

Moral Behaviors: What Can Behaviorists Learn from the Developmental Literature?

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Abstract

Research on moral behavior in children is sorely lacking in the behavioral literature. Yet, behavioral research documenting effective treatment of children with behavioral and emotional problems has often failed to generalize or to focus on moral behavior. Developmental psychologists have researched moral behavior and have provided models of moral development in children. The authors of this paper have reviewed this literature in an attempt to encourage behavioral researchers to critically evaluate the developmental literature in light of what it may have to offer in the area of moral behavior.

Keywords: Moral Development, Internalization, Parent Behaviors, Child Behaviors, Conscience, Morality, Attachment, Self-regulation

Moral behavior is of great concern to society in general and to parents, teachers and others who care for children. Children with behavioral and emotional problems often behave well when they are provided with external structure and contingencies, but seem to be lacking in “internalization”, “morality” and the development of a “conscience”. Much has been researched and written about moral development in the developmental literature, but behaviorists disregard most of this literature and refuse to research this topic because such concepts are considered to be vague terms for a set of complex behaviors at best, and most often “explanatory fiction” (Skinner, 1953). Yet, behaviorists serve many children who act as if they lack a “conscience” and would benefit if their motivation was “internalized” and yet they are satisfied to simply say that their “immoral behavior” is a “failure to generalize”. The authors of this paper have reviewed the developmental literature in an attempt to glean from it any information that may be useful (i.e. where inferred concepts have been translated into operationally defined behaviors that can be observed and measured) to the understanding and treatment of children with behavioral and emotional disorders.

Developmental researchers have defined “socialization” as the ability to function adequately in society, or to act appropriately in social environments (Kochanska, 1994; Perry & Bussey, 1984). “The process of internalization in children is the vehicle for the intergenerational continuity of values, culture, and social order in families and societies” (Kochanska, 1994, p. 20). According to developmental psychologists, “socialization” and “internalization” are accomplished through the development of a “conscience”, which is “an inner guiding system responsible for the gradual emergence and maintenance of self-regulation” (Kochanska & Aksan, 2006, p.1584).

Children with an inadequate “conscience” or one that is impaired are at risk for developing problems later in life. Among these risks are conduct problems, antisocial development, insecure attachment and psychopathology (Blair, 1997; Frick et al, 2003; Kochanska, Forman, Aksan, & Dunbar, 2005). On the other hand, successful moral development is characterized by an early capacity for remorse as well as an understanding of right and wrong (Kochanska, Forman, Aksan, & Dunbar, 2005).

Components of Moral Development

“Moral development” is the process through which children acquire the concepts of right and wrong as well as the ability to regulate behavior to adhere to standards deemed appropriate by society (Kochanska, 1994; Perry & Bussey, 1984). “The function of morality is to provide guidelines for behavior” (Royal & Baker, 2005). According to developmental psychologists, the concept of morality is comprised of three distinct yet interrelated dimensions: “moral reasoning” (cognition), “moral emotions” (affect), and “moral conduct” (behavioral) (Kochanska & Aksan, 2006; Kochanska, Forman, Aksan, & Dunbar, 2005; Perry & Busey, 1984).

“Moral reasoning” is considered the cognitive portion of morality (Perry & Bussey, 1984; Royal & Baker, 2005, Smetana, 1999). It is defined as the understanding of the concepts that make up right and wrong (Royal & Baker, Smetana, 1999). For example, it is considered wrong to lie, steal, and cheat; however, it is considered right to help another and to share (Kochanska, Aksan, & Nichols, 2003). Moral reasoning also includes the justifications made for and during moral dilemmas (Kochanska, Aksan, & Nichols; Royal & Baker; Smetana, 1999).

“Moral emotion,” or the affective portion of morality, includes the feelings and experiences of the child (Kochanska & Aksan, 2006; Hoffman; Perry & Bussey, 1984). Here the child compares his/her current and past emotional responses to the responses of other. This allows the child to “check” that the emotions he/she is feeling and employing match, not only the dilemma, but also the responses of others (Perry & Bussey, 1984; Tangney, Stuewig, & Mashek, 2007). Researchers have defined moral affect as “guilt, discomfort, concern, and empathy following a transgression” (Kochanska, Gross, Lin, & Nichols, 2002).

“Moral conduct” is the behavioral component of morality (Kochanska & Aksan, 2006) and is comprised of two parts. The first is the engagement in prosocial behaviors or helping behaviors and the second is resistance or inhibition to engage in antisocial behaviors such as stealing (Koenig, Cicchetti, & Rogosch, 2004; Perry & Bussey).

Factors of Moral Development

Several researchers have made the argument that each dimension develops independently and only as the child matures and schemas grow do the dimensions interact with each other. Kochanska, Forman, Aksan, and Dunbar (2005) suggest that instead of a unitary process, there are distinct pathways through which moral emotion, moral conduct, and moral cognition develop. Again, that these dimensions are distinct yet interrelated (Aksan & Kochanska, 2005; Burton, 1963; Rushton, Brainerd, & Pressley, 1983; Kochanska, Padavich, & Koenig, 1996). However, the interrelatedness of these dimensions is outside the scope of this article, but is included to provide the reader with relevant information. The theoretical approach of the researcher determines which dimension is more important and the order in which they believe the dimensions develop. That being said, this next section is devoted to the general description and measurement of each dimension.

Moral cognition involves the justifications made for a moral, or for that matter an immoral, act (Royal & Baker, 2005). As Searle describes, “It is a mistake to confuse the evidence that we have about a subject matter for the subject matter itself. The subject matter of psychology is the human mind, and human behavior is evidence for the existence and features of the mind, but is not itself the mind” (Searle 2004, pp. 52–53).

Researchers rely on tasks such as Defining Issues Task (DIT; Rest, 1973) and Moral Judgments Test (MJT; Colby, Kohlberg et al. 1987) to assess moral cognition, or other hypothetical dilemmas. In these tasks the child is read a story of a protagonist acting immorally. The child is then asked a series of questions pertaining to the actions the character should take and why the character will take those actions (Narvaez & Bock, 2002). Researchers also often discuss moral cognition in the terms of schemas. A schema is a term coined by cognitive developmental theorists (Piaget, 1932/1965) that describes “mental representations of events and experiences” (Perry & Bussey, 1984, p.13). Schemas organize information, allowing children to make sense of novel situations. Schemas build on each other, incorporating more sophisticated rules for complex events (Perry & Bussey).

Often times, children understand rules and norms that are laid out by society; however, their underlying moral reasoning differs. Young children often employ ‘external loci of control’ to judge their behaviors, responding in terms of blame and punishment. ‘External loci of control’ is defined as the reliance on external factors such as parents or authority figures for behavior cues. Slightly older children’s response patterns are consistent with a more sophisticated moral level; “upholding laws” and “being aware of the feelings of others” are among common themes. Even older children understand more abstract themes such as “the golden rule.” (Perry & Bussey, 1984)

In regard to moral behavior, the ability to ‘self-regulate’ is considered one of the earliest signs of moral development. Regulation occurs within the first 12 to 36 months of life. Regulation is the beginning of the capacity for control when caregivers are present in the environment. Soon after, children acquire self-control, which allows children to regulate behaviors in an environment without the caregiver. Finally, children are able to adapt their behaviors to meet the demands of various environments (Eiden, Edwards, & Leonard, 2007; Kochanska & Aksan, 2006; Kochanska, Coy, & Murray, 2001; Kopp, 1982).

Late infancy through preschool age is considered the critical stage for the development the ability to ‘self-regulate.’ Kochanska, Coy, and Murray (2001) conducted a longitudinal study of the development of self-regulation which took place over the course of 4 years. Compliance situations are used to assess self-regulation. The researchers observed 108 children during committed and situational compliance situations. Compliance situations involve the mother asking the child to either engage in or refrain from a task. Kochanska, Coy, and Murray (2001) have discussed two types of compliance: committed and situational. Committed compliance “describes children’s behavior when they embrace the maternal agenda, accept it as their own, and eagerly follow maternal directives in a self-regulated way. Committed compliance was coded when the child made statements of “I want to clean,” “I want to help,” or the child smiles while performing the task. On the other hand, situational compliance describes instances when children, although essentially cooperative, do not attempt to embrace wholeheartedly the maternal agenda. Situational compliance was coded when the child made statements of “I don’t wanna,” or the child did not smile and had a slouched body posture. Such compliance is “shaky and seems contingent on sustained maternal control.”

The children were observed at 14, 22, 33, and 45 months and the researchers found that females’ ability to self-regulate surpassed the males’ ability during committed compliance situations (Kochanska, Coy & Murray, 2001). The researchers also found that young children had a more difficult time sustaining an instructed activity then refraining from one.

Again, compliance situations involve the mother asking the child to conduct or refrain from doing a task. When placed in compliance situations, the typical child engages in committed

compliance, which involves the child cooperating eagerly, where as the maltreated child often rejects the mother's idea of morality (Kochanska, Coy, & Murray, 2001; Koenig, Cicchetti, & Rogosch, 2000; Kuczynski & Kochanska, 1990).

Bandura felt that children learned to regulate their own behavior after observing others regulated behaviors (Bandura, Ross, & Ross, 1963b). Bandura added that there are several factors that influence imitation: vicarious reinforcement (Bandura, Ross, & Ross, 1963b) and power, which he defined as "the ability of a person to influence the behavior of others by controlling or mediating their positive and negative reinforcements" (Bandura, Ross, & Ross 1963a, pg.528) However their theories did not have empirical support for imitation and development, until recently (Forman, Aksan, & Kochanska, 2004). Forman, Aksan and Kochanska (2004) looked at imitation and its predictive capabilities on different aspects of the developing conscience. They observed children at 14, 22, 33, and 45 months under different stimulus conditions. At 14 and 22 months imitation was assessed through maternal child interaction. The mother taught the child 3 different scripts and was instructed to "encourage" imitation...or the child was instructed to model her behavior. To assess internalization, cheating games and prohibited toy paradigms were used (will be discussed in greater detail later in the article). Guilt was assessed when an experimenter led the child to believe that he/she had damaged a precious item. The researchers found that ability of and the readiness to imitate/model the mother at 14 and 22 months predicted internalized moral behaviors at 33 and 45 months.

Guilt and empathy are considered the moral emotions. However, there are behaviors of guilt and empathy that are assessed separately from the actual emotion. To assess the behavioral aspects of guilt, experimenters led children to believe that they have damaged an object that had not only had monetary value but sentimental value as well. Observers were coding for gaze avoidance (brief or long), bodily tension (squirming, backing away, hunched shoulders), and affect (positive or negative). A distress paradigm is used to assess empathic behaviors of the child. It consists of a confederate dropping a box on her foot. The confederate then acted exacerbated by both the pain to her foot and the distress of spilling the contents of the box. The researchers coded "helping behaviors," as well as comforting behaviors (Kochanska, Forman, Aksan, & Dunbar, 2005; Kochanska, Gross, Lin, Nichols, 2002).

To assess moral emotions, an experimenter needs only to ask the participant. "To say that a person is consciously experiencing emotion is to say that he or she has a mental representation of emotion: past feelings (memories), hypothetical feelings (imaginings), or feelings that are occurring in the moment (on-line experiences). The most direct way to measure the contents of a mental representation of emotion is to examine people's verbal behaviors regarding their own mental state, in the form of self reports (e.g., narratives or simple ratings of emotion words using Likert-type scales)" (Barrett, Mesquita, Ochsner, & Gross, 2007, p. 377).

Hypothetical narratives and rating scales of emotions have been used in previous developmental research, along with parental and teacher reports (Kochanska; 1991; Kochanska, Padavich, Koenig, 1996; Woolgar et al., 2001). These reports ask parents to rate the child's emotions during common transgressions for the appropriate age group. During narratives tasks, the child is read a case vignette or hypothetical dilemma, just as in the moral cognition assessment. Only here the questions pertain to the emotion being felt by the character. This concept is projective, assuming that the children will project their feelings and experiences when misbehaving onto the characters in the narratives (Perry & Bussey, 1984). In the case of young children, verbal abilities vary and children often lack the sophisticated language needed for the task. Doll-play narrative techniques have been used to combat this confound. These protocols involve the experimenter to act out a brief "socio-emotional dilemma" utilizing dolls and props

then asks the child to complete the story and “resolve the dilemma (Woolgar et al., 2001).

Aside from the three dimensions, another important factor in the development of morality in children is internalization. Internalization is defined as the “vehicle for the intergenerational continuity of values, culture, and social order in families and societies” (Kochanska, 1994). According to Grusec and Goodnow (1994), internalization is the similarity of the parent's and child's values. Grusec and Goodnow suggest that for this similarity to take place several things have to occur. When the child has committed a transgression, the parent has to convey to the child the inappropriateness and consequence of the act. The child not only has to understand the parent's reasoning, but has to be willing accept it as well. The child has to then apply this reasoning to other moral dilemmas and embrace it as his/her own. These authors also suggest several factors that foster the development of internalization. The first two deal with parental behaviors. Parents need to look at their child's conception of rules and increase their understanding by explaining them in greater detail. This explanation helps decrease the gap between the parents and child's conceptions. The second behavior is for parents to use indirect discipline (discussed in more detail later in the article). The authors reasoning, is that with this technique the child may be less likely to be angry after being confronted with their transgressions. The third has to do with child behaviors. If child are less angry with being confronted, they may feel that their punishment/consequence is appropriate for the transgression. However, Hoffman (1994) believes that moral induction within disciplinary encounters can be positively or negatively effected by factors related to the child. First, they may not have the cognitive ability to fully understand the message. Secondly anxiety, fear or resentment related to the parents' interpretation of their behavior may interfere with feelings of empathy. Finally, they may not have sufficiently developed “empathy” or “guilt” to have concern about the message.

To measure internalization several paradigms have been developed: Maternal Prohibition, in which the mother instructs the child to not play with an attractive toy, and Maternal Request, involving the mother asking the child to conduct a chore (clean up room). In each of the preceding paradigms, willingness to comply was coded. The third paradigm consists of an experimenter playing a game with a child in which the rules are set up so that it is impossible to win. Cheating behaviors were compared to following the rules of the game (Aksan, Kochanska, 2005; Forman, Aksan, Kochanska, 2004; Kochanska, Gross, Lin, Nichols, 2002).

We move now to the portion of the article that discusses the various the influences on moral development. The development of moral conduct, emotion and cognition are predicted by several factors. These factors include the quality of interaction within the family as well as the temperament of the child. The quality of interaction within the family is measured by the attachment of the parent to the child and vice versa, a mutually responsive orientation (MRO) and power assertion (Kochanska & Aksan, 2006).

Temperament is looked at in terms of two “inhibitory systems”: fearfulness and effortful control. Fearfulness is described as “passive, reactive inhibition,” where as effortful control is described as the “voluntary, active, vigilant control of behavioral impulses.” Temperament is discussed in more detail later.

Parent Behaviors that Effect Moral Development

It has been previously thought that peers were a significant factor of influence in moral development. More recently, however, the parents are seen as being a more influential source in the development of morality in children (Royal & Baker, 2005). Developmental researchers specifically state that the parent-child relationship is at the root of moral development (Honig,

1982; Kochanska; Liabre & Thompson; Lamb, 1993; Pratt et al., 1999; Rudy et al., 1999; Smetana, 1999; Walker, 1999). Attachment is one area of importance.

Attachment

Mary Ainsworth (1967) studied the interactions between the mother and her infant, looking specifically at the quality of their relationship (Bowlby, 1969; Bretherton, 1992). She recruited 26 families from Uganda, Africa. A requirement to participate in the study is that the families had to have at least one unweaned infant. Over a period of nine months, Ainsworth observed the family every two weeks for two hours per visit. Ainsworth was interested in the age when the child employed certain behavioral cues (i.e., crying and following) to keep other individuals, specifically the mother, within close proximity to him/her (Bowlby; Bretherton).

Through Ainsworth's work, researchers have acknowledged three types of attachment: secure, insecure, and disorganized (Bretherton, 1997; Zilberstein, 2006). During this study Ainsworth found that when the mothers were sensitive to the infants proximity cues, understanding the needs of the child and responding quickly, the infants were more "securely attached." Secure attachment "is rooted in trust and intimacy" as seen during parent-child observations. When the mother leaves a room, the child acts sad (clings to mother, cries) and upon her return the child acts happy (hugs mother, smiles). When the primary caregiver is physically and emotionally available and the child incorporates these experiences into a schema of the world, a secure attachment is said to develop (Zilberstein).

However, the insensitive mothers were more likely to have infants who were "insecurely attached" (Ainsworth, 1967). In the case of insecure attachment, the child reaches out to the primary caregiver only to find that the caregiver is emotionally and even physically unavailable (Zilberstein, 2006). Therefore, the child learns to or resorts to getting their needs met elsewhere. Children with disorganized attachment have the need to reach out to the caregiver but do not out of fear of rejection or abandonment (Zilberstein). These children appear to be the most at risk for developing difficulties later in life. Children with disorganized attachment fail to respond to socialization and have difficulty with affective regulation (Wodarski, Kurtz, Guadin, & Howling, 1990; Zilberstein). In the case of insecurely attached children, when the mother leaves, the child does not notice (not looking at the mother, eyes are fixed on toy or other person in the room) and when she returns, similar behavior is noted. Thus, the formed attachment is subject to the environment that the child individually experiences.

The goal of maternal care, as Bowlby explains it, is to reduce the distance between the infant and mother. If the infant strays away, the mother takes action to bring him/her back. It is important to remember that attachment behavior varies in its intensity and consistency from moment to moment and across children. Bowlby divides the development of attachment into four phases, although he makes note that there are no clear boundaries separating the phases (Bowlby, 1969). Within all four stages, the significant aspect is the need for consistency, which enables the child to develop a positive view of relationships, viewing them as a means of security and comfort (Bowlby, 1969). Consistency refers to the predictable behaviors and actions of the primary caregiver regarding the infant. When the child can predict the parent's behavior, the child can then engage in reciprocal behaviors. Consistency makes for secure attachment because the child becomes reliant on the primary caregiver for safety and comfort (Sheperis, Renfro-Michel, & Doggett, 2003; Wilson, 2001). In an article summarizing the achievements and collaborative work of Ainsworth and Bowlby, Bretherton remarked that "some psychoanalysts accused Bowlby of behaviorism because he supposedly ignored mental phenomena" (Bretherton, pg. 793, 1992) and focused on the impact that the primary caregiver's behavior had on the child's behavior.

Quality of Interaction Between Caregiver and Infant

An important component of the relationship between the child and caregiver is a “mutually responsive orientation” (MRO). In such a relationship, there is a responsiveness, closeness, and positive affectivity. “Responsiveness refers to the parent’s and the child’s willing, sensitive, supportive, and developmentally appropriate response to one another’s signals of distress, unhappiness, needs, bids for attention, or attempts to exert influence. Shared positive affect refers to the ‘good times’ shared by the parent and the child--pleasurable, harmonious, smoothly flowing interactions fused with positive emotions experienced by both” (Kochanska, pg. 192, 2002). This type of relationship has been shown to be beneficial in the early development of conscience, behaviorally, affectively, and cognitively.

Grazyna Kochanska and colleagues conducted several experiments looking at the development of conscience and its relationship to MRO (Kochanska, 1997; Kochanska, Forman & Coy, 1994; Kochanska & Murray, 2000). Grazyna Kochanska and colleagues defines conscience as “a reliable internal guidance system that regulates conduct without the need for external control” (Kochanska, pg. 192, 2002). Over 200 mother-child dyads as well as individual dyads were observed during the course of these experiments. Observations were conducted in multiple naturalistic settings (“yet carefully scripted contexts”), at home and in laboratories. The observed situations included, but were not limited to, care giving routines, playing, and doing household chores. Both maternal responsiveness and positive affect were observed and coded. Maternal responsiveness was coded for the swiftness and accuracy of the mother’s reaction to her child’s needs, whether they were related to attention or discomfort. Positive affect was coded by behaviors exhibited by both the mother and the child, specifically the emotional expressions during their interactions together. The emotional expressions observed ranged from happy (smiling) to sad (crying). Not only were measures repeatedly obtained, but the researchers tracked the same families for several years (Kochanska, 1997; Kochanska, 2002; Kochanska, Forman & Coy, 1994; Kochanska & Murray, 2000).

During the development of this positive early relationship, the child begins to internalize the parent’s morals and values. Parents and teachers were asked to evaluate the children’s moral emotions and conduct displayed at home and at school. Two mechanisms have been found through which MRO has its effects. The first is the reinforcement of an early positive mood and the second is the reinforcement of the internalization of the parents rules (Kochanska, 2002; Kochanska, Forman, Aksan, & Dunbar, 2005; Laible & Thompson, 2003). MRO impacts all three dimensions of morality: emotion, behavior, and cognition. Enjoyment of interactions with the mother is key to promoting moral conduct as well as cognition. An indicator of moral conduct was the child’s committed compliance to the mother (Kochanska, Forman, Aksan, & Dunbar, 2005). As stated earlier, committed compliance is the child’s willingness and eagerness to act in accordance with maternal directives.

Effective vs. Ineffective Parenting Techniques

Laible and Thompson (2002) looked at the mother-child relationship during toddlerhood. They found that the child’s emotional understanding and internalization were based on the amount of assertion the mother put forth to the child. If the mother used harsh disciplinary techniques then internalization of values and norms was discouraged. Laible and Song (2006) also linked the reciprocal language between mother and child as being imperative to the internalization process and socioemotional competence. When emotions and morals were not

discussed children elicited more antisocial themes.

Through observations of family conflict, it was found that conflict is common between toddlers and parents (Dunn & Munn, 1985, 1987; Kuczynski, Kochanska, Radke-Yarrow, & Girnius-Brown, 1987). During video and audio observations of mother-toddler conflict, it was found that the child learns language and begins to employ self-regulatory behaviors through such discourse. Conflict does not only include negative emotions, but also involves experiences with, observations of, and expressions of emotion (Liable & Thompson, 2002). Thus, it is likely that the development of emotional understanding can be partly explained by parent-child conflict situations (Liable & Thompson, 2000; 2002).

During such conflict, maternal behaviors and emotions are observed and incorporated into the child's social schemas. Therefore, maternal behavior and emotion during conflict situations fosters emotional understanding. Going a step further, the discussion of emotion during these conflict situations further develops emotional understanding. Since the majority of conflict focuses on inappropriate behavior, rules, regulations and morals are often discussed synonymously. With this, conflict situations can provide early conscience development (Liable & Thompson, 2002).

Another aspect of parent interaction that effects moral development are the disciplinary techniques of the parent. If parents use 'inductive reasoning' techniques, then children are better able to understand the concepts of right and wrong as they apply to other situations. Inductive reasoning involves a discussion where children are made aware of the feelings other people have. The discussion also involves highlighting to children the causal role they can play in producing these feelings in others. Inductive reasoning is associated with the capacity for guilt and the internalization of values (Liable & Thompson, 2000; 2002; Perry & Bussey, 1984). Hoffman's Emotion-attribution theory postulates that children experience guilt because they feel the other persons' pain and feel responsible for causing the pain (Perry & Bussey, 1984).

However, when mothers use assertive power or are hostile and aggressive in their disciplinary methods, this could hinder moral development in children. Kochanska, Padavich, and Koenig (1996) found that those children who experience assertive maternal discipline were less likely to elicit themes of compliance and were less concerned with appropriate behavior. The researchers also found that the children who produced several antisocial themes to hypothetical narratives were less internalized. Internalization was measured through compliance tasks. Compliance tasks involved the observation of children complying or disobeying a rule to not play with specified toys.

Maltreatment of the Child by the Parent

Maltreatment is a topic that has received great attention both in its causes and effects. Specifically, maltreatment in the form of abuse and neglect can significantly affect the moral development of children. When placed in compliance situations, the typical child engages in committed compliance, which involves the child cooperating eagerly, where as the maltreated child often rejects the mother's idea of morality (Kochanska, Coy, & Murray, 2001; Koenig, Cicchetti, & Rogosch, 2000; Kuczynski & Kochanska, 1990). Researchers differentiated between physically abused and neglected children. During observed free play and clean-up paradigms of the child with the mother, they found that the abused toddlers exhibited less internalization, that is to say, they complied out of fear of a caregiver or other external force rather than embracing the maternal rule. The researchers also found that the toddlers who were neglected had significantly more negative affect toward the mother during their interactions

(Koenig, Cicchetti & Rogosch 2000).

Crittenden and DiLalla (1988) coined the term 'compulsive compliance.' By observing videotapes of mother-child interactions, the researchers divided the child-rearing techniques into 5 categories. The categories corresponded to varying levels of maltreatment: abuse, abuse and neglect, neglect, marginal, and adequate. The researchers discovered that the maltreated children employed a coping strategy termed 'compulsive compliance.' With this strategy the child 'suppresses' inappropriate behavior, 'responding quickly to maternal directives' out of fear and/or avoidance of maltreatment. When abused infants experience maternal hostility and punitiveness, they learn different response patterns than typical infants.

It has been discussed that the root of behavioral problems in maltreated children could be the atypical organization of their affective responses rather than their moral evaluations and moral immaturity. That is to say that maltreated are overly sensitive to the emotional reactions they have during moral situations. Smetana et al. (1999) conducted a study examining hypothetical and actual moral transgressions of maltreated and nonmaltreated preschoolers. Transgressions refer to participation or engagement in antisocial behaviors. Hypothetical transgressions were assessed through pictures depicting common transgressions, such as hitting another child. Reported transgressions were assessed through a structured interview with the child. The researchers found that maltreatment status (abuse/neglect) did not determine the moral justifications children made. Rather, the context of the dilemma (hypothetical vs. actual) as well as the type of transgression made determined the children's moral judgments. Conversely, the researchers found that the type of maltreatment the child experienced determined the affective responses given. Nonmaltreated males reported more anger than physically abused males across contexts. Physically abused males reported more sadness in actual situations than either the no maltreated and neglected children. Neglected males reported more sadness than neglected female in actual situations, whereas no maltreated females reported more sadness than did no maltreated males.

Koenig, Cicchetti and Rogosch (2004) studied maltreated children from low socioeconomic backgrounds. Observational measures of moral behavior and emotion were done to assess their maltreated children's prosocial behaviors and moral transgressions. The measures used were the Peabody Picture Vocabulary Test, 3rd ed.; the Narrative Story Stem Task; Experimenter Distress (simulation); Stealing Paradigm; Expressive Vocabulary Test, a cheating paradigm and a donation paradigm. The distress paradigm consisted of a confederate dropping a box on her foot. The confederate then acted exacerbated by both the pain to her foot and the distress of spilling the contents of the box. The researchers coded "helping behaviors," as well as comforting behaviors. The stealing paradigm consisted of a confederate leaving a child alone in a room with a bowl full of candy, only after the confederate has explained to the child that the candy belongs to other children. The child was observed for two minutes to assess if he/she took any candy. The researchers used the number of pieces missing as the level of moral development reached for that child.

The researchers found that both abused and neglected children engaged in antisocial behaviors; however, abused children stole more frequently and neglected children engaged in more cheating behaviors and active rule breaking. The researchers viewed stealing and cheating as two different moral transgressions, expressing the view that stealing is worse because of the impact on other people. The researchers concluded that abused children are more impaired in their moral development than neglected children.

In regard to guilt, abused girls displayed less than neglected girls, and the least compared to males (Koenig, Cicchetti, & Rogosch, 2004). Studies with older maltreated children have

shown similar results to those of younger maltreated children. When comparing the socioemotional development of maltreated and nonmaltreated 5-to 11-year-olds, Kaufman and Cicchetti (1989) found that not only did maltreated children (physically, sexually abused and neglected) have lower self-esteem, but engaged in more antisocial behaviors such as rule-breaking. The California Child Q-sort (Block & Block, 1969) was used to assess self-esteem. The cards had phrases that described the child's personality, such as "Tends to be proud of accomplishments." Counselors, who interacted with the children, sorted the cards. A 9-item behavior rating questionnaire (Wright, 1983) was used to assess the behaviors of children. Again the counselor completed the questionnaire. Only here the counselor assessed the child's prosocial, aggressive and withdrawn behaviors during several structured activities. The researchers also found that maltreated children have negative views of others as well as little concern for the feelings of others. To assess the children's views of others, the researchers had the children name two other children that they liked to play with the most and the least. The researchers also had the children categorize their peers into 1 of the following descriptions: a cooperative child, a disruptive child, a shy child, a fighter and a leader.

Several studies have demonstrated increased aggression among maltreated children (Shields & Cicchetti, 2001; Shields, Cicchetti, & Ryan, 1994). Shields and Cicchetti (2001) compared maltreated and nonmaltreated children aged 8 to 11 years attending summer camp. The camp served as a naturalistic setting while measures of aggression, specifically bullying, were collected from the participants themselves, the participant's victims and the camp counselors. The authors used Olweus' (1991, 1993) definition of bullying which "involves chronic and systematic aggression directed toward a small subset of children, and victims are the children who are targeted by these acts." The researchers found that maltreated children, especially those experiencing physical and sexual abuse, were more likely to bully. They also found that this population was more prone to being bullied (victims).

Several studies have also looked at the delinquency outcomes of maltreated children (Widom, 1989). Widom (1989) conducted a literature review that focused on the question "Does violence breed violence?" The researchers looked at numerous retrospective and prospective studies commenting on their methodological strengths and weakness. They found that abused and neglected children had delinquency rates ranging from 8 to 20% higher than nonmaltreated children.

During observational studies of responses to peer distress, researchers found that maltreated toddlers and preschoolers were more likely to engage in activities to cause distress than nonmaltreated toddlers (Main & George, 1985). When they were not the cause of the distress (that is to say, they were a bystander), they tended to act in inappropriate, antisocial ways, displaying little empathy. The researchers defined distress "as crying, screaming, or verbalizations (e.g., "ouch," "stop," "help") that were in reaction to physical pain or some other aversive event (e.g., loss of a desired object, being teased)." The researchers coded inappropriate responses included negative and withdrawn. Negative responses included any attempt to antagonize the distressed individual, either by "teasing, verbal or physical aggression." The withdrawn responses described an awareness of the distressed individual "followed by movement away from the distressed peer" (Klimes-Dougan & Kistner, 1990).

During story stem completion tasks (MacArthur Story Stem Battery) maltreated children (both abused and neglected) placed themselves in the role of caregiver to relieve child distress over other characters such as parents and/or peers. The researchers concluded that maltreated children view parents as unresponsive to their needs (Macfie, Toth, Rogosch Robinson, Emde, & Cicchetti, 1999).

Dean, Malik, Richards and Stringer (1986) found that abused children compared to nonmaltreated children told more stories where children engaged in reciprocity towards adults, but told fewer stories where peers and adults engaged in reciprocity towards children. Looking at the stories from a developmental perspective, boys exhibited more immature interpersonal peer relations than girls did. "Cicchetti (1989) proposed that the deviations in the development of prosocial behaviors and increased level of aggression may suggest a possible etiological pathway from maltreatment to conduct disorder and delinquency" (Koenig, Cicchetti and Rogosch, p.88, 2004).

Child Behaviors that Effect Moral Development

Temperament

"Temperament refers to the behavioral style exhibited by infants or young children in response to a range of stimuli and contexts" (Zeanah & Fox, 2004). The temperament of the child also plays a role in the development of moral behavior. Kochanska (1997) researched fearful and fearless children's interactions with their mothers to uncover the predictor variables for conscience development. The study was conducted longitudinally with 14 months in between each observation period. During the three separate times, observations took place in multiple naturalistic settings and laboratory paradigms. Fearful children were described as children who exhibit anxiety during subtle discipline. Fearless children are 'insufficiently aroused' during gentle parental discipline. Discussions of inappropriate behavior are an example of subtle/gentle discipline.

Kochanska conducted several experiments to assess the predictors. Laboratory observations across multiple settings were designed to tempt children to break rules set by the experimenter. The children answered questions regarding a series of hypothetical narratives that focused on moral issues. Kochanska also used interactive play narratives using dolls and props. Further measures were done with the maternal responsiveness to the child through videotaping the mother child interactions in naturalistic settings. Through these measures Kochanska concluded that a predictor for conscience development in fearful children was gentle/subtle discipline by the mother. For the fearless child having high security of attachment to the mother, as well as high maternal responsiveness, prompted conscience development.

Children with stable temperaments readily complied in non-fearful situations. Children's readiness to comply highly correlated with internalization during periods of instructional tasks (Kochanska, 1997; Kochanska, DeVet, Goldman, Murray, & Putman, 1994; Liable, 2004). "Anxiety, fear, nervous apprehension, and worry have long been implicated as mediators of internalization, both in the traditional social-learning models and in research on psychopathy, where grossly inadequate internalization has been interpreted as indicating deficits of fear and anxiety or of the behavioral inhibition system" (Kochanska, pg. 228, 1997).

Effortful Control

The second inhibitory system of temperament that affects moral development is effortful control. Effort control is the "the efficiency of executive attention, including the ability to inhibit a dominant response, to plan, and to detect errors" (Rothbart & Bates, 2006, p.129). Characteristics of effortful control include the paying attention to a task and the ability to shift ones attention to another. Behaviors include purposefully initiation and restraint as well as the ability to delay action (Spinrad et al., 2007).

Several observed tasks have been implemented to assess effortful control. The first is a delayed behavior activity. Here the child has to delay their actions until a specified time. An example would be waiting to eat an M&M until a bell rings. Slowing down motor activity is another. In this task, the participant is asked to walk a straight line slowly. A third task involves suppressing and initiating activity. An example of such would be to take turns building a tower. Here the confederate would wait to before placing his/her block to see if the child ushers him/her to take his turn. Another task involves the child whispering the names of 10 cartoon characters. As the child matures a little (26-41 months to 43-56 months) a fifth task is introduced, which is referred to as 'cognitive reflectivity.' In this task the child is to match a picture to one in a set where all are only slightly different to the original. Researchers found that these tasks not only correlated highly with parental reports of their child's ability to exert self-control, but also correlated with internalization. Children who exhibited increased effortful control also has increased internalization. Researchers used the same methods, mentioned earlier to assess effortful control and internalization. It was also found that females were more capable than males of effortful control (Kochanska, Murray, & Coy, 1997; Kochanska, Murray, & Harlan, 2000; Kochanska, Murray, Jacques, Koenig, & Vandegest, 1996).

Conclusion

Although the terms discussed in this paper have all been defined in the developmental literature, with some exceptions, they do not provide exact operational definitions. Much work needs to be done to provide definitions that are reliably observable and measurable. Many of these terms refer to a complex set of behaviors that may require multiple operational definitions. However, the failure to do this work would mean that we are missing the opportunity to assess the impact of what others view to be "inner guidance systems". Although behaviorists may not believe in the concept of inner, underlying, psychic forces that provide causal explanations for human behaviors, it may be useful to look at this literature and attempt to understand the relationships between certain types of early learning experiences and parenting behaviors and later outcomes with child behaviors. "Those inner guidance systems are critical for viability of social life and social institutions, as well as for adaptive functioning, mental health, and sociomoral competence of individuals" (Kochanska & Aksan, 2006). This literature might provide behaviorists with some insights into means of promoting the maintenance and generalization of desired behavioral changes.

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