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EMOTIONAL AVAILABILITY IN EARLY MOTHER–CHILD INTERACTIONS FOR CHILDREN WITH AUTISM SPECTRUM DISORDERS, OTHER PSYCHIATRIC DISORDERS, AND DEVELOPMENTAL DELAY

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Abstract

Emotional availability (EA) is a method to assess early parent–child dyadic interactions for emotional awareness, perception, experience, and expression between child and parent that describe global relational quality (Z. Biringen & M. Easterbrooks, 2012). The current study aimed to examine the effects of an infant’s diagnosis of autism spectrum disorders (ASDs), other psychiatric disorders (OPD), and developmental delay (DD) on the maternal EA Scale (EAS; Z. Biringen & M. Easterbrooks, 2012; Z. Biringen, J.L. Robinson, & R.N. Emde, 2000) scores and the relative contributions of infant’s age, gender, diagnosis, developmental level, and maternal education on EAS scores in a clinical Turkish sample. Three hundred forty-five infant–mother dyads participated in this study. Results of the research indicated that EAS adult scores were associated with maternal education and infant’s diagnosis whereas child scores were associated with infant’s age, diagnosis, and developmental level. Infants’ involvement and responsiveness to the mother were lower in the group with ASD. Children with OPD, particularly when their mothers have lower education, might be at increased risk of having problems in parent–child interactions. Young ASD subjects with developmental delay are in greatest need of support to increase reactions toward their mother. These findings underscore the importance of using all of the EA dimensions rather than only one measure on children in high-risk populations.

Keywords

emotional availability; mother–child interaction; infant mental health; psychiatric disorders

Framework of emotional availability (EA) refers to the capacity of a dyad to organize a healthy relationship. Mahler, Pine, and Bergman (1975) first utilized the concept of EA to describe caregivers’ ability to provide a secure base for their infants. Accordingly, they described the healthy mother–child relationship as assisting a “quiet supportiveness” atmosphere that allows exploration and autonomy. Ainsworth, Blehar, Waters, and Wall (1978) also defined the emotionally available caregiver as accessible and responsive as well

as adjusted to the infant's signals For Emde (1980), EA is an affective barometer of both negative and positive emotions that provides the caregiver with information about a child's feelings and needs.

Initially, the focus of emotionally unavailable caregiving was on the adverse developmental effect of psychological unavailability, such as unresponsiveness to the infants' distress, lack of pleasure and mutually fulfilling joy during interactions, and insecure attachment (Egeland & Erickson, 1987; Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985). The recently developed Emotional Availability Scales (EAS; Biringen, Robinson, & Emde, 2000; Biringen & Easterbrooks, 2012) have made it possible to directly assess the EA in caregiver–infant dyads that are concerned with four global ratings of caregiver behavior (sensitivity, structuring, nonintrusiveness, and nonhostility) and two global ratings of child behavior (responsiveness and involvement of the caregiver) (Biringen, Robinson, & Emde, 2000). To date, EA has been examined in many risky populations, including teenage and young mothers (Easterbrooks, Chaudhuri, & Gestsdottir, 2005; Robinson & Spieker, 1996), mothers with abuse histories (Moehler, Biringen, & Poustka, 2007), dyads exposed to various conditions of high risk, such as deaf or maltreated children (Pipp-Siegel, 1996), low-income samples (Little & Carter, 2005), and samples with atypical development (Biringen, Fidler, Barrett, & Kubicek, 2005).

According to the studies, in terms of parental characteristics on EA, low income (Little, & Carter, 2005), low educational achievement, school dropout, adolescent and single parenthood, substance abuse, low occupational status, poor physical health (De Genna, Stack, Serbin, Ledingham, & Schwartzman, 2006), and nutrition are the risk factors tending to be sequential over time (Stack et al., 2012). Parental protective factors that predict positive child outcomes are financial security, parents' level of education, and parental warmth, sensitivity, and nonhostility (Serbin et al., 2002). In terms of the effect of children's disabilities on parenting, increased marital problems and divorce rates (Bristol, Gallagher, & Schopler, 1988), grieving over the loss of the "ideal child" for which they had been prepared, maternal depression (Blacher, Shapiro, Lopez, & Diaz, 1997), feelings of isolation, and lack of fulfillment have been described (Todd & Sheam, 1996).

In this study, we focus on the connection between dyadic EA and maternal characteristics in a clinical Turkish sample. The first goal was to investigate the effects of diagnosis [autism spectrum disorders (ASDs), other psychiatric disorders (OPDs), and developmental delay (DD)] on the maternal EAS scores and to investigate the relative contributions of infants age, gender, diagnosis, developmental level, and maternal education on EAS scores by regression analysis.

METHOD

Participants

The sample consisted of 345 infant–mother (69 girls, 276 boys) dyads who had been admitted to the Infant Mental Health Unit of the Department of Child and Adolescent Psychiatry at the Ankara University School of Medicine over a 1 1/2 period with a suspicion of ASD, DD, and other clinical problems. Children who had visual, hearing, orthopedic

deficits, and cerebral palsy were not included in the sample. The average age of infants/toddlers was 31.97 months ($SD = 8.4$, range = 14–54). Mother ages ranged between 20 and 45 ($M = 31.2$, $SD = 4.9$), and their years of education ranged between 5 and 17 ($M = 11.5$, $SD = 3.5$). All mothers except for 9 were married. Most of the mothers (59.13%) were unemployed ($n = 204$). Among the employed group, 92 mothers (26.70%) were working in professional occupations, and 49 (14.20%) were working in service and sales sectors.

In our sample, 186 children (53.9%) were diagnosed with ASD or pervasive developmental disorder not otherwise specified, 80 (23.2%) were diagnosed with only DD without ASD, and 79 (22.9%) were diagnosed in the OPDs group including regulatory disorder (7.3%), deprivation/maltreatment disorder (6.1%), adjustment disorder (3.8%), anxiety disorders (2.9%), eating disorders (1.2%), posttraumatic stress disorder (1.2%), and sleep disorders (0.6%). In this sample, 211 (61%) children were firstborn, and the number of the children in the families ranged from 1 to 9 ($M = 1.65$, $SD = 0.84$).

MEASURES

Assesments of Children's Diagnosis

Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood, Revised edition (DC: 0–3R; ZERO TO THREE Revision Task Force, 2005)—This classification is a multi-axial diagnostic classification system used for the psychiatric assessment of children less than 3 years of age. It embraces the Clinical Disorder of the infant (Axis I), the Relationship Classification (Axis II) emphasizing the fundamental importance of the parent–infant relationship, Medical and Developmental Disorders and Conditions (Axis III), Psychosocial Stressors (Axis IV), and Emotional and Social Functioning of the infant (Axis V) (ZERO TO THREE Revision Task Force, 2005).

Assesments of Children's Level of Functioning

The Ankara Developmental Screening Inventory (ADSI; Erol, Sezgin, & Savasir, 1993; Sava ır, Sezgin, & Erol, 1998)—The ADSI was constructed as a culturally appropriate developmental inventory that would be useful in large-scale surveys, assessing developmental changes over time both at individual and community levels and evaluating progress of programs geared to the developmental needs of infants, toddlers, and preschool children (Erol, Sezgin, & Sava ır, 1993; Sava ır, et al., 1998). The ADSI is a 154-item scale consisting of questions related to different domains of development: Language-Cognitive (65 items), Fine Motor (26 items), Gross Motor (24 items), Social and Self-Help (39 items), arranged according to age level. The questions are answered by the mothers or caregivers as “yes,” “no,” and “don’t know.” However, for the researchers, the validity of using mothers as sources of information has to be shown experimentally. The extent to which mothers’ report of their children’s development correspond to children’s actual development should be examined. Thus, a parallel child form of the inventory was developed to test the degree of correspondence between the child’s performance and the mother’s report. This form contained the same questions as those on the mother form, but they were addressed to the child or filled by the examiners on the basis of her or his direct observation

of the child. A total of 66 low socioeconomic status (SES) mothers and their children were assessed with the mother and child forms at five age levels (0–12, 13–24, 25–36, 37–48, and 49–72 months) and then compared. Item analysis also was conducted to ascertain what contributed to the observed discrepancies. Frequencies and percentages of correct responses were computed for each item on the mother and child forms. Items that showed discrepancies greater than 20% were eliminated. In addition, items that had high frequency of “don’t know” answers on the mother form were reexamined and mostly eliminated. The new form of the Developmental Inventory containing 154 items was prepared. General Development and scale scores were added to a profile for the child.

Eighty-six mothers from the low-SES group were administered the inventory a second time 6 to 10 days after the first administration. The test-retest reliabilities for age groups 0 to 12, 13 to 48, and 49 to 72 months were very high, $r_s = .99, .98, \text{ and } .88$, respectively. Cronbach’s α coefficients also were high for the age groups. Four groups of children and their mothers or caregivers (low-SES sample, premature infant sample, DD children, and institutionalized children) were used for the validity study. Comparison of different groups of children thought to be at different developmental levels also suggested that the inventory was valid. When the Denver Developmental Screening Test (Frankenburg & Dodds, 1967), Bayley Scales of Infant and Toddler Development (Bayley, 1993), and the Vineland Adaptive Behavior Scale (Sparrow et al., 1984) were used as a criterion, the correspondence between the measures was found to be high, suggesting that they measured similar aspects of development (Erol et al., 1993; Savaş et al., 1998; Sezgin, 2011).

Assessment of Mother–Child Interaction

The EAS—The EAS Version 3 is a global measure of caregiver–child relational quality (Biringen & Easterbrooks, 2012; Biringen et al., 2000) and focuses on child as well as caregiver qualities. The four caregiver qualities measured are sensitivity, structuring, nonintrusiveness, and nonhostility, and the two child qualities-measured are responsiveness to the caregiver and involvement of the caregiver. EAS training in Turkey was conducted several times by Zeynep Biringen (interrater reliability: $r > .80$). The coders were unaware of a child’s diagnosis. Interrater reliability (based on 5 participants), calculated using Pearson correlations, was established between each of the three coders and ranged from $r = .79$ to $.91$.

PROCEDURE

The study included a clinical assessment and a laboratory session. The clinical assessment procedure consisted of a clinical interview by a child psychiatrist or clinical psychologist and a developmental level assessment by a child developmentalist or clinical psychologist. The development of infants/toddlers was assessed using the ADSI, which is a culturally appropriate, valid, and reliable developmental device, by interviewing the mothers (Savaş et al., 1998).

In the second part of the assessment, a laboratory session took place in a center which had a playroom equipped with a range of toys and a meeting room for the infant mental health team. The team consisted of two child psychiatrists, five clinical psychologists, one child

developmentalist, and two nurses. All researchers of this study were members of this team and participated in different parts of the sessions. Before the sessions, an informed consent was obtained from each participant. Parent–infant dyad then were videotaped through a one-way mirror and included three mother–child interaction episodes. Ten minutes of free play, a 5-min cleanup, and a series of four tasks (appropriate for infant’s age and development level) were graded on the difficulty of which dyads worked at their own pace, and then a 2-min separation was followed by a reunion. Mother and child were alone during the session. Instructions to the mother were given via intercom, and the ability of the mother to organize the session for her child was observed. After the reunion, one member of the infant mental health team joined the dyad. After observations of the three play episodes to assess quality of the interactions between parent and child, the EAS (EAS Infancy/Early Childhood Version; Biringen, Robinson, & Emde, 2000) was coded by the three clinical psychologists from the infant mental health team. On the other hand, child psychiatrists and one of the clinical psychologist who made the first clinical assessments tried to classify the problem using the criteria of the DC: 0–3R and the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (American Psychiatric Association, 2000; ZERO TO THREE Revision Task Force, 2005).

At the end of the laboratory session, mothers were informed by the infant mental health team about the strength of the dual relationship, the ability of the mothers to read the infant’s actions and signals, how they can respond to their child in a more viable way, and the diagnosis. Appointments were made for the mothers for interaction guidance, to give the Working Model of the Child Interview (Zeanah et al., 1995), and for the treatment.

Statistical Analyses

Using SPSS 18 for Windows, demographic variables, correlations among the EAS, and demographic variables were compared between groups using *t* tests, Pearson’s chi-square, Fisher’s exact test, and one-way analyses of variance, as appropriate. Correlations between the maternal EAS and each of the maternal demographic variables were first computed to determine which variables should be included in regression models. Then, regression models were conducted separately for each diagnostic group for maternal EAS; independent variables in regression analysis were gender (male vs. female), maternal education, infants’ age, maternal age, and developmental level of the infant, per ADSI assessment.

RESULTS

Demographic Variables

Mean age of the children was not significantly different between boys and girls, $p > .5$. In all diagnostic groups, the majority of the sample were boys. No significant differences were found in infants’ age and maternal education between the OPD and the DD groups, but infants in the ASD group were significantly younger and maternal education of the ASD infants were significantly higher than that of the other two groups. Results are summarized in Table 1.

Do Mothers of Children With Autism and Developmental Delay Show Less Sensitivity and EA Than Do Those in the Other Diagnostic Group?

In Table 1, means and *SDs* of maternal sensitivity, structuring, nonintrusiveness, and nonhostility for all diagnostic groups are presented. Significant differences in sensitivity were found between mothers of children in the DD group than between mothers of the other two groups. Mothers of DD children were more sensitive than were mothers of the other two groups, $F = 3.97, p = .02$. Structuring scores of the ASD group were higher than those of the other groups, $F = 3.61, p = .03$. No significant differences were found in nonintrusiveness scores between mothers of infants, $F = .354, p = .702$. In terms of nonhostility, mothers of OPD children had significantly lower scores than did those in the other two groups. In other words, the mothers with OPD children showed more hidden or covertly hostile behavior during interaction with their children, $F = 6.01, p = .003$.

Do Children With ASD Display Less Involvement and Less Responsiveness With Their Mothers?

Infants' involvement and responsiveness to their mother were significantly lower in the ASD group, $F = 78.15, p = .001, F = 72.33, p = .001$, respectively). No significant differences were found between the DD and the OPD children in terms of infants' involvement and responsiveness to the mother (see Table 1).

Do Infants' and Mothers' Characteristics Predict EA?

We examined how demographic variables were related to the EAS scores by correlation analyses. Infant age, maternal age, and maternal education parameters were normally distributed, so the correlation and their significance were calculated using Pearson's test. As summarized in Table 2, correlations were generally weak, except those between developmental level and responsiveness to adult and involvement of the adult scores. Maternal education and infant's age were associated with several EAS variables.

After investigating the correlations, a multiple linear regression model was used to identify independent predictors of EAS scores separately for each diagnostic group (Table 3). Our results indicated that maternal education was significantly associated with sensitivity and nonintrusiveness in the ASD group; with structuring in the OPD group; and with sensitivity, nonintrusiveness, and nonhostility in the DD group. Developmental level was associated with nonintrusiveness, responsiveness to adult, and involvement of the adult in the ASD group; responsiveness to adult and involvement of the adult in the OPD group; and with nonhostility, responsiveness to adult, and involvement of the adult in the DD group. Infant age was associated with nonhostility in the ASD and the OPD groups. Gender and maternal age were not significantly associated with EAS scores when other factors were controlled for. Therefore, higher maternal education was associated with higher sensitivity and less intrusiveness in the ASD and the DD groups, less hostility in the DD group, and more structuring in the OPD group. Higher developmental level was associated with more responsiveness to adults and more involvement of adults in all diagnostic groups. Older infant age was associated with more hostile maternal behaviors (see Table 3).

DISCUSSION

To our knowledge, our study is the first to focus on maternal characteristics, including EAS and demographic variables and quality of the infant–mother relationship in infants with clinical disorders at 2 years of age, in Turkey. Our study tested the demographic variables to explain whether they affect EA scores in children with a major social impairment, as implied by the autism diagnosis, and in children without social impairment that referred to a diagnosis for DD and for other infant mental health problems.

Ainsworth suggested that although children with ASD suffer from social impairments in their capacity to signal and report their needs, maternal sensitivity still seems to play the same important role in helping the children use their mothers as a source of security as that in typically developing children (Ainsworth et al., 1978). This hypothesis received support by van IJzendoorn et al. (2007) and by Capps, Sigman, and Mundy (1994) in comparing the ASD and typically developing children groups. First, our findings showed that although children with autism tended to show less involvement with and less responsiveness to their mothers, the sensitivity of mothers in the ASD children did not differ significantly from that of the mothers of children without ASD in this clinical sample. These findings were consistent with those of the aforementioned studies. In fact, the ASD and the DD groups showed similar EAS scores; in both groups, sensitivity, structuring, and nonhostility were higher than they were in the OPD group. This finding suggests that mothers of DD infants, with or without autistic traits, were more able to create a supporting, positive connection with their child and were more able to provide guidance, when compared with mothers of the OPD infants. Although it is not possible to evaluate causality in a cross-sectional study like the present one, it can be speculated that maternal lack of sensitivity and an inadequate or lack of structuring might be associated with emergence of and/or in response to infant behavioral and emotional problems in the OPD group.

Mothers of OPD children were rated as having more hidden or covertly hostile behavior during interactions with their children than did the other mothers. Most of the infants in this diagnostic group had either regulatory disorder (7.3%) or deprivation/ maltreatment disorder (6.1%). More hostile maternal behaviors can be expected in children with deprivation/ maltreatment disorder. Biringen and Easterbrooks (2012) defined adult nonhostility as a behavior that ranges from the absence of hostile responses, to concealed/covertly hostile behavior, to openly hostile responses. Hidden or covert hostility includes slightly raising one's voice and showing impatience or boredom during the interaction. Hostility does not necessarily need to be directed to the child; one also has to take into account dissatisfaction, impatience, anger, or other concealed or open forms of hostility that may be present in the background of the interaction. This quality is potentially the least dyadic and most traitlike of the EA dimensions, but again, it is assessed in the context of the observed relationship. As mentioned, the causality cannot be inferred from cross-sectional studies. It also is possible that behavioral and emotional problems of infants in this diagnostic group may lead to hostile behaviors in mothers; this might be more valid for infants with regulatory disorder. Lack of goodness of fit in the infant–mother dyad might lead to more hostile maternal behaviors. Psychosocial risk factors, caregivers internal representations of her child, and the

relationship with the child could provide more detailed information regarding the interaction.

Third, regression results indicated that higher maternal education was associated with higher sensitivity and less intrusiveness in the ASD and the DD groups, less hostility in the DD group, and more structuring in the OPD group. As defined by Saunders, Kraus, Barone, and Biringen (2015), sensitivity leads to creation and maintaining a positive, healthy connection with the child by the use of behaviors and emotions of an adult while nonintrusiveness refers to the ability of an adult to follow the child's lead during play and without interference. This suggests that mothers with higher education were better at creating a healthy connection without interference with infants who had significant social interaction problems and/or DD. Maternal education also was associated with less hostile behaviors toward children with DD. Mothers with a higher educational level also were better in supporting and guiding child's learning by not only teaching and helping but also supporting independent learning, as described by Saunders et al. (2015), in children with OPD, mostly with regulatory problems or with those who were maltreated. Therefore, it seems that higher maternal education led to a more patient, supporting, and consistent mode of parenting. In fact, it has been previously reported that maternal education is an independent predictor of maternal sensitivity (Van Doesum, Hosman, Riksen-Walraven, & Hoefnagels, 2007). On the other hand, maternal education was not associated with infant's responsiveness to and involvement with adults, after other variables were controlled for.

Higher developmental level was associated with more responsiveness to adults and better involvement of adults in all diagnostic groups. Child responsiveness includes building connections in an age-appropriate way and child's eagerness to respond to relational partner whereas child involvement includes a child's ability and interest to engage the adult (Biringen & Easterbrooks, 2012). Therefore, it was not surprising that for each diagnostic group, higher developed infants were more responsive and had more initiative. Higher development was also associated with less hostile and less intrusive maternal behaviors in the ASD and the DD groups, which could be interpreted as an indicator of better fit with the mother.

Older infant age was associated with more hostile maternal behaviors. This might be due to changing, and possibly unrealistic, expectations of the mothers for their infants with their increasing age.

Our results must be evaluated in light of limitations. First, due to a cross-sectional design, it is not possible to comment on causality. Second, we did not collect data on fathers, which could provide interesting findings. Nevertheless, in the presents study, we showed in a clinical sample from Turkey that sensitivity, nonhostility, and structuring were significantly lower in the OPD group when compared with the ASD and the DD groups; that mothers of ASD infants were not less sensitive; that ASD infants were less responsive to adults and were less eager to join adults; and that maternal education and infant developmental level and age were associated significantly with several emotional availability constructs.

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Differences Among Groups

TABLE 1

Diagnostic Groups	Autistic Spectrum Disorders		Other Psychiatric Disorder		Developmental Delay	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Infant Age	30.48 ^{*a}	.60	33.58	.93	33.85	.92
Maternal Age	31.73	.36	30.54	.55	30.91	.55
Maternal Education	13.14 ^{*b}	.30	11.21	.47	10.87	.46
Sensitivity	4.18	1.95	3.60	1.79	4.39 ^{*c}	1.63
Structuring	2.76 ^{*d}	1.12	2.38	1.04	2.68	1.01
Nonintrusiveness	3.32	1.19	3.22	1.23	3.40	1.76
Nonhostility	4.38	.99	3.92 ^{*e}	1.24	4.39	.92
Responsiveness to Adult	2.92 ^{*f}	1.30	4.65	1.27	4.66	1.19
Involvement of the Adult	2.52 ^{*g}	1.42	4.40	1.50	4.42	1.44
Gender (% male/ <i>n</i>) ^h	85.5% (<i>n</i> = 159)		73.4% (<i>n</i> = 58)		73.8 (<i>n</i> = 59)	
Developmental Level (%/ <i>n</i>) ⁱ						
Normal	10.2% (<i>n</i> = 19)		50.6% (<i>n</i> = 40)		<i>n</i> = 0	
Mild	61.8% (<i>n</i> = 115)		45.6% (<i>n</i> = 36)		83.8% (<i>n</i> = 67)	
Moderate	24.7% (<i>n</i> = 46)		2.5% (<i>n</i> = 2)		13.8% (<i>n</i> = 11)	
Severe	3.2% (<i>n</i> = 6)		1.3% (<i>n</i> = 1)		2.5% (<i>n</i> = 2)	

^{*a}Mean difference is significant with OPD and DD, $F = 6.54$, $p = .002$.^bSignificant with OPD and DD, $F = 6.54$, $p < .001$.^cSignificant with OPD, $F = 3.97$, $p = .02$.^dSignificant with OPD, $F = 3.61$, $p = .002$.^eSignificant with ASD and DD, $F = 6.01$, $p = .003$, $p = .014$.^fSignificant with OPD and DD, $F = 78.15$, $p < .001$.^gSignificant with OPD and DD, $F = 72.33$, $p < .001$.^h $\chi^2 = 7.6$, $p < .05$.

$$d'_{9,16} = \chi^2_{10}$$

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TABLE 2
Correlations Among the Emotional Availability Scales (EAS) and Demographic Variables

EAS	Infant Age	Maternal Age	Maternal Education	Infant Male Gender	Infant Developmental Level
Sensitivity	-.08	.09	.18**	.05	.04
Structuring	-.10*	.03	.20**	.01	.03
Nonintrusiveness	-.12*	.04	.16**	-.02	.11*
Nonhostility	-.19**	.01	.17**	.11*	.04
Responsiveness to Adult	.11*	-.03	-.11*	-.03	.42**
Involvement of the Adult	.12*	-.01	-.12*	-.06	.41**

* $p < .05$ (two-tailed).

** $p < .01$ (two-tailed).

TABLE 3
Regression Analysis for Predictors of Emotional Availability Scales Among Diagnosis Groups

	Infant Age			Male Gender			Maternal Education			Maternal Age			Developmental Level		
	<i>b</i>	<i>t</i>		<i>b</i>	<i>t</i>		<i>b</i>	<i>T</i>		<i>b</i>	<i>t</i>		<i>b</i>	<i>t</i>	
Autism Spectrum Disorders															
Sensitivity	-0.02	-0.2		0.1	1.06		0.18	2.5**		0.16	2.1		-0.10	-0.7	
Structuring	-0.08	-1.0		0.08	1.1		0.13	1.8		0.04	0.5		-0.08	-1.1	
Nonintrusiveness	-0.05	-0.6		-0.06	-0.8		0.14	1.9*		0.03	0.5		-0.20	-2.8**	
Nonhostility	-0.17	-2.4*		0.13	1.7		0.10	1.4		0.06	0.8		-0.08	-1.1	
Responsiveness to Adult	-0.03	-0.4		0.04	0.5		0.07	0.9		0.03	0.4		-0.40	-5.9**	
Involvement of the Adult	-0.05	-0.7		0.03	0.36		0.04	0.6		0.04	0.5		-0.37	-5.5**	
Other Psychiatric Disorders															
Sensitivity	-0.18	-1.6		-0.1	-1.1		0.14	1.2		-0.07	-0.6		0.01	0.02	
Structuring	-0.15	-1.3		-0.13	-1.2		0.27	2.5**		-0.12	-1.1		-0.08	-0.7	
Nonintrusiveness	-0.11	-0.9		-0.02	-0.2		0.13	1.1		0.07	0.6		-0.02	-0.1	
Nonhostility	-0.22	-2.0*		0.03	0.3		0.18	1.6		-0.33	-0.3		-0.04	-0.4	
Responsiveness to Adult	0.04	0.4		-0.01	-0.1		-0.10	-0.9		0.02	0.2		-0.35	-3.3**	
Involvement of the Adult	-0.05	-0.4		-0.06	-0.6		-0.8	-0.7		0.07	0.6		-0.32	-3.0**	
Developmental Delay															
Sensitivity	-0.16	-1.4		0.10	0.9		0.25	2.3*		0.08	0.7		-0.13	-1.15	
Structuring	-0.08	-0.7		-0.03	-0.3		0.21	1.9		0.10	0.9		-0.01	-0.02	
Nonintrusiveness	-0.15	-1.3		-0.08	-0.7		0.29	2.7**		0.13	1.2		-0.14	-1.3	
Nonhostility	-0.21	-1.9		-0.18	1.6		0.28	2.5*		-0.07	-0.6		-0.33	-3.0**	
Responsiveness to Adult	0.02	0.02		0.15	1.3		0.09	0.8		-0.03	-0.3		-0.44	-4.3**	
Involvement of the Adult	0.15	1.3		0.10	-0.9		0.03	0.25		-0.00	-0.0		-0.38	-3.6**	

* Linear regression is significant at the .05 level.

** Linear regression is significant at the .01 level.