015;24(10):3047–57.
- Bernet W, Baker AJL, Verrocchio MC. Symptom-Checklist-90-Revised Scores in adult children exposed to alienating behaviors: an Italian sample. J Forensic Sci 2015;60(2):357–62.
- Verrocchio MC, Baker AJL. Italian adults' recall of childhood exposure to parental loyalty conflicts. J Child Fam Stud 2015;24(1):95–105.
- Baker AJL. Adult recall of parental alienation in a community sample: prevalence and associations with psychological maltreatment. J Divorce Remarriage 2010;51:1–20.
- Baker AJL, Ben Ami N. Adult recall of childhood psychological maltreatment in adult children of divorce: prevalence and associations with outcomes. J Divorce Remarriage 2011;52(4):203–19.
- Baker AJL, Brassard MR. Adolescents caught in their parents' loyalty conflicts. J Divorce Remarriage 2013;54(5):393–413.
- Heim C, Nemeroff CB. The role of childhood trauma in the neurobiology of mood and anxiety disorders: preclinical and clinical studies. Soc Biol Psychiatry 2001;49:1023–39.
- 46. Hovens JG, Giltay EJ, Spinhoven P, Van Hemert AM, Pennix BW. Impact of childhood life events and childhood trauma on the onset and recurrence of depressive and anxiety disorders. J Clin Psychiatry 2015;76 (2):931–938.
- Bernet W. References in the professional literature. In: Lorandos D, Bernet W, Sauber SR, editors. Parental alienation: the handbook for mental health and legal professionals. Springfield, IL: Charles C Thomas, 2013; CD-ROM 5–77.

698 JOURNAL OF FORENSIC SCIENCES

- Baker AJL, Eichler A. College student childhood exposure to parental loyalty conflicts. Families Soc 2014;95:59–66.
 Lorandos D. Representative North American legal cases. In: Lorandos D,
- Lorandos D. Representative North American legal cases. In: Lorandos D, Bernet W, Sauber SR, editors. Parental alienation: the handbook for mental health and legal professionals. Springfield, IL: Charles C Thomas, 2013;CD-ROM 81–250.

Additional information and reprint requests: Amy J.L. Baker, Ph.D. PO Box 505 Teaneck, NJ 07666 E-mail: amyjlbaker@aol.com and William Bernet, M.D. 1313 Twenty-first Avenue South 209 Oxford House Nashville, TN 37232 E-mail: william.bernet@vanderbilt.edu