

Physically Abusive Mothers' Responses Following Episodes of Child Noncompliance and Compliance

Joaquin Borrego Jr.
Texas Tech University

Susan G. Timmer and Anthony J. Urquiza
University of California, Davis Medical Center

William C. Follette
University of Nevada, Reno

The authors used sequential analysis to examine specific interaction patterns between physically abusive mothers and their children following episodes of noncompliance and compliance. Fifteen abusive and 15 nonabusive, low-risk mother–child dyads were observed, and their behaviors were coded for specific interactions. The children in the study ranged in age from 2 to 6 years. Results indicated that after noncompliance occurred, physically abusive mothers were more likely than nonabusive mothers to respond negatively and give another command. When child compliance occurred, there were no group differences in the likelihood of praising their children's prosocial behavior, but physically abusive mothers were less likely than nonabusive mothers to engage in other forms of positive behavior (e.g., positive touch) after compliance. Clinical implications are discussed in the context of working with physically abusive families.

Although abundant clinical research has examined a wide range of both parent (Milner, 1998) and child (Kolko, 1992) characteristics in physically abusive families, this line of research has historically used indirect measures of behavior (e.g., secondhand information, rating scales) to assess parent and child traits (e.g., impulsivity), and states (e.g., parental satisfaction). Relatively few research studies have used direct observation methodologies to examine abusive parent–child relationships. When behavioral observation methodologies have been used, parent and child behaviors are usually examined separately while documenting the frequency and rate of specific behaviors (e.g., Burgess & Conger, 1978). For example, behavioral observation research has found that abusive mothers engage in more negative verbal and physical interactions (e.g., Cerezo & D'Con, 1995), fewer positive verbal and physical interactions (e.g., Kavanagh, Youngblade, Reid, & Fagot, 1988), and higher rates of threats and demands (Oldershaw, Walters, & Hall, 1986) when compared with nonabusive mothers. Although frequencies of behavior may characterize the overall context of the interaction, they do not reflect the functional relationships between parent and child behaviors.

Understanding Abusive Parent–Child Interactions

In describing the interactions between abusive parents and their children, we apply Patterson's (1982) social learning framework for understanding the dynamics of families with children with disruptive behavior problems. Patterson's framework is applicable to physically abusive families given the similarities shared between the two populations. Patterson has identified a number of conditions that contribute to negative parent–child interactions. Specifically, when a parent fails to positively reinforce appropriate prosocial behaviors, gives attention to negative behaviors, and uses coercive strategies (e.g., threats), an escalation of negative behaviors results over time.

With physically abusive families, one possible strategy used to achieve child compliance (or the termination of other child negative behaviors) is to escalate the intensity of the response, which includes physically abusive behaviors (e.g., slapping, hitting). If the parent's physically abusive behavior results in child compliance, the parent's coercion is reinforced and thus has a greater likelihood of occurring in future parent–child conflicts. Child noncompliance is an important variable to examine because the literature suggests that most physical abuse occurs in the context of discipline (Wolfe, 1987).

What we do not know from research that has examined Patterson's theory is what occurs in the context of the discipline interaction that differentiates the development of abusive interactions from negative but nonabusive interactions. We know from observational studies that abusive mothers have higher rates of negative behavior than nonabusive mothers during parent–child interactions, but we do not know why this occurs because the differences in functional relationships of parent and child behaviors have not been examined.

Joaquin Borrego Jr., Department of Psychology, Texas Tech University; Susan G. Timmer and Anthony J. Urquiza, Department of Pediatrics, University of California, Davis Medical Center; William C. Follette, Department of Psychology, University of Nevada, Reno.

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Correspondence concerning this article should be addressed to Joaquin Borrego Jr., Department of Psychology, Texas Tech University, Lubbock, TX 79409-2051. E-mail: joaquin.borrego@ttu.edu

Purpose

We used sequential analysis to examine the functional relationships of parent and child behaviors in physically abusive mother-child dyads and to examine the differences in these relationships between dyads with and without a history of child physical abuse. On the basis of the literature, the following hypotheses were proposed: (a) Physically abusive mothers would be more likely than nonabusive mothers to respond negatively following noncompliance and (b) physically abusive mothers would be less likely than nonabusive mothers to praise their children following compliance.

Method

Sample

The participants in the study were 30 mother-child dyads selected from a larger group of 147 families referred for treatment for child disruptive behavior problems. Of the 147 families, 81 had a history of substantiated child physical abuse, with 58 of these children being physically abused by their mothers. Of the 66 nonabusive families in treatment, 52 mothers were identified as having low abuse potential (scores below the clinical cutoff score of 166 suggested that a person was at low risk for child physical abuse as measured by the Child Abuse Potential [CAP] Inventory; Milner, 1986). Fourteen mothers with no physical abuse history but who scored in the clinical range of the CAP Inventory were excluded from consideration for this study for two reasons: (a) to increase confidence in the accuracy of the reported absence of abuse history and (b) research has shown that nonabusive parents with high abuse potential show similar behaviors to physically abusive parents (Dolz, Cerezo, & Milner, 1997).

Fifteen dyads were randomly selected from the 58 dyads with abusive mothers, and 15 dyads were randomly selected from the 52 mothers without a substantiated abuse history and with low CAP Inventory scores for inclusion in the nonabusive group. The physically abusive group consisted of mother-child dyads referred by a Child Protective Services social worker. The nonabusive group consisted of mother-child dyads referred by either a physician or the child's school. Although the families in the abusive group had a history of substantiated physical abuse through court reports, all 30 families were referred for treatment because of the mother's inability to manage the child's disruptive behavior problems (e.g., noncompliance and aggression).

Table 1 shows selected characteristics of the abusive and nonabusive dyads. There were no significant group differences related to the mother's ethnicity, marital status, educational level, socioeconomic status, or age (mothers ranged in age from 24.4 to 34.9 years). There were also no significant group differences with regard to the child's age, ethnicity, or gender. Table 1 also shows the similarity of abusive and nonabusive mothers' reporting of child behavior problems on the Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999) Intensity scale, $F(2, 26) = 2.23, ns$, and ECBI Problem scale, $F(2, 26) = 3.15, ns$.

Measures

Dyadic Parent-Child Interaction Coding System-II (DPICS-II; Eyberg, Bessmer, Newcomb, Edwards, & Robinson, 1994). The DPICS-II is a behavioral coding system designed to assess the quality of parent-child interactions. The DPICS-II is an expanded version of the original DPICS system, which defines the categories more precisely. The DPICS-II contains 25 behavioral categories that can be coded for both the parent and child, including vocalizations (e.g., laughing), verbalizations (e.g., praising), and physical behaviors (e.g., positive touch). Recent studies have found the DPICS-II to have good interrater reliability (Calzada, Eyberg, Rich, & Querido, in press) and discriminative validity (Nixon, Sweeney, Erickson, & Touyz, 2003). Table 2 reports frequencies and rates per min for behaviors relevant to the study. Rates were calculated by summing the

Table 1
Subject Demographic Information

Variable	Abuse	Nonabuse
Mother's age (in years)		
<i>M (SD)</i>	29.6 (9.2)	29.9 (7.1)
Mother's ethnicity (%)		
Caucasian	66.7	80.0
African American	33.3	7.0
Hispanic	0.0	13.0
Mother's marital status (%)		
Married-cohabitating	27.3	40.0
Single	45.4	20.0
Divorced-separated	27.3	33.3
Widow	0.0	6.7
Mother's highest education level (%)		
High school graduate	60.0	50.0
Some college	30.0	21.4
Bachelor's degree or higher	10.0	28.6
Socioeconomic status (%)		
I-III	22.2	33.3
IV	44.4	55.6
V	33.4	11.1
Child's age (in years)		
<i>M (SD)</i>	4.4 (1.3)	3.9 (1.1)
Child's ethnicity (%)		
Caucasian	60.0	80.0
African American	33.0	7.0
Hispanic	7.0	13.0
Child's gender, <i>n</i> (%)		
Boy	9 (60)	9 (60)
Girl	6 (40)	6 (40)
CAP scores		
<i>M (SD)</i>	239.5 (79.6)	71.3 (40.8)
ECBI scores		
Intensity score		
<i>M (SD)</i>	158.1 (38.1)	148.3 (38.4)
Problem score		
<i>M (SD)</i>	22.9 (7.8)	18.5 (9.2)

Note. CAP = Child Abuse Potential Inventory; ECBI = Eyberg Child Behavior Inventory.

individual codes per group and dividing by 225 min (15 dyads \times 15 min of interaction). Table 3 lists the codes that were used in the study.

CAP Inventory (Milner, 1986). The CAP Inventory is a 160-item self-report questionnaire that is used as a child physical abuse-screening device with a third-grade reading level. The CAP Inventory contains a 77-item physical child abuse scale that contains six descriptive factor scales: Distress, Rigidity, Unhappiness, Problems With Child and Self, Problems With Family, and Problems From Others. Milner (1986) reported good reliability data for the CAP Inventory, and the abuse scale has also been shown to correctly discriminate 82.7% of abusers and 88.2% of nonabuse control participants.

ECBI (Eyberg & Pincus, 1999). The ECBI is a 36-item parent-report scale that measures disruptive behavior problems in children. Parents indicate the frequency of the disruptive behaviors (Intensity score) and whether the behavior is considered to be problematic (Problem score). Eyberg and Pincus (1999) demonstrated the reliability and stability of the ECBI, as well as the validity and sensitivity to change following parent training. The clinical cutoff scores for the Intensity and Problem scales are 132 and 15, respectively.

Procedures

During the treatment-intake evaluation, informed consent for study participation was obtained from the mothers. Each mother-child dyad was

Table 2
Frequencies and Rates

Behavior type	κ	Abuse		Nonabuse		$F(1, 29)$
		Freq	Rate	Freq	Rate	
Parent behaviors						
Verbal praises	.84	68	0.32	179	1.17	7.6**
Positive behaviors	.66	105	0.49	243	1.58	8.8**
Negative behaviors	.73	154	0.72	91	0.59	1.0
Neutral comments	.78	1,904	8.94	2,289	14.90	3.2*
Child behaviors						
Compliance	.48	336	1.57	317	2.08	0.03
Noncompliance	.43	146	0.68	90	0.59	1.01

Note. Unmarked F values are not statistically significant. Freq = frequencies for both groups; Rate = rate per minute for all mothers and children per group.

* $p < .10$. ** $p < .01$.

videotaped during three 5-min standard situations that varied in amount of parental control. The first situation (child directed interaction) required the parent to follow the child's lead. In the parent directed interaction segment, parents were instructed to pick an activity and have the child play with the parent according to the parent's rules. The final segment (clean up) consisted of the parent directing the child to put the toys away without the parent's assistance.

Behavioral Coding

The videotapes were transcribed, timed, and coded with the DPICS-II coding manual. The codes were then entered into a database and rechecked for accuracy. Coders were either undergraduate or graduate students in psychology. Each coder was provided a didactic training of all DPICS-II codes and procedures and had reached at least 85% reliability on criterion videotapes (i.e., mean reliability for the last two coding tapes). Observer drift was assessed by requiring coders to recode a criterion videotape after coding 50% of the tapes. Any coder who had less than 85% reliability on the criterion videotape was retrained until he or she reached 85% reliability. For reliability purposes, 20% of all videotapes were recoded by a reliability checker. In an attempt to minimize bias, all coders were uninformed as to group assignment. Interobserver agreement was computed with kappas. Kappas for individual codes are provided in Table 2, and they range from .43 to .84. Fleiss (1981) characterized kappas of .40–.60 as fair, .61–.75 as good, and over .75 as excellent.

Data Analysis

Sequential analysis was used to analyze the behavioral observation data collected. As previously stated, the vast majority of observational studies have relied on frequencies and rates of behavior as a means of analyzing data. Although frequencies and rates of behavior can answer certain questions, they do not provide contingent probabilities of behavior. By using sequential analysis, we were able to examine specific sequences of parent-child behaviors. The Sequential Data Interchange Standard was used for formatting the data, and the Generalized Sequential Querier was used to analyze the Sequential Data Interchange Standard-formatted data (Bakeman & Gottman, 1997; Bakeman & Quera, 1995). To detect between-groups differences, we used a hierarchical log-linear analysis (Bakeman & Robinson, 1994).

Results

Child Noncompliance → *Parent Negative Behavior Hypothesis*

In the first hypothesis, we predicted that physically abusive mothers would be more likely than nonabusive mothers to respond negatively following child noncompliance. An analysis of the likelihood of parents engaging in negative behaviors following their child's noncompliance versus child neutral behaviors (e.g., after a child gives a description of an object or activity) showed

Table 3
Composite DPICS-II Categories Used in This Study

Term	Description
Parent negative behaviors	
Critical statements	Parent and child verbalizations that find fault with the activities, products, or attributes of the child (e.g., "You drew an ugly flower.")
Yell	A yell is a screech, scream, or shout, or any verbalization or vocalization that is so loud as to be aversive or potentially aversive if continued
Destructive	A destructive behavior is intentionally rough treatment of any object. Actual damage to the object is not necessary (e.g., throwing toys off table)
Physical negative	A physical negative is any physical touch that is intended to be antagonistic, aversive, hurtful, or restrictive of the parent or child's activity (e.g., spanking child)
Parent positive behaviors	
Praise	A verbalization expressing a favorable judgement on an attribute, product, or behavior of the child (e.g., "Nice job!")
Physical positive	Any intentional positive touch by the parent to the child (e.g., hug, kiss)
Laugh	An audible vocalization of laughter or giggling in a pleasant and agreeable manner in the context of positive, appropriate play
Parent neutral behaviors	
Acknowledgments	Brief verbal or vocal responses that indicate attention to child or parent but do not describe or evaluate (e.g., "uh-huh")
Descriptions	A declarative statement or phrase that describes people, objects, or activities (e.g., "That is a blue block.")
Questions	Verbal inquiries from one person to another (e.g., "What color is that block?")
Child responses to commands	
Compliance	When the child obeys, begins to obey, or begins to obey a command
Noncompliance	When the child does not obey a command

Note. Although the *Dyadic Parent-Child Coding System-II (DPICS-II) Manual* has over 50 codes, only the codes listed in the table were deemed relevant for the study. The code definitions in this table were summarized from the DPICS-II manual retrieved from www.pcit.org, September 8, 2004. Copyright 1994 by S. M. Eyberg. Reprinted with permission.

that abusive parents were significantly more likely than nonabusive parents to respond negatively within 5 s of child noncompliance ($G^2 = 5.0, df = 1, p < .05$). Further analysis revealed a significant likelihood that child noncompliance quickly elicited (within 5 s) parent negative behavior in abusive mothers, $\chi^2(1, N = 1189) = 56.70, p < .001$ (odds ratio [OR] = 5.50) but not in nonabusive mothers, $\chi^2(1, N = 1323) = 0.83, ns$ (OR = 1.60). See Table 4 for observed behavior frequencies.

We next examined the types of verbalizations that parents used in response to their children's noncompliance. Hierarchical log-linear analysis results showed that both abusive and nonabusive parents were more likely to respond to child noncompliance with another command versus a neutral behavior such as a description ($G^2 = 10.8, df = 1, p < .01$). Child compliance was followed by either a repeated or new command within 5 s of child noncompliance for the abusive group, $\chi^2(2, N = 1685) = 121.31, p < .001$ (OR = 3.90) and nonabusive group, $\chi^2(2, N = 1846) = 31.45, p < .001$ (OR = 2.48). In sum, within the first 5 s of noncompliance, abusive mothers responded negatively (e.g., criticized) in addition to giving another command, whereas nonabusive mothers responded by repeating or giving another command.

Contextual Analysis

To explore whether the precursors of child noncompliance differed by abuse history, we examined differences in the likelihood that child noncompliance was preceded by parent negative behavior versus neutral behavior. Exploratory analyses revealed that mothers' negative behaviors were more likely to occur in the 5 s before child noncompliance (in comparison with a child's neutral behaviors) in the abusive group than in the nonabusive group ($G^2 = 4.1, df = 1, p < .05$). The strength of this effect is illustrated in the results of within-groups analyses in which the likelihood of a parent negative response preceding child noncompliance within 10 s was stronger for the abusive group, $\chi^2(1, N = 1495) = 137.70, p < .001$ (OR = 9.60) than the nonabusive group, $\chi^2(1, N = 1602) = 19.20, p < .001$ (OR = 4.20).

In summary, the results suggest that (a) abusive mothers respond to noncompliance with negative behaviors and commands, whereas (b) nonabusive mothers respond with another command only, and (c) child noncompliance is likely to be preceded by parent negative behaviors in both groups but with a stronger relationship evident for the abuse group.

Child Compliance → Parent Positive Behavior Hypothesis

We predicted in the second hypothesis that physically abusive mothers would be less likely than nonabusive mothers to provide positive reinforcement in the form of praise to their children for complying with a command. Although rates of verbal (e.g., praises) and physical (e.g., hugs) positive reinforcers were lower for abused than nonabused children (see Table 2), rates of compliance were also lower among abused than nonabused children (see Table 2). Hierarchical log-linear analyses showed that abusive and nonabusive mothers did not differ in their likelihood of praising their children's compliance ($G^2 = 2.6, df = 1, ns$). Child compliance was more likely to be followed by a praise versus a neutral behavior for abusive mothers, $\chi^2(1, N = 1201) = 14.50, p < .001$ (OR = 3.10) and nonabusive mothers, $\chi^2(1, N = 1465) = 88.20, p < .001$ (OR = 5.70). See Table 4 for observed behavior frequencies.

When broadening the definition of a positive reinforcer to include any positive behavior (e.g., praise, physical touch, and laugh), significant differences were found between abusive and nonabusive mothers' likelihood of positively reinforcing their children's compliance ($G^2 = 5.6, df = 1, p < .05$). Chi-square analyses run separately for abusive and nonabusive groups revealed that both abusive and nonabusive mothers were more likely to engage in some form of positive behavior after their children complied than after their children performed neutral behaviors: abusive group, $\chi^2(1, N = 1214) = 5.87, p < .01$ (OR = 1.90), nonabusive group, $\chi^2(1, N = 1496) = 72.30, p < .001$ (OR = 4.20). See Table 4 for observed behavior frequencies.

Table 4
Results of Sequential Analyses of Parent Responses to Child Behaviors

Analysis	Abusive group		Nonabusive group	
	Negative	Neutral	Negative	Neutral
Likelihood of parent response Given child behavior				
Noncompliance	30	76	4	82
Neutral behavior	73	1,010	36	1,201
Odds ratio		5.5		1.6
Likelihood of parent response Given child behavior				
Compliance	19	233	61	238
Neutral behavior	24	925	50	1,116
Odds ratio		3.1		5.7
Likelihood of parent response Given child behavior				
Compliance	21	232	71	236
Neutral behavior	43	918	80	1,109
Odds ratio		1.9		4.2

Note. Cellwise odds ratios were calculated within categories of child behaviors (e.g., compliance and non-compliance) and across abusive and nonabusive groups. The odds ratio is calculated by multiplying the top left cell with the bottom right cell and dividing it by the product of the bottom left cell and the top right cell.

Contextual Analysis

To explore whether the precursors of child compliance differed by abuse history, we examined differences in the likelihood that child compliance was preceded by a parent positive behavior versus a negative behavior. Results of these analyses revealed that compliance in nonabused children was more likely to be preceded by parents' positive behavior than it was in abused children ($G^2 = 4.0$, $df = 1$, $p < .05$). More specifically, abusive mothers were not more likely to be engaged in positive than negative behavior during the 10-s interval before child compliance, $\chi^2(1, N = 1494) = 0.80$, ns (OR = 1.25). In contrast, nonabusive mothers were more likely to be engaged in positive behavior during this time, $\chi^2(1, N = 1817) = 29.60$, $p < .001$ (OR = 2.30).

In summary, results from the second hypothesis suggest that (a) there were no significant between-groups differences in praising child compliance, (b) abusive mothers were less likely than nonabusive mothers to follow child compliance with a positive behavior, and (c) only nonabusive mothers were likely to be engaged in positive behavior just before giving a command that results in compliance.

Discussion

This study was conducted to determine whether differences could be detected between mother-child dyads that had a history of physical abuse versus mothers with no abuse history and who were identified as low risk for physical abuse as measured by the CAP Inventory. In the first hypothesis, we predicted that abusive mothers would be more likely to respond negatively (e.g., criticize) following child noncompliance. Differences were found between abusive and nonabusive mothers, with abusive mothers responding negatively after noncompliance in addition to repeating or issuing a new command. In contrast, nonabusive mothers responded to noncompliance by giving only another command. The study also found a strong relationship for child noncompliance being preceded by parent negative behaviors (e.g., yelling) in the abusive group that suggests that the context in which a command is given (e.g., criticizing the child while giving a command) might increase the likelihood of noncompliance.

Our second hypothesis, predicting that abusive mothers would be less likely than nonabusive mothers to praise their child for compliance, was not confirmed. Although no differences were found for praise, when we expanded the definition of positive reinforcers to include a broader range of positive behaviors, we found that abusive mothers were less likely than nonabusive mothers to positively reinforce child compliance. Results also suggest that there was a strong relationship for child compliance being preceded by parent positive behaviors in the nonabusive group only, again suggesting that the context under which the command is given (e.g., having a positive interaction before giving a command) also seems to increase the likelihood of compliance.

Limitations

There are several limitations to the study. First, the mother-child dyads were videotaped in a clinical setting for 15 min. Because of the single time sampling of behavior and short time duration, the observed sample of behaviors is small and may not be

representative of interactions that occur in the home, other public places, and at different times of the day (e.g., getting ready for bedtime). Second, parents in this study were all mothers, and these findings cannot be generalized to physically abusive father-child dyads. Third, the results of the study may only generalize to physically abusive mothers in treatment for their children's behavior problems and may not generalize to abusive mothers not in treatment or to abusive mothers who do not have difficulty managing their children's behaviors. Fourth, having a relatively small sample size of 15 dyads per condition limited us with regard to having sufficient power to perform more stringent analyses of group differences. Fifth, because the present study focused solely on physically abusive mother-child dyads, it is not known whether the observed interactions generalize to families who engage in other forms of child maltreatment (e.g., neglect). Finally, the lack of analysis of the types of commands given by the mothers in the study warrants attention. Research (e.g., Borrego, 1999) has suggested that the type of command given by an abusive mother does not influence whether her child complies. In contrast, this same research has found that the type of command given by nonabusive mothers seems to impact child compliance, with direct commands increasing the probability of compliance. Although we only focused on child compliance and noncompliance and the consequences that followed, it is also important to examine the antecedents (e.g., types of commands given) of these negative interactions.

Methodological Implications

To our knowledge, observational studies of physically abusive families have relied solely on behavioral frequencies to describe parent-child interactions and, thus, have been unable to capture the dynamic interpersonal transactions that occur within abusive dyads. In contrast, by examining interaction patterns at a micro-analytic level with sequential analysis, our study took research showing higher rates of negative behavior in abusive parents one step further. Our research documented child noncompliance as one condition in which abusive parents are likely to respond negatively. Furthermore, sequential analysis allowed exploration of the context in which compliance and noncompliance occurred by identifying the antecedent conditions in the interaction before a command was given. The results suggested that abusive mothers' negative behaviors toward their children influence subsequent compliance. Thus, the use of sequential analysis permitted a functional assessment of specific temporal components of abusive parent-child interactions.

Theoretical Implications

The results of this study lend support to Patterson's (1982) coercion hypothesis regarding the interchange of negative behaviors in physically abusive parent-child relationships. Specifically, our study found that abusive mothers give attention to noncompliance and respond to it with coercive behaviors along with another command. This interaction pattern may contribute further to the escalation of negative interactions. It is possible that abusive mothers respond to child noncompliance with negative behaviors because they have a limited repertoire of discipline strategies and negative responses may have become conditioned over time.

Clinical Implications

There are several clinical implications related to working with physically abusive mother–child dyads. The first clinical implication pertains to the assessment of the parent–child relationship through behavioral observations. As part of a comprehensive pre-treatment assessment, physically abusive families should be observed engaging in different activities that may simulate conditions that naturally occur in a family environment (e.g., playing together or instructing a child to perform a certain task). These observations may assist the clinician in identifying key interaction styles that warrant clinical attention.

As an example, in support of research showing that abusive mothers have lower rates of positive interactions, our study shows that abusive mothers praised their children about once every 3 min. Given this data, clinicians might want to focus on increasing a parent's positive interaction skills with his or her child. This can be accomplished through teaching the parent to follow his or her child's lead in different activities. By having the parent follow the child's lead, abusive parents can be taught to identify different instances of prosocial behavior and deliver some type of positive reinforcement. As another example, by simulating a discipline scenario (e.g., having the parent instruct the child to pick up toys), clinicians can observe how the parent gives a command, how the child responds to the command, and whether the parent follows through with any type of consequence.

Because abusive mothers responded to their child's noncompliance with a negative behavior, clinical attention should also be given to teaching parents to follow through with appropriate consequences using noncoercive discipline strategies such as time-out and response cost. As our data also suggest, abusive parents respond to noncompliance by repeating or issuing a new command. This may suggest that an abusive parent may not provide or know any specific noncoercive negative consequences for the child's inappropriate behavior.

Another focus of treatment should be teaching abusive parents to notice their affects as they interact with their children. This can be done through both role-playing stressful situations with the parent (e.g., preparing the child for bath time) or modeling for the parent. Role-playing and modeling may help the parent discriminate different situations that give rise to negative affect. In addition to teaching parents to notice their affects, it is also important to assist parents in modifying their negative affects. As an example, parents can be taught to notice their affects and practice giving commands in a neutral voice tone or showing positive affects (e.g., enthusiasm) when interacting with their children during play activities.

The finding that abusive parents' negative behavior also predicted child noncompliance suggests that clinicians must carefully monitor the context in which abusive parents give commands. Teaching abusive parents only discipline techniques may be insufficient. A parent can learn rule-governed behavior, such as how to give commands, without paying attention to his or her own negative affect toward the child. Thus, teaching parents to attend to their own affects before beginning an interaction with their children may be central to changing the coercive interactions in abusive families. This is especially true for interactions involving probable negative outcomes (e.g., giving commands in efforts of getting child compliance).

Furthermore, the absence of a significant relationship between abusive parents' positive behavior and their children's compliance suggests that therapists may have to first focus on improving the parent–child relationship and making the parents' praises and other positive behaviors more reinforcing to their children before introducing different discipline strategies (Borrego & Urquiza, 1998). In support of this point, data from Table 2 suggest that the rate of negative behaviors emitted by abusive mothers was higher than the rate for praises or other positive behaviors. Thus, one treatment goal would be to change the frequency by increasing positive behaviors and decreasing negative behaviors.

Although the literature has a tendency of highlighting abusive parents' as negative and having numerous deficits, clinicians should focus on finding parents' strengths and competencies and assisting them in developing more positive interactions with their children. As our data suggest, abusive parents do emit praises and positive behaviors, but they may either not be occurring at a sufficient rate or not contingent on the child's prosocial behavior. Therapists can clinically focus on increasing parents' repertoire of positive parenting skills by teaching them to use enthusiasm and other positive nonverbal behaviors along with praise in response to child compliance and to use these skills in play as well as discipline interactions. Increasing this positive parenting repertoire may assist in having the parent be less coercive when discipline strategies are introduced in treatment.

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