Moral development in maltreated and nonmaltreated children was examined by coding child compliance and noncompliance behaviors in a mother–child interaction during a cleanup situation that followed a semi-structured free play. Features of child compliance/noncompliance involve a shift from reliance on external controls to internal mechanisms, thereby reflecting child internalization of the maternal agenda. Differences in maltreating versus comparison mothers’ use of control strategies (power-assertive and inductive techniques) and their relations to child internalization were examined. Eighty-nine mother–child dyads participated; approximately half of the children (n = 46) had documented histories of maltreatment and the remaining children (n = 43) were nonmaltreated, demographically similar comparison children. Maltreated children were divided into two subgroups: physically abused and neglected. Compared with nonmaltreated children, abused children were found to exhibit less internalization, whereas neglected children displayed significantly more negative affect. No differences were found between groups for the maternal control strategies. However, maltreated and nonmaltreated groups differed in the maternal variables that predicted child internalization. A lower level of maternal negative affect was linked to child internalization in maltreated children, whereas a lower level of maternal joy predicted internalization for the comparison children. The findings suggest that maltreated children exhibit both behavioral and affective differences in their moral development, with differential effects based on the type of maltreatment. The clinical implications for maltreated children’s self and moral development are discussed.

INTRODUCTION

Internalization of moral standards, involving a shift from reliance on external controls to internal mechanisms, is a crucial landmark in the socialization process. The development of internalization is important on two levels. On the societal level internalization prevents antisocial and promotes prosocial behaviors. In addition, on the individual level internalization is related to mental health and successful functioning in families, peer groups, and other environments (Ryan, Deci, & Grolnick, 1995). The task of socializing a child and promoting internalization is primarily the responsibility of the child’s parents (Ryan et al., 1995). Parental strategies, such as the use of reasoning and empathic statements, facilitate the development of internalization (Hoffman, 1975; Maccoby & Martin, 1983; Ryan et al., 1995). However, less is known about the development of internalization in family environments that may hinder this process, such as those in which child maltreatment has occurred. The investigation of child maltreatment, an extreme deviation from both normal parenting and the “average expectable environment” thought to be essential for the development of internalization, can affirm, expand, and test theories of normal parenting (Cicchetti, 1989, 1996; Rogosch, Cicchetti, Shields, & Toth, 1995), as well as aid our understanding of the development of maladaptation and psychopathology.

Internalization and the Development of Child Compliance/Noncompliance Strategies

Although Piaget (1932) and Kohlberg (1969) did not view compliance as related to internalization, many developmental theorists view compliance to maternal commands as an essential precursor to internalization (Kochanska, 1991; Kopp, 1982; Lytton, 1980). Indeed, Kochanska, Aksan, and Koenig (1995) argued that internalization is rooted in some forms of compliance. Research has shown that compliance during toddlerhood correlates positively with the quality of moral internalization six years later (Kochanska, 1991). Thus, compliance and noncompliance strategies are a noteworthy indicator of the degree to which a child is on the developmental pathway to internalization.

Even though noncompliance is a normal aspect of child development, it reflects low internalization (Kochanska, 1991; Kochanska & Aksan, 1995). Noncompliance is an important part of a child’s development of autonomy, which begins around 18 months and is usually consolidated by age 36 months (Mahler, Pine, & Bergman, 1975; Sroufe, 1990). Thus, one would predict a high degree of noncompliance during this age range. Noncompliance begins with unsophisticated forms, such as direct defiance and passive
noncompliance, and then shifts to more sophisticated strategies, such as simple refusal and negotiation. This shift usually occurs during the second or third year (Kuczynski & Kochanska, 1990; Kuczynski, Kochanska, Radke-Yarrow, & Gurnius-Brown, 1987). Because noncompliance is negatively correlated with the level of internalization, the parent’s task is to respond to noncompliance in ways that lead the child to comply and to internalize directives.

The development of compliance to maternal directives is a further step toward internalization. Not all forms of compliance, however, contribute to internalization. Kochanska and colleagues (Kochanska & Aksan, 1995; Kochanska et al, 1995) found two distinct forms of compliance: committed and situational. Whereas committed compliance involves a child’s full endorsement of a command, situational compliance consists of transient cooperation (Kochanska & Aksan, 1995). Because situational compliance is maintained through maternal control, it does not indicate internalization (Kochanska & Aksan, 1995). Committed compliance, by contrast, is conceptually similar to internalization (Kochanska & Aksan, 1995; Kochanska et al., 1995). Indeed, committed compliance, but not situational compliance, during toddlerhood predicts internalization in preschool age children (Kochanska et al., 1995).

**Compliance in Maltreated Children**

Compliance and noncompliance strategies may develop differently in maltreated compared with nonmaltreated children. Crittenden and DiLalla (1988) found that maltreated toddlers demonstrated a coping strategy, called “compulsive compliance,” in which negative behaviors were suppressed and the child responded quickly to maternal directives. This pattern will not necessarily lead to the optimal development of internalization because the child is complying to maternal directives out of fear, rather than internal regulation (Hoffman, 1970). Differences between maltreated and nonmaltreated children in levels of compliance and noncompliance have also been found in observational studies of older children. Egeland, Stroufe, and Erickson (1983) observed mother–child interactions during problem-solving and teaching tasks at 24 and 42 months of age and found that children who had experienced physical abuse, neglect, verbal abuse, or psychologically unavailable mothers were more noncompliant and less compliant than nonmaltreated children. In addition, Oldershaw, Walters, and Hall (1986) examined compliance to maternal commands during mealtime, free-play, and clean-up paradigms, and found that maltreated preschool children were more noncompliant and less compliant than nonmaltreated children. Finally, Schindler and Arkowitz (1986) studied compliance with maternal directives during a free-play situation in maltreated and nonmaltreated children ages 3 to 8 years. Maltreated children were found to be less compliant than nonmaltreated children. However, few studies have used a control situation, such as a clean-up paradigm, to measure child compliance/noncompliance in maltreated children. Thus, how maltreated and nonmaltreated children may differ in situations viewed as crucial for the internalization of moral standards is still unclear.

Trickett and Kuczynski (1986) also found maltreated children to be more likely to use less sophisticated forms of noncompliance, such as verbal refusals, anger, or other forms of overt opposition. Because these investigators used parental report in their study, it is impossible to know whether maltreated children differed in their noncompliance strategies or whether maltreating parents simply viewed their child’s behavior as more defiant than nonmaltreating parents. In summary, whereas nonmaltreated children move from less sophisticated forms of noncompliance to sophisticated noncompliance and, finally, to compliance, maltreated children appear to shift from compulsive compliance to less sophisticated forms of noncompliance.

**Maternal Contributors to Internalization**

Parental support is crucial in the internalization process (Hoffman, 1970). Through parental discipline, many moral values are internalized (Grusec & Goodnow, 1994). Consequently, various discipline styles can have a differential effect on the internalization process. Hoffman (1970) proposed three types of socialization strategies: power-assertion (i.e., physical punishment, displays of anger, and commands), love withdrawal (i.e., ignoring, overt displays of disapproval), and induction (i.e., reasoning, bargaining). Hoffman hypothesized that compliance with inductive techniques occurs because of an understanding of the rationale underlying the command for such behavior. However, compliance with power assertive strategies takes place because of fear of punishment (Hoffman, 1970). When parental force is used, children fail to develop an ability to use internal processes (i.e., guilt, shame); rather, they rely on fear of punishment to regulate moral behavior (Hoffman, 1970). Indeed, researchers have shown that power assertive strategies are associated with lower moral development and internalization of standards of conduct (Hoffman, 1970; Lytton, 1980; Maccoby, 1992). In contrast, inductive techniques and low levels of power assertion are associated with advanced moral devel-

Moreover, the type of maternal control strategy used has been found to have a direct influence on the type of compliance and noncompliance strategies exhibited by the child. Maternal reasoning, suggestions, and empathy have been linked to the child’s use of negotiation (Kuczynski et al., 1987) and compliance (Lytton, 1980; Lytton & Zwirner, 1975; Maccoby & Martin, 1983; Rocissano, Slade, & Lynch, 1987), whereas direct maternal strategies (i.e., physical control and power assertion) were found to relate to defiance and other forms of noncompliance (Crockenberg & Litman, 1990; Kuczynski et al., 1987; Lytton, 1980; Lytton & Zwirner, 1975). However, little is known about the best maternal predictors for specific compliance and noncompliance behaviors in low-income and maltreated populations.

In addition to maternal verbal and physical strategies, the concurrent expression of positive emotions between mother and child is crucial for internalization (Emde, Biringen, Clyman, & Oppenheim, 1991; Kochanska & Aksan, 1995; Maccoby, 1992). Theoretically, mutually positive affect promotes internalization by enhancing the child’s willingness to endorse the maternal agenda (Kochanska & Aksan, 1995). Research has shown that mothers who shared positive affect with their children had more internalized children on measures of compliance and noncompliance (Kochanska et al., 1995). In addition, research has found that when children are in a positive mood, they are more likely to comply (Dix, 1991). Hoffman (1982) argued that power assertive techniques predispose the child to anger and hostility, which in turn lead to unwillingness to comply. Negative child affect, in turn, tends to elicit maternal negative affect, resulting in an aversive interaction (Patterson, 1982). When the mother controls her anger, she encourages the child to turn his or her anger inward, which is the process by which guilt is developed (Hoffman, 1970). However, if maternal anger is expressed, then the child feels anger or fear, not empathic distress or guilt (Hoffman, 1983). These feelings will subsequently impede the development of internalization.

In addition to affecting the negative emotions previously mentioned, maternal socialization practices influence the development of self-conscious feelings, such as shame and embarrassment (Alessandri & Lewis, 1993, 1996a, 1996b). The child’s cognitive abilities, such as self-awareness and self-evaluation, impact the development of self-conscious emotions (Lewis, Alessandri, & Sullivan, 1992; Lewis, Sullivan, Stanger, & Weiss, 1989). In turn, parental evaluation and feedback on child behaviors can contribute to self-evaluations in the child, which could lead to internalization of the parental agenda and learning of social rules (Alessandri & Lewis, 1996b). Moreover, parental evaluation (i.e., praise or criticism) provides the marker by which the child critiques his or her own behavior (Alessandri & Lewis, 1996b). If the child judges his or her behavior to be inadequate on the basis of negative parental evaluation, then the child may experience feelings of shame. These negative feelings toward the self could eventuate in problems in school achievement and a negative self-image (Aber & Allen, 1987; Alessandri & Lewis, 1996b).

Child Maltreatment, Maternal Socialization Strategies, and Internalization

Child maltreatment is a graphic illustration of parenting that has gone awry. One key difference between maltreating and nonmaltreating parents lies in their respective views of discipline and child socialization. Specifically, maltreating parents have higher expectations for their children, including a lower tolerance for “normal” child misbehaviors (Reid, Kawanagh, & Baldwin, 1987) and a greater expectancy for compliance than do nonmaltreating parents (Chilamkurti & Milner, 1993). When children fail to meet these expectations and do not comply with parental demands, maltreating parents are more likely than nonmaltreating parents to believe that their children have been disobedient intentionally (Mash, Johnston, & Kovitz, 1983; Reid et al. 1987).

The preceding differential perceptions and expectations of maltreating parents predispose different discipline strategies, including harsher responses to child disobedience (Rosenberg & Reppucci, 1983), yelling (Disbrow, Doerr, & Caulfield, 1977), spanking (Trickett & Susman, 1988), verbal and material punishment (Trickett & Susman, 1988), and less use of reasoning (Trickett & Susman, 1988). Observational studies also have shown maltreating mothers to use punitive and power-assertive strategies more often and reasoning and positively oriented strategies less often than nonmaltreating mothers (Oldershaw et al., 1986; Trickett & Kuczynski, 1986), as well as less empathy (Feshbach, 1989). In addition to differences between maltreating and nonmaltreating mothers’ use of verbal strategies, maltreating dyads have been found to exhibit less positive and more negative affect during parent–child interactions (Oldershaw et al., 1986; Rosenberg & Reppucci, 1983; Trickett & Susman, 1988). Moreover, maltreated children have been found to be more angry and to show more negative
and less positive emotion in a variety of situations (Egeland & Sroufe, 1981; Egeland et al., 1983). In addition, the high degree of negative evaluation and the socialization of negative emotions in maltreating families may lead to a higher level of negative self-evaluation, such as feelings of shame, in maltreated children (Alessandri & Lewis, 1996a; Lewis, 1992; Morrison, 1989; Tomkins, 1963).

As previously discussed, these direct and forceful socialization strategies employed by maltreating parents could affect their child’s moral development adversely. Research has shown that maltreated children do not differ from nonmaltreated children in their moral judgments or reasoning (Smetana, Daddis, et al., 1999; Smetana, Toth, et al., 1999), as well as internalization and socialization. These include (1) less empathy, or concern, in response to peer distress (Klimes-Dugan & Kistner, 1990; Main & George, 1985); (2) fewer prosocial behaviors (Hoffman-Plotkin & Twentyman, 1984); (3) a higher incidence of aggression (Aber, Allen, Carlson, & Cicchetti, 1989; Famularo, Kinscherff, & Fenton, 1992; George & Main, 1979; Shields, Cicchetti, & Ryan, 1994; Weiss, Dodge, Bates, & Pettit, 1992); and (4) greater delinquency among maltreated populations (Lewis, Mallouh, & Webb, 1989; Pollock et al., 1990; Smith & Thornberry, 1995; Widom, 1989).

The main goal of this study was to understand whether compliance/noncompliance strategies differ between maltreated and nonmaltreated children, as well as how normal and deviant parenting styles affect the process of internalization. The late toddler and early preschool periods (36 and 48 months of age) were studied because these are crucial, formative periods for internalization (Emde et al., 1991; Kochanska, 1993). Internalization was investigated through the examination of child compliance and noncompliance with maternal requests. Differences in parenting strategies between maltreating and nonmaltreating mothers were addressed by studying both verbal and physical features of mother-child interactions, and mother-child affect during such interactions.

The following questions were addressed, with hypotheses based on the current maltreatment and normal development literature: (1) How does the development of compliance and noncompliance strategies differ in maltreated and nonmaltreated children? We hypothesized that maltreated children would be less internalized than nonmaltreated children (i.e., use more situational compliance and unsophisticated forms of noncompliance and use less committed compliance). Moreover, we predicted that physically abused children would be most at risk for impairment in moral internalization. (2) Do maltreating mothers and their children evidence more negative affect (e.g., anger) than nonmaltreating dyads? We expected maltreating dyads were expected to exhibit more mutually negative and less mutually positive affect than nonmaltreating dyads. (3) Are there differences in the control strategies of maltreating and nonmaltreating mothers? We expected maltreating mothers to evidence more power-assertive strategies (e.g., direct commands and physical intervention) and fewer inductive strategies (e.g., reasoning) than nonmaltreating mothers. In addition to formulating these hypotheses, we conducted exploratory analyses to examine which maternal strategies best predict specific child compliance and noncompliance strategies for maltreating versus comparison dyads.

**METHOD**

Participants

Eighty-nine mother–child dyads from the Harvard Child Maltreatment Project, a short-term longitudinal investigation of the causes and effects of child maltreatment (Cicchetti & Rizley, 1981), participated in this study. Approximately half of the children had experienced documented cases of maltreatment and the other half consisted of nonmaltreated comparison children. Forty-five of the children (23 maltreated and 22 comparison) were 3 years old, $M_{age} = 37.53$ months, $SD = 1.15$ months, and 44 (23 maltreated and 21 comparison) were 4 years old, $M_{age} = 49.32$ months, $SD = 1.55$ months). Fifty-two percent of the sample were boys and 19% were minorities.

Maltreated children were randomly selected from the active or current caseloads of child protective social workers in the Massachusetts Department of Social Services (DSS). The sample was representative of all protective cases in the greater Boston region at the time of the study (Cicchetti & Manly, 1990). The biological mother was named as the perpetrator or co-perpetrator in all of the cases. Because none of the children had been placed in foster care, the ongoing salience of the mother–child relationship was ensured.

Maltreatment status was established on the basis of both official government records and social workers’ ratings on the Giovannoni and Becerra (1979) checklist of maltreatment incidents. A Ph.D. psychologist administered the 87-item checklist in an interview format to the social worker of each family. Eighty percent of the maltreated children experienced emotional abuse, 90% neglect, 46% physical abuse, and 4% sexual abuse. Comorbidity of subtypes occurred.
for 81% of the maltreated sample, which is congruent with the maltreatment literature (Barnett, Manly, & Cicchetti, 1993; Cicchetti & Rizley, 1981). Maltreated children were then divided into two groups according to the subtypes experienced. Any child who had been physically abused, irrespective of neglect or emotional maltreatment, was classified into the physically abused group. Two physically abused children who also had been sexually abused were retained in the physically abused group. This was done because their mothers were not the perpetrators of the sexual abuse but were responsible for the physical maltreatment. Thus, the two children likely experienced similar maternal control strategies as the other children in the abused group (i.e., power-assertive techniques). All of the remaining children had been neglected (with many also experiencing emotional maltreatment), and these children were classified as neglected. Thus, 20 children were in the physically abused group and 26 in the neglected group. This grouping was based on the differential impact of maltreatment subtypes on development and adaptation that has been found in past research (Cicchetti & Toth, 1995; Trickett & McBride-Chang, 1995). For example, Cicchetti and Rogosch (1997) discussed the more severe impact on resilience of the active commission of maltreatment acts upon the child (i.e., physical abuse and sexual abuse) versus the omission of attention to basic needs and supervision (i.e., neglect).

To assess the effects of maltreatment beyond the influence of low socioeconomic status (SES), we used a demographically comparable group of low-income nonmaltreating families was used as a comparison sample. Because the majority of the maltreating families were receiving Aid to Families with Dependent Children (AFDC), families also receiving AFDC were targeted as comparisons so that the effects of receiving welfare could be controlled. Comparison families were recruited through advertisements placed in welfare offices and stores in low-income neighborhoods. Nonmaltreatment status was verified, with the families’ permission, through searches of the state registry of maltreatment cases. Maltreating and comparison families did not differ on the following factors: Hollingshead index of socioeconomic status, \( \chi^2(1, N = 89) = 1.73, p = .42 \); maternal education, \( \chi^2(1, N = 89) = 2.33, p = .11 \); total income, \( t(1, 88) = .88, p = .38 \); receipt of Aid to Families with Dependent Children, \( \chi^2(1, N = 89) = .35, p = .84 \); or minority status, \( \chi^2(1, N = 89) = .30, t = .86 \).

Paradigm

ABA semistructured free play. We used a videotaped ABA semistructured free-play and cleanup paradigm in this study (Cicchetti & Beeghly, 1987). In the free-play portion of ABA, the mother and child play in a laboratory playroom furnished with a standard set of age-appropriate toys. Equal numbers of prototypically male and female toys are available. The play session is divided into three 10-min segments. During the first and last 10-min segments of free play (A), the mother is instructed not to initiate interaction with the child but to respond to the child’s initiating or as she does at home. For segment two (B), the mother is told to interact freely with the child. After the second free-play portion, the experimenter signals the start of a cleanup period to the mother with two knocks on the observation mirror. The mother is asked to initiate cleanup with the child by saying, “Okay (child’s name), it’s time to clean up and put the toys in the basket.” Up to 6 min were allowed for the cleanup period. The cleanup portion of free play is the focus of this study because during a cleanup situation, the child must engage in uninteresting behavior and the mother must attempt to direct the child’s behavior. Hence, compliance and noncompliance behaviors are elicited. The child’s compliance and noncompliance behaviors are used to indicate the degree to which the child has internalized prosocial behaviors, such as helping others and taking responsibility for one’s actions. The ABA paradigm has been used and validated with different populations, including children with Down Syndrome (Beeghly, Weiss-Perry, & Cicchetti, 1990) and maltreated children (Beeghly & Cicchetti, 1994).

Measures

Peabody Picture Vocabulary Test-Revised (Dunn & Dunn, 1981). We used the Peabody Picture Vocabulary Test-Revised (PPVT-R) to assess differences in receptive language between maltreated and nonmaltreated children. Receptive language is important both because it establishes the likelihood that the child understands the maternal directives and because some forms of noncompliance require a verbal refusal or negotiation. Thus, establishing comparability between the two groups is important. The PPVT-R is an individually administered, standardized test of receptive language. The child is read a word and presented with four illustrations arranged in a multiple-choice format. The child must select the picture that best illustrates the meaning of the stimulus word. The test is designed for ages 2½ through 18. PPVT-R internal consistencies range from .61 to .88 and alternate-form reliability from .74 to .89 (Sattler, 1992). The PPVT-R correlates .68 with the Wechsler Intelligence Scale for Children-Revised (WISC-R) across studies (Sattler, 1992).

Cleanup coding systems. We used four coding systems to describe mother–child interactions. The first
system, *child internalization*, measures child compliance and noncompliance strategies by using the following categories: committed compliance, situational compliance, passive noncompliance, overt resistance, defiance, and time out (Kochanska & Aksan, 1995). *Committed compliance* is scored when the child fully endorses the cleanup situation and requires little control from mother. *Situational compliance* is scored when the child complies with maternal demands but, if the mother ceases to make requests for compliance, stops cleaning up. During *passive noncompliance*, the child does not comply with maternal directives, usually by ignoring. *Overt resistance* occurs when the child does not comply with maternal directives either by refusal or negotiation. *Defiance* is scored when the child does not comply with maternal directives, usually by refusal with uncontrolled affect. For each 15-s segment of the cleanup period, we coded the predominant child compliance/noncompliance category. Kochanska and colleagues (Kochanska & Aksan, 1995; Kochanska et al., 1995) reported κ between .63 to .78 using this coding system with a nonmaltreated sample.

In the next coding system, *maternal verbal control strategies*, we coded each maternal utterance as one of 16 categories; however, only the 8 categories that captured power-assertive and inductive techniques were used for the present study. The categories are direct do (i.e., “put that away,” “go get that ball”), polite do (i.e., “please help mom put the toys away,” “could you put the ball away?”), hint do (“the toys need to go in the basket,” “it is time to clean up”), reasoning (i.e., “you need to put the toys away because it is time to go,” “you played with the toys so you need to clean them up”), positive evaluation (i.e., “you are doing a great job,” “you are a good boy”), bargaining (i.e., “if you pick up some of the toys then mom will help you with the rest”), negative evaluation (i.e., “you are a bad boy for not picking up the toys”, “you are doing a bad job”), and empathy (i.e., “I know that picking up the toys is hard,” “I know that you don’t want to pick up”). Using a similar coding system with a nonmaltreated sample, Kochanska (G. Kochanska, personal communication, November 11, 1993) reported κs from .62 to .99.

In the *maternal physical control coding system*, we coded all physical intervention strategies into one of six categories, with the three power-assertive and inductive categories used in the present study: distant signals (i.e., pointing from a distance), negative touch (i.e., forcefully grabbing the child’s arm, hitting, spanking), and positive touch (i.e., hugging, kissing). We coded each incident of physical intervention for each 15-s segment of the cleanup period. Hence, each segment can have several categories. For a nonmaltreated sample, an average κ of .76 was reported for a similar physical control coding system (Kochanska, 1995; Kochanska & Aksan, 1995).

The last coding system, *maternal and child affect*, includes six categories: tender/affectionate (i.e., baby talk, caring tone of voice), pleasure/joy (i.e., smiling, laughing, singing, enthusiastic), neutral, slightly negative (i.e., whining, impatient tone of voice, embarrassment, lowered head, slumped shoulders), sad (i.e., crying), and irritable/anger (i.e., yelling, scowling). However, maternal sadness and anger, as well as child anger, were not used in the analyses because of the low frequency of occurrences. Because we coded all instances of maternal and child affective display, multiple categories can be coded for each 15-s segment. Using a similar coding system on a nonmaltreated sample, Kochanska and colleagues (Kochanska & Aksan, 1995; Kochanska et al., 1995) reported κs ranging from .76 to .81 for maternal affect, and κs ranging from .77 to .84 for child affect.

Reliability

Interrater reliability was established on the basis of 20% of the cases, a criterion employed in the extant normal development literature (Kochanska & Aksan, 1995; Kochanska et al., 1995). The two coders were unaware of child maltreatment status for each dyad or the hypotheses of the study. We used κs to establish reliability to control for chance agreement (Cohen, 1960). For each 15-s segment, we compared the predominant coded category between raters to determine agreement. The following κs were found for the coding systems: child internalization, κ = .80, maternal physical strategies, κ = .85, maternal affect, κ = .76, and child affect, κ = .77, and all are considered substantial (Cohen, 1960). We calculated αs for the maternal verbal coding system because we recorded category totals, rather than specific incidents (Bakeman & Gottman, 1989). These αs ranged from .75 (negative evaluation) to .97 (polite do and bargaining), with a mean of .78.

RESULTS

Peabody Picture Vocabulary Test-Revised

Seventy-six of the 89 children (41 maltreated and 35 comparison) completed the PPVT-R. A significant difference, t(75) = -2.53, p < .02, was found between maltreated and comparison children, M = 83.93, SD = 19.33, and M = 95.72, SD = 21.64, respectively. Because all correlations between PPVT-R scores and child compliance and noncompliance, maternal physical, maternal verbal and mother–child affective categories ranged from .00 to .21 (all nonsignificant), the effect of PPVT-R scores on child or maternal strategies was not considered further.
Gender

Gender did not correlate significantly with the compliance/noncompliance categories, \( r(88) = -0.15 \) to .03, maternal physical categories, \( r(88) = -0.01 \) to .13, maternal verbal categories, \( r(88) = -0.01 \) to .28, maternal affective categories, \( r(88) = -0.04 \) to .19, or child affective categories, \( r(88) = 0.04 \) to .19. Because of the lack of significant correlations between gender and other variables, gender effects were ignored in subsequent analyses.

Proportional Scores

Because dyads differed in their total number of cleanup segments (e.g., cleanup may have lasted 3 min for one dyad and 6 min for another), the relations of segment length with child and maternal categories were explored. Total length of the cleanup segment correlated significantly with the child category committed compliance, \( r(88) = -0.34, p < .01 \), and the maternal verbal categories direct do, \( r(88) = 0.36, p < .01 \), hint do, \( r(88) = 0.34, p < .01 \), bargaining, \( r(88) = 0.40, p < .01 \), and negative evaluation, \( r(88) = 0.35, p < .01 \). In addition, an ANOVA with maltreatment status and age as the between-subjects variables and the length of the segment as the dependent variable found a significant difference in segment length between the age groups, \( F(1, 88) = 6.19, p < .01 \). Younger children had significantly longer cleanup segments than the older children, \( M = 3.06 \) minutes, and \( M = 2.11 \) min, respectively. Segment length did not differ between the maltreated and nonmaltreated groups, \( F(1, 88) = .00, p < .05 \). Accordingly, to control for variations in the length of the cleanup across dyads, we used proportional scores for all four coding systems. For each coding system, we divided the total number of incidents in each category by the total number of cleanup segments for the dyad. We then transformed proportional scores in all four coding systems with an arcsine transformation (Cohen & Cohen, 1983) to stabilize variance in their distributions. Moreover, to further control for the effects of segment length on child and maternal categories, in subsequent analyses we used segment length as a covariate.

Compliance/Noncompliance Strategies

We calculated correlations among the compliance and noncompliance categories to examine the relations among the categories (Kochanska et al., 1995) and found for the theoretical distinctness of the committed compliance category, with committed compliance significantly negatively correlated with other categories (see Table 1).

Table 1 Correlations between Compliance/Noncompliance Categories

<table>
<thead>
<tr>
<th>Situation</th>
<th>Passive</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committed</td>
<td>-0.47**</td>
<td>-0.64**</td>
</tr>
<tr>
<td>Situational</td>
<td>0.06</td>
<td>0.17</td>
</tr>
<tr>
<td>Passive</td>
<td></td>
<td>0.06</td>
</tr>
</tbody>
</table>

* \( p < .01 \); ** \( p < .001 \).

To evaluate the first study question, whether compliance and noncompliance strategies differ between maltreated and nonmaltreated children, we conducted a MANCOVA with maltreatment status groups (abused, neglected, comparison) and age as between subjects, segment length as the covariate, and the five forms of compliance and noncompliance (committed compliance, situational compliance, passive noncompliance, overt resistance, and defiance) as the dependent variables. To enhance robustness, in this and subsequent analyses, overt resistance and defiance were combined into a single resistance category. This was justified both on the grounds of theoretical similarity and a similar procedure used in past normative research (Kochanska, 1991). No multivariate effects were found for compliance/noncompliance strategies as related to the maltreatment status by age interaction, Wilks’s \( F(4, 86) = 1.22, p = .30 \), or the age main effect, Wilks’s \( F(4, 86) = .16, p = .96 \).

We found a significant multivariate effect related to maltreatment status for compliance/noncompliance strategies, Wilks’s \( F(4, 83) = 2.43, p < .02 \). Table 2 presents the arcsine transformed proportional score means and standard deviations for physical abuse, neglect, and comparison groups on all dependent measures. Examination of univariate ANOVAs revealed that the amount of committed compliance, \( F(2, 86) = 3.50, p = .04 \), and situational compliance, \( F(2, 86) = 3.02, p = .05 \), differed significantly between the three groups. The children who experienced physical abuse exhibited significantly more situational compliance, \( t(62) = 2.12, p < .05 \), and significantly less committed compliance, \( t(62) = 2.01, p < .05 \), than the nonmaltreated group. The neglect group did not differ significantly from the comparison group on committed compliance, \( t(68) = -.67, p = .51 \), or situational compliance, \( t(68) = 1.42, p = .16 \). There were no significant differences between the groups on passive noncompliance, \( F(2, 86) = .82, p = .44 \), or resistance, \( F(2, 86) = 1.89, p = .16 \).

Maternal and Child Affect

We tested differences in maternal affect on the basis of child age and maltreatment status by using a
MANCOVA, with between-subjects variables of maltreatment status groups and age, segment length as a covariate, and four maternal affect categories (joy, tenderness, neutral, and slightly negative) as the dependent variables. The MANCOVA did not reveal differences in maternal affect based on maltreatment status, Wilks’s $F(3, 84) = 5.95, p = .48$, child age, Wilks’s $F(4, 86) = .57, p = .68$, or the maltreatment status by age interaction, Wilks’s $F(4, 86) = 1.00, p = .44$.

We also tested differences in child affect between maltreatment groups by using a MANCOVA, with between-subjects variables of maltreatment status groups and age, segment length as a covariate, and five child-affect categories (joy, tenderness, neutral, slightly negative, and sadness) as the dependent variables. Affective differences approaching significance were found between maltreatment status groups, Wilks’s $F(4, 83) = 1.68, p < .09$. Although the multivariate effect was not significant, we examined follow-up univariate ANOVAs because little is known about affective expression in maltreated children. ANOVAs revealed that the amount of slightly negative affect differed significantly between the three groups, $F(2, 86) = 3.61, p = .03$. The neglect group exhibited significantly more negative affect than the comparison group, $t(68) = 2.69, p < .01$, whereas the physical abuse group did not significantly differ from the comparison, $t(62) = .55, p = .58$, or neglect, $t(45) = 1.68, p = .10$, groups. We found no differences between the three groups on any of the other affective categories. The MANCOVA found no significant differences for child age, Wilks’s $F(5, 85) = .79, p = .56$, or the maltreatment status by age interaction, Wilks’s $F(5, 85) = .60, p = .82$.

Table 2 Arcsine Transformed Proportional Score Means and Standard Deviations for Child and Maternal Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Physical $(n = 20)$</th>
<th>Neglect $(n = 26)$</th>
<th>Comparison $(n = 43)$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Child compliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committed compliance*</td>
<td>.26a</td>
<td>.31</td>
<td>.42</td>
</tr>
<tr>
<td>Situational compliance*</td>
<td>.22a</td>
<td>.18</td>
<td>.18</td>
</tr>
<tr>
<td>Passive noncompliance</td>
<td>.22</td>
<td>.21</td>
<td>.23</td>
</tr>
<tr>
<td>Resistance</td>
<td>.11</td>
<td>.14</td>
<td>.12</td>
</tr>
<tr>
<td>Maternal affective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly negative</td>
<td>.11</td>
<td>.15</td>
<td>.14</td>
</tr>
<tr>
<td>Joy</td>
<td>.05</td>
<td>.07</td>
<td>.05</td>
</tr>
<tr>
<td>Tender</td>
<td>.02</td>
<td>.05</td>
<td>.03</td>
</tr>
<tr>
<td>Neutral</td>
<td>.80</td>
<td>.12</td>
<td>.76</td>
</tr>
<tr>
<td>Child affective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly negative*</td>
<td>.10</td>
<td>.14</td>
<td>.18a</td>
</tr>
<tr>
<td>Joy</td>
<td>.04</td>
<td>.08</td>
<td>.10</td>
</tr>
<tr>
<td>Tender</td>
<td>.00</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>Sadness</td>
<td>.03</td>
<td>.10</td>
<td>.02</td>
</tr>
<tr>
<td>Neutral</td>
<td>.86</td>
<td>.17</td>
<td>.75</td>
</tr>
<tr>
<td>Maternal verbal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hint do</td>
<td>.51</td>
<td>.32</td>
<td>.55</td>
</tr>
<tr>
<td>Direct do</td>
<td>.40</td>
<td>.27</td>
<td>.37</td>
</tr>
<tr>
<td>Polite do</td>
<td>.24</td>
<td>.30</td>
<td>.18</td>
</tr>
<tr>
<td>Positive evaluation</td>
<td>.06</td>
<td>.10</td>
<td>.10</td>
</tr>
<tr>
<td>Bargaining</td>
<td>.12</td>
<td>.23</td>
<td>.07</td>
</tr>
<tr>
<td>Negative evaluation</td>
<td>.03</td>
<td>.12</td>
<td>.01</td>
</tr>
<tr>
<td>Empathy</td>
<td>.03</td>
<td>.07</td>
<td>.01</td>
</tr>
<tr>
<td>Maternal physical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>.00</td>
<td>.00</td>
<td>.02</td>
</tr>
<tr>
<td>Negative</td>
<td>.03</td>
<td>.07</td>
<td>.02</td>
</tr>
</tbody>
</table>

*a,b* Indicates significant group differences; see text for explanation.

* $p < .05.$
Maternal Verbal and Physical Control Strategies

We tested differences in maternal verbal and physical control strategies on the basis of child age and maltreatment status groups by using the same MANCOVA strategy. For maternal physical control, we found no significant differences related to maltreatment status, Wilks’s $F(3, 84) = 1.37, p = .23$, child age, Wilks’s $F(3, 84) = .50, p = .68$, or the status by age interaction, Wilks’s $F(3, 84) = 1.25, p = .28$. In addition, we found no significant differences on maternal verbal strategies related to the child’s age, Wilks’s $F(8, 79) = .99, p = .45$, maltreatment status, Wilks’s $F(8, 79) = 1.14, p = .34$, or the status by age interaction, Wilks’s $F(8, 79) = .76, p = .73$.

Relations among Maternal Strategies and Child Compliance/Noncompliance Strategies

Table 3 presents correlations among maternal categories and the child compliance and noncompliance categories. Many of the maternal physical and verbal categories were negatively correlated with committed compliance and positively correlated with the other child categories (i.e., negative physical, polite do, bargaining, and slightly negative affect). In addition, some of the categories theorized as beneficial to the internalization process and thus expected to correlate positively with committed compliance, (e.g., bargaining), were negatively correlated with committed compliance and positively correlated with noncompliance.

To examine further the relations among maternal and child variables, we used stepwise regression analyses to explore the extent to which maternal categories predicted child compliance/noncompliance strategies for the maltreated and comparison children (see Table 4). Because of limited power, we did not divide the maltreated group into physically abused or neglected categories for the regression analysis. We entered maternal verbal control, physical control, affection, length of clean up segment, and child age into the stepwise regression analyses.

In the separate regressions for the maltreated group and the comparison group, more variance was explained in two of four categories for maltreated versus comparison dyads; committed compliance (maltreated $R^2 = .68$, comparison $R^2 = .39$) and resistance (maltreated $R^2 = .64$, comparison $R^2 = .25$).

For maltreated children, negative maternal categories were the best predictors of two strategies. For committed compliance, the affective category slightly negative was the best predictor, whereas for resistance, the negative physical category was the best predictor, with negative evaluation as the next-best predictor for maltreated children. However, the direction of effects for predicting committed compliance and resistance was different. Maternal slightly negative affect was nega-

* $p < .01$; ** $p < .001$.

Table 4 Stepwise Regression for Each Child Compliance/Noncompliance Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Maltreated</th>
<th>$R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>committed compliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly negative</td>
<td>-.62</td>
<td>.38</td>
<td>10.46*</td>
</tr>
<tr>
<td>Length</td>
<td>-.55</td>
<td>.68</td>
<td>16.73**</td>
</tr>
<tr>
<td>Comparison</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>-.50</td>
<td>.25</td>
<td>6.55*</td>
</tr>
<tr>
<td>Joy</td>
<td>-.38</td>
<td>.39</td>
<td>6.06*</td>
</tr>
<tr>
<td>Situational compliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maltreated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bargaining</td>
<td>.47</td>
<td>.22</td>
<td>6.51*</td>
</tr>
<tr>
<td>Comparison</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hint do</td>
<td>.48</td>
<td>.23</td>
<td>8.29**</td>
</tr>
<tr>
<td>Polite do</td>
<td>.36</td>
<td>.35</td>
<td>6.92**</td>
</tr>
<tr>
<td>Passive noncompliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maltreated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hint do</td>
<td>.44</td>
<td>.20</td>
<td>5.66*</td>
</tr>
<tr>
<td>Comparison</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joy</td>
<td>.58</td>
<td>.34</td>
<td>13.61**</td>
</tr>
<tr>
<td>Resistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maltreated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative physical</td>
<td>.66</td>
<td>.44</td>
<td>17.80**</td>
</tr>
<tr>
<td>Negative evaluation</td>
<td>.46</td>
<td>.64</td>
<td>19.83**</td>
</tr>
<tr>
<td>Comparison</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of segment</td>
<td>.50</td>
<td>.25</td>
<td>9.09*</td>
</tr>
</tbody>
</table>

* $p < .05$; ** $p < .01$. 
tively related to committed compliance, whereas the negative physical and negative evaluation strategies were positively related to resistance.

In contrast, for the comparison children, maternal joy was the best predictor of passive noncompliance and the second-best predictor of committed compliance. Again, the direction of effects was different for the two child categories, with a positive relation between joy and passive noncompliance and a negative relation between joy and committed compliance.

For situational compliance, the verbal category bargaining was the best predictor for maltreated children. For comparison children, however, the verbal category hint do was the best predictor, followed by polite do. In summary, although the use of the various maternal strategies does not differ significantly between the maltreatment groups, child compliance and noncompliance were differentially predicted by alternate maternal behaviors in the maltreated and comparison dyads.

**DISCUSSION**

The findings both support and expand the literature on moral development and self-development in maltreated children. Physically abused children evidenced less moral internalization: They exhibited significantly more mere cooperation and significantly less whole-hearted endorsement or acceptance of the maternal agenda than comparison children. The neglected children, by contrast, did not differ significantly from the nonmaltreated children on their level of internalization. The finding that maltreatment subtypes have a differential impact on moral development supports past research findings of subtype differences in development and adaptation (Cicchetti & Toth, 1995; Smetana, Toth, et al., 1999; Trickett & McBride-Chang, 1995). Apparently, the commission of maltreatment acts upon the child (i.e., physical abuse and sexual abuse) has a more severe impact on moral internalization than the omission of attention to basic needs and supervision (i.e., neglect).

The strategy of situational compliance appears to be theoretically similar to the coping style that Crittenden and DiLalla (1988) discovered in maltreated toddlers and called “compulsive compliance.” Thus, on the basis of both the past study and present results, physically abused children appear to engage in a form of compulsive compliance at least until the age of 4. The strategy involves suppression of negative behaviors and immediate compliance with the maternal directive. The present study findings have important clinical implications. Crittenden and DiLalla (1988) argued that, because these children distort their own perceptions and emotional responses, the youngsters could develop a “false self.” This could impede children’s ability to express their true needs to others, thus contributing to a lack of need fulfillment and difficulties in emotion regulation and may be a possible marker for maladaptation (Cicchetti, 1991). Moreover, the fact that compulsive compliance does not lead to internalization places the child at risk for nonoptimal functioning, possibly even psychopathology (Ryan et al., 1995).

In addition, neglected children expressed significantly more negative affect than comparison children, whereas the physically abused children did not differ significantly from the nonmaltreated children. Apparently, neglected children have a higher level of anger, which could be due to a lack of attention and need fulfillment by their caregivers. This finding is consistent with past research, which found that neglected children displayed, rather than inhibited, expressions of anger when involved in mother–child interactions (Crittenden & DiLalla, 1988). The increase in expressed negative affect could be highly detrimental to their moral development because turning anger or negative feelings inward, instead of directing them toward others, is crucial for the development of guilt (Hoffman, 1983). Internalized guilt which motivates a child to inhibit antisocial and engage in prosocial behaviors (Hoffman, 1983). The impairment of moral development seen in maltreated children may result from affective differences in their responses to moral situations.

Instead of indicating anger, the negative affect seen in neglected children may represent feelings of shame or embarrassment during internalization situations. Although research has found increased levels of shame only in maltreated girls (Alessandri & Lewis, 1996b), the current findings suggest that neglected children may experience more shame or embarrassment in compliance situations. This could, in turn, contribute to the development of psychopathology, especially depression (Alessandri & Lewis, 1996a; Lewis, 1992; Zahn-Waxler & Kochanska, 1990).

The lack of gender differences in compliance and noncompliance strategies was surprising given that prior research on compliance and internalization has found significant gender differences (Kochanska & Aksan, 1995; Kochanska et al., 1995; Kochanska, Padavich, & Koenig, 1996; Kuczynski et al., 1987). Girls have been shown to exhibit more committed compliance and less passive noncompliance than boys (Kochanska & Aksan, 1995; Kochanska et al., 1995). In addition, preschool aged girls were found to display less situational compliance than preschool aged boys (Kochanska et al., 1995). However, past studies of compliance in maltreated children have either not ex-
examined gender differences (Crittenden & DiLalla, 1988; Egeland et al., 1983; Oldershaw et al., 1986; Schindler & Arkowitz, 1986), or found only a few differences in parenting strategies based on the gender of the child (Trickett & Kuczynski, 1986). One reason for the lack of gender differences in the present findings may be that the study was not designed to examine sex effects. The number of boys versus girls across the three maltreatment groups is small. Thus, a larger sample is needed to examine gender differences in compliance and noncompliance strategies in maltreated children.

Correlations among maternal control strategies and child internalization appear counterintuitive. Categories theorized as beneficial to the internalization process, such as reasoning, and thus expected to correlate positively with committed compliance were negatively correlated with committed compliance and positively correlated with noncompliance. In fact, of the statistically significant correlations only tenderness was positively associated with internalization. These findings, however, do make sense when one considers the interaction between the mother and child. Apparently, when the child is cleaning up and engaged in the task, the mother exhibits no control strategies. The child is already complying with the mother’s directive; thus, no maternal intervention is needed. The mother appears to simply give the initial directive and then engage in tender affect, with few verbal or physical interventions and little negative affect. Only when the child is noncompliant does the mother need to engage in discipline strategies. Hence, maternal verbalizations and behaviors expected to correlate negatively with low internalization (i.e., noncompliance strategies) actually correlate positively with them.

Through stepwise regression analyses that explored differences in maternal predictors of child compliance and noncompliance, we discovered some intriguing new findings. Maltreating and comparison mothers differed in the techniques that best predicted child strategies, especially concerning child internalization. A lower level of maternal negative affect was linked to child internalization in maltreated children, whereas a lower level of maternal joy predicted internalization for the comparison children. Possibly, for comparison children, the less the child experiences maternal joy, the greater the sense of guilt and degree of internalization. In contrast, when the comparison mothers expressed a high degree of joy, the child may not have felt guilt or responsibility and thus ignored the maternal commands and agenda (i.e., passive non-compliance). For maltreated children, apparently, less maternal negative affect enhances the child’s ability to internalize the task, whereas a high degree of negative strategies (i.e., negative physical interventions and negative evaluation of the child) seems highly detrimental to the internalization process for maltreated children as evidenced by an increase in resistant behaviors. Thus, if maltreating mothers can suppress expressions of negative affect and behavior, moral development may be less impaired in their children.

In addition, regression analyses revealed that more variance is explained for two of the four child categories (i.e., committed compliance and resistance) in maltreating versus comparison dyads. Thus, maltreated children’s behaviors are more strongly predicted by maternal control strategies than are those of comparison children. This finding suggests that maltreated children may be more reactive to maternal behaviors and strategies than comparison children. Perhaps maltreated children are more vigilant to the verbalizations and affective expressions of their mothers so that they can detect any signals of punishment or potential abusive behaviors (cf. Pollak, Cicchetti, Klorman, & Brumaghim, 1997; Rieder & Cicchetti, 1989). Future research should examine further the factors, and possibly the pathways, that are crucial for moral internalization in both maltreated and nonmaltreated children.

The three groups did not differ on any of the maternal verbal, physical, or affective strategies seen in the literature as critical for internalization. This could be explained by past results that found differences in the strength of the relation between maternal strategies and child moral development. A strong relation was found between maternal discipline strategies and children’s moral development in middle-SES dyads; however, in lower-SES dyads, maternal practices were not systematically related to measures of moral functioning (Brody & Shaffer, 1982; Hoffman, 1970). Hoffman (1970) argued that because power-assertive strategies predominate in lower SES parenting, any technique, including induction, will still have a power-assertive tone for the child. Because all of the families in the present study came from lower SES backgrounds, maternal strategies may not have differed on the basis of maltreatment status because all mothers may have employed power-assertive strategies. Table 2 shows evidence of this, with all mothers using direct verbal strategies more often than inductive techniques.

Another reason for the lack of observed differences between the groups on any maternal strategies could be that a laboratory paradigm may not sufficiently represent behaviors seen in a natural home environment (Brody & Shaffer, 1982). The paradigm captured a very brief period of time, one in which the mothers
could slightly alter their strategies from their typical repertoire. It is the long-term exposure to harsh parenting techniques that may be detrimental to maltreated children’s moral development.

Even so, maltreating and comparison mothers may differ in these strategies in other ways besides mere frequency. For example, whereas comparison mothers may convey morality or a sense of responsibility with reasoning statements, maltreating mothers may use “reasoning” statements to convey threats or punishment. For example, a comparison mother might say, “You should clean up the toys because you were the one who played with them,” whereas a maltreating mother may say, “You should clean up the toys because I told you to and I am the boss.” Although both statements offer reasons for picking up the toys, the comparison mother’s statement is more likely to promote internalization because it conveys a sense of responsibility, whereas the maltreating mother’s statement, emphasizing an external cause for the action, will not. Maltreating and comparison mothers may thus differ importantly in underlying meanings that children derive from their statements, a dimension not captured in this study. Modifying the coding system to account for these differences in underlying meaning may help to capture different strategies in maltreating versus comparison mothers.

As discussed earlier, one limitation of the study is the very brief time period in which maternal and child strategies were measured. The paradigm lasted, at most, 6 min. In fact, for maltreated children the situation averaged just over 3 min and for nonmaltreated children the mean was approximately 2 min. Future research should develop other more in-depth paradigms for assessing internalization. Moreover, a second limitation is the cross-sectional nature of the research. To capture which maternal strategies lead to internalization, as well as how maternal strategies change over developmental periods, longitudinal studies with both maltreated and nonmaltreated children are needed.

Despite the study’s limitations, maltreated children, especially physically abused children, appear to have impaired moral development. The strategy of situational compliance, seen in the physically abused children, could also be detrimental to self-development. As discussed, the strategy could create a “false self” as a result of the child’s suppression of his or her own feelings. Neglected children were shown to have differences in their affective responses during internalization situations, which could impair both their moral and emotional development. This finding adds to the literature showing aberrations in maltreated children’s emotional development. Maltreated children have been found to use fewer internal state words (Beeghly & Cicchetti, 1994) and to be less able to decode facial expressions of emotion (Camras, Grow, & Ribordy, 1983). Intervention directed at aiding maltreated children in the identification and expression of their feelings, especially their emotions regarding attachment figures, could decrease disturbances to the self-system and enhance moral development. Intervention focused on improving maltreating mothers’ sensitivity and responsiveness to their children’s feelings and needs is also crucial.

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REFERENCES

Alessandri, S. M., & Lewis, M. (1996b). Differences in pride


Pollak, S., Cicchetti, D., Klorman, R., & Brumaghim, J. (1997). Cognitive brain event-related potentials and...


