

## **Effects of Maternal Distraction and Reprimands on Toddlers' Transgressions and Negative Affect**

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*Misbehaviors occur at a high rate during the toddler years, and parents use a variety of methods to control these behaviors. The present investigation compared the effectiveness of two commonly used strategies, distraction and reprimands. Twenty mothers and their 17- to 39-month-old children were observed in a laboratory setting in which mothers used either distraction then reprimands or reprimands followed by distraction in response to their children's transgressions. When reprimands were used as the initial strategy, they were significantly more effective than distraction in controlling children's transgressions. Distraction was effective in maintaining low rates of transgression when preceded by a period of reprimands. However, when reprimands were instituted following a period of distraction, children's rates of negative affect increased significantly. Implications for the etiology and management of child behavior problems are discussed.*

By the time children reach the "terrible twos," parents often find themselves dealing with noncompliant and oppositional behavior (Gard & Berry, 1986). At home, discipline episodes with toddlers occur as often as once every 3 to 9 min (Lytton & Zwirner, 1975; Minton, Kagan, & Levine, 1971; Power & Chapieski, 1986). Outside the home, mothers may encounter undesirable behavior even more often, for instance, once every 0.8 min in a supermarket (Holden, 1983).

Parents use a variety of strategies to manage their children's misbehavior and promote appropriate behavior (e.g., Kuczynski, 1984; Londerville & Main, 1981; Lytton, 1979; McLaughlin, 1983; Peele & Routh,

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1978; Schaffer & Crook, 1980). Mothers of toddlers negotiate, bargain, coax, reason, instruct, warn, command, reprimand, use diversions or distractions, physically intervene, and concede. Parenting styles in a child's early years influence whether these early and common types of misbehavior develop into patterns predictive of more serious problems later (Baumrind, 1967). Unfortunately, most of what is known about the "best" ways to discipline toddlers is surmised from correlational studies that do not allow causal conclusions to be drawn. Correlational research is useful for identifying disciplinary approaches that may be associated with behavior problems, but experimental research that evaluates the comparative effects of different strategies is needed to develop clear guidelines for parents.

The purpose of the present investigation, therefore, was to compare the efficacy of two commonly used strategies for controlling toddler behavior: distraction and reprimands. Distraction refers to diverting a child's attention from an undesirable activity by suggesting an appropriate behavior. For example, if a child starts to play with the VCR, the mother may ask the child to play with blocks on the floor. Reprimands express the mother's disapproval of a child's behavior and are often accompanied with instructions or commands to cease the behavior. In the scenario described above, the mother may reprimand by saying, "No! Stop touching the VCR." These two strategies were selected for comparison primarily because parents use them frequently. Minton et al. (1971) found that reprimands were the most common responses to child transgressions, whereas Schaffer and Crook (1979) found that mothers used distraction much more frequently than reprimands. Correlational research suggests that reprimands are more effective than distraction. Kuczynski, Kochanska, Radke-Yarrow, and Girnius-Brown (1987) reported a positive correlation between mothers' use of reprimands, but not distraction, and toddlers' compliance. Moreover, the use of reprimands was negatively correlated with children's negotiation attempts while distraction was positively correlated with passive noncompliance in toddlers, suggesting that children tend to be more resistant when mothers use distraction than when they use reprimands. Furthermore, this toddler resistance was correlated with passive noncompliance and mother-perceived externalizing behavior problems in the children at age 5. (Kuczynski, Kochanska, & Maguire, 1989).

A pilot study with a sample ( $N = 10$ ) of mother-toddler dyads comparing reprimands and distractions suggested that children misbehave less when mothers reprimand initially than when they use distraction initially (Wolff, Street, O'Leary, & Pfiffner, 1989). When distractions followed reprimands, distractions were as effective as reprimands. When reprimands followed a period of distraction, child negative affect in response to the reprimands was high. Because of the small sample size and chance differ-

ences between the two groups in the pilot study, the current study replicated the pilot procedures with a new and larger sample.

## METHOD

### *Subjects and Design*

Twenty-four mother-child dyads were recruited through advertisements in local newspapers. Mothers ranged in age from 23 to 39 years ( $M = 32.5$  years). They had from 12 to 17 years of education ( $M = 14.3$ ). Annual family income ranged from \$7,000 to \$90,000 ( $M = \$57,500$ ). The 12 boys and 12 girls ranged in age from 17 to 39 months ( $M = 25.4$  months). Achenbach Child Behavior Checklists (CBCLs) (Achenbach, Edelbrock, & Howell, 1987) indicated scores on the externalizing scale ranging from 35 to 68 ( $M = 48.0$ ). Children were matched on age and sex, and randomly assigned to one of two experimental groups: Order I (distraction-reprimand) or Order II (reprimand-distraction). One boy and one girl in each condition were dropped from the study because they had fewer than two transgressions in the first phase and therefore had little exposure to the experimental procedures.

### *Experimental Setting*

A 1.5-m  $\times$  2-m area was furnished to resemble a waiting room. A chair in one corner of the area was provided for the mother. "Forbidden objects" that the child was not allowed to touch were placed on several small tables. These objects included, for example, a typewriter, a radio, candy, a bell, and a vase. Mothers were provided with magazines to read, and several age-appropriate toys for children to play with were placed on the floor. All sessions were videotaped.

### *Procedure*

Each mother-child dyad participated in two 8-min phases with a brief rest in between. During each phase, the mother was instructed via a bug-in-the-ear device to respond to her child's transgressions (see Measures section below) using only one type of strategy, either distraction or reprimands. Order I mothers used distraction during the first phase and reprimands during the second phase. Conversely, Order II mothers issued reprimands during the first phase and distraction during the second. In both phases, each mother was instructed to remove forbidden objects from

her child's hand or bring her child back into the area if the child did not respond to the distraction or reprimand within a reasonable amount of time (after three reprimands or 15 to 20 sec of distraction for the same transgression). Throughout both phases, mothers were also instructed not to attend to their children unless a transgression occurred.

### *Measures*

One pair of observers coded children's behaviors, and another pair coded mothers' behaviors. All observers were blind to the purposes of the study. One observer in each pair was designated as the primary observer. The other observer served as the reliability checker. The primary observer and reliability checker made their observations at different times and had no access to the other's coding sheets. Two child behaviors and three mother behaviors were recorded in continuous 10-sec intervals, and the occurrence or nonoccurrence of a behavior was scored during each interval. Interrater reliability was assessed for 35% of the data.

*Mother Behaviors.* These included the following:

1. Distraction—attempting to involve the child in an appropriate alternate activity (e.g., “Here, play with this puzzle”), including playing with the toys or modeling how to use them.
2. Reprimand—verbal statements of disapproval of the child's behavior (e.g., “No, don't touch that”).
3. Attention—verbal statements not fitting the descriptions of any categories described above. Examples include neutral comments or questions, reasoning, and praise.

*Child Behaviors.*

1. Transgressions—touching, attempting to touch, or pointing to the forbidden object.
2. Negative affect—whining, crying, hitting, tantrumming, or yelling at the mother.

## RESULTS

### *Interrater Reliability*

Interrater reliability was calculated by deriving a kappa coefficient for each behavior. They were as follows: distraction (.89), reprimand (.93), attention (.87), transgressions (.96), and negative affect (.95).

### *Demographic Information*

Two-tailed *t*-tests revealed no significant differences between the two experimental groups for mother age, mother education, family income, child age, or CBCL externalizing score.

### *Mother Behavior*

Mean percentages of intervals in which reprimands, distractions, and attention occurred are presented in Table I. Three two-way (Order  $\times$  Condition) analyses of variance revealed significant main effects of condition for distraction [ $F(1, 18) = 231.18, p < .001$ ], for reprimands [ $F(1, 18) = 65.15, p < .001$ ], and for attention [ $F(1, 18) = 6.32, p < .02$ ]. These results for distraction and reprimands indicate that mothers complied with experimental instructions as they used mostly reprimands during the reprimand conditions and mostly distraction during the distraction conditions. The main effect for attention reflects the fact that mothers gave slightly more attention during the reprimand conditions than the distraction conditions. However, this difference in rates of attention did not seem to affect child negative affect or transgressions. Overall rates of attention were low, ranging from 6.48% to 14.9%. Furthermore, attention did not correlate significantly with child behavior in any of the cells involved in the *a priori* analyses; an ANCOVA using attention as a covariate did not change the significance of any results; and an interval-by-interval examination of the data showed that attention most often occurred independent of negative affect and transgressions. Significant main effects for order were found for distraction [ $F(1, 18) = 5.36, p < .03$ ]. This result can be accounted for by the fact that children transgressed at higher rates during the Phase 1 distraction condition (see below) and so received more distractions. The Order  $\times$  Condition interaction was not significant for any of the variables, again demonstrating that mothers complied with the experimental procedures.

### *Child Behavior*

The percentages of intervals in which children transgressed and displayed negative affect are presented in Figs. 1 and 2, and Table I.

*Transgressions.* One-tailed *t*-tests were conducted to test the *a priori* hypotheses. The first phase of the study allowed for a pure distraction versus reprimand comparison, since at this point children had been exposed to only one strategy. In this phase, children who were being reprimanded

Table I. Mean Percentages of Intervals of Mother and Child Behaviors

	Condition			
	Distraction		Reprimand	
	<i>M</i> (%)	<i>SD</i> (%)	<i>M</i> (%)	<i>SD</i> (%)
Order I (distraction-reprimand)				
Distraction	78.50	29.68	1.87	2.98
Reprimand	3.12	6.91	41.85	17.26
Attention	6.48	9.01	14.90	12.61
Transgressions	53.96	15.97	32.84	20.09
Negative affect	16.46	21.39	52.29	35.56
Order II (reprimand-distraction)				
Distraction	59.16	25.93	0.20	0.00
Reprimand	2.08	5.77	39.70	22.44
Attention	7.08	9.01	9.16	6.24
Transgressions	28.12	17.47	33.11	24.42
Negative affect	20.21	29.12	9.79	17.81

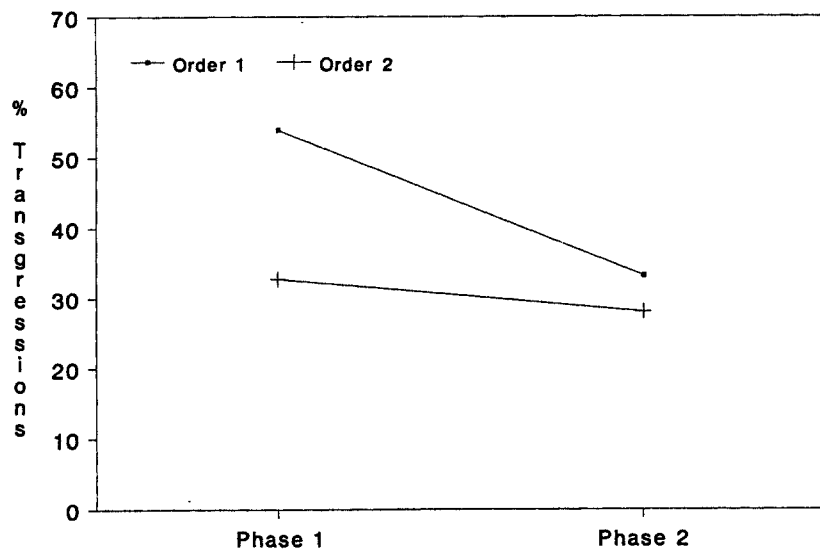


Fig. 1. Mean percentage of intervals of child transgression per group; Order 1 = distraction-reprimand, Order 2 = reprimand-distraction..

transgressed significantly less often than children who were being distracted ( $t = 2.236, p < .02$ ). When reprimands were implemented following distractions, transgression rates decreased significantly ( $t = 2.61, p < .025$ ).

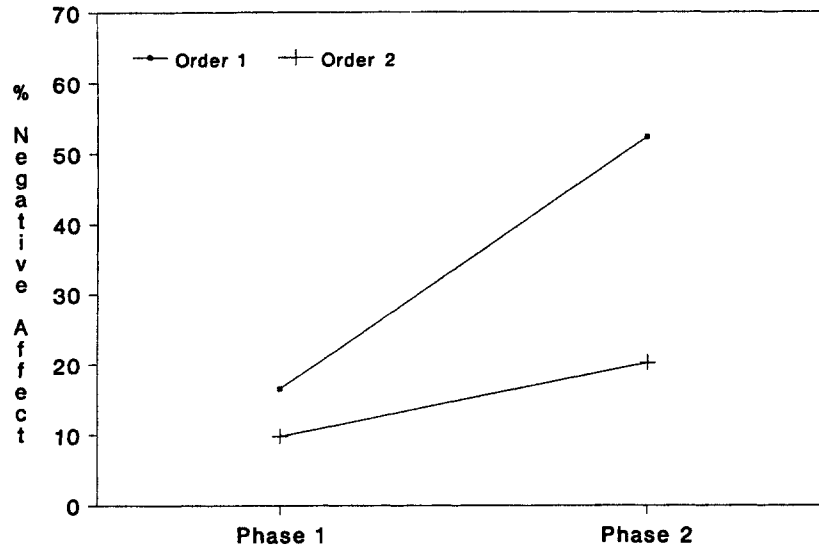


Fig. 2. Mean percentage of intervals of child negative affect; Order 1 =distraction-reprimand, Order 2 = reprimand-distraction.

Additionally, children transgressed significantly less often when distractions followed reprimands than when distractions were used as the initial strategy ( $t = 3.45, p < .001$ ).

*Negative Affect.* Phase 2 children receiving reprimands displayed significantly more negative affect than children receiving distraction ( $t = 2.21, p < .02$ ). In order I (distraction-reprimand), children displayed significantly more negative affect in the reprimand condition ( $t = 3.36, p < .005$ ).

## DISCUSSION

The study clearly replicated the pilot study findings. As predicted, reprimands were more effective than distractions in suppressing transgressions when the mothers' initial strategies were compared. Distraction was more effective following than preceding a period of reprimand use. These findings are consistent with those of Kuczynski et al. (1987) and suggest that if reprimands are used first, distraction may later be employed to maintain low rates of children's transgressions. The relative effectiveness of reprimands compared to distraction can probably be accounted for by a

difference in the aversiveness of the two strategies. During the Phase 1 reprimand condition, transgression rates were consistently low while the rates in the distraction condition showed only a slight downward trend. This latter trend suggests that, if distraction has a suppressive effect at all, it is minimal and apparent only over time. Another possible explanation for the relative effectiveness of reprimands is that they contain information about what constitutes a misbehavior whereas distractions do not. Perhaps children behave better when they have the explicit information provided by reprimands. This factor may be especially important as children become older and are better able to understand and remember directions.

In this laboratory setting mothers were asked to respond only to their child's transgressions and to ignore all other child behavior. It seems that, if mothers are otherwise ignoring their children, initial reprimands work as effective punishers while initial distractions do not. It is possible that distractions would be more effective if they were used within a context of high rates of mother attention.

The high rate of negative affect observed when reprimands followed a phase of distraction may be explained by more than one mechanism. Order I children first heard warm, pleasant distractions from their mothers. When their mothers changed strategies and began reprimanding, those reprimands may have been more salient and unpleasant than if the same reprimands had not been preceded by a period of nurturant interaction. Alternatively, when Order I mothers began using reprimands, the children lost a great deal of positive attention. This undoubtedly unpleasant loss may have caused the children to cry and fuss. Finally the high rates of negative affect may have resulted from the high frequency of reprimands these children received in Phase 2. The correlation between frequency of reprimands and frequency of negative affect was not significant, however, making this latter hypothesis less plausible than the others. Although negative affect was highest when reprimands followed distraction, children in both groups displayed significantly more negative affect in Phase 2 than Phase 1. This can be explained by fatigue and possibly boredom with the situation.

In summary, we found that reprimands were more effective than distraction in managing toddlers' behavior. Mothers who initially responded to transgressions with reprimands were later able to use distraction without any adverse effects. Conversely, mothers who attempted to manage behavior with distraction first were less effective, and their children transgressed a great deal. When these mothers did implement the more effective strategy of reprimanding transgressions, their children cried and whined at high rates, behaviors likely to punish their mothers' use of better discipline. Experimental documentations of differences in the effectiveness of discipline

strategies such as these should facilitate the development of prevention and treatment programs, especially those focused on externalizing disorders, which become stable at a very early age and are prognostic of similar problems in the future.

## REFERENCES

- Achenbach, T. M., Edelbrock, C., & Howell, C. T. (1987). Empirically based assessment of the behavior/emotional problems of 2- and 3-year-old children. *Journal of Abnormal Child Psychology, 15*, 629-650.
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs, 75*, 43-88.
- Gard, G. C., & Berry, K. K. (1986). Oppositional children: Taming tyrants. *Journal of Clinical Child Psychology, 15*, 148-158.
- Holden, G. W. (1983). Avoiding conflict: Mothers as tacticians in the supermarket. *Child Development, 54*, 233-240.
- Kuczynski, L. (1985). Socialization goals and mother-child interactions: Strategies for long-term and short-term compliance. *Developmental Psychology, 20*, 1061-1073.
- Kuczynski, L., Kochanska, G., & Maguire, M. (1989, April). *Development of children's noncompliance strategies from toddlerhood to age 5*. Paper presented at the meeting of the Society for Research in Child Development, Kansas City, MO.
- Kuczynski, L., Kochanska, G., Radke-Yarrow, M., & Ginius-Brown, O. (1987). A developmental interpretation of young children's noncompliance. *Developmental Psychology, 23*, 799-806.
- Londerville, S., & Main, M. (1981). Security of attachment, compliance, and maternal training methods in the second year of life. *Developmental Psychology, 17*, 289-299.
- Lytton, H. (1979). Disciplinary encounters between young boys and their mothers and fathers: Is there a contingency system? *Developmental Psychology, 15*, 256-268.
- Lytton, H., & Zwierner, W. (1975). Compliance and its controlling stimuli observed in a natural setting. *Development Psychology, 11*, 769-779.
- McLaughlin, B. (1983). Child compliance to parental control techniques. *Developmental Psychology, 19*, 667-673.
- Minton, C., Kagan, J., & Levine, J. A. (1971). Maternal control and obedience in the two-year-old. *Child Development, 42*, 1873-1894.
- Peele, R. A., & Routh, D. K. (1978). Maternal control and self-control in the 3-year-old child. *Bulletin of the Psychonomic Society, 11*, 349-352.
- Power, T. G., & Chapieski, M. L. (1986). Childbearing and impulse control in toddlers: A naturalistic investigation. *Developmental Psychology, 22*, 217-275.
- Schaffer, H. R., & Crook, C. K. (1979). Maternal control techniques in a directed play situation. *Child Development, 50*, 989-996.
- Schaffer, H. R., & Crook, C. K. (1980). Child compliance and maternal control techniques. *Developmental Psychology, 16*, 54-61.
- Wolff, L. S., Street, L. S., O'Leary, S. G., & Pfiffner, L. J. (1989, November). *Effects of maternal distraction and reprimands on toddlers' transgressions and negative affect*. Poster presented at the Annual Meeting of the Association for Advancement of Behavior Therapy, Washington, DC.