AN INVESTIGATION OF CHILD AND FAMILY FACTORS PREDICTING PARENTAL RESPONSE TO CHILDREN'S CONDUCT PROBLEMS

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ABSTRACT

AN INVESTIGATION OF CHILD AND FAMILY FACTORS PREDICTING PARENTAL RESPONSE TO CHILDREN'S CONDUCT PROBLEMS

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Previous research suggests that parental concerns about offspring adjustment, if carefully elicited, predict future mental health problems among children who might otherwise appear to be at low risk for developmental problems. Many parents, however, either overestimate or underestimate the significance of their children's behavior problems. These findings indicate the importance of studying the source(s) of inaccuracies in parental concerns. To date, however, little research has considered familial, dispositional, and contextual factors that predict 1) whether or not a parent becomes concerned about their child's behavior problems, 2) whether or not a parent becomes concerned about their child's behavior above and beyond the presence of behavioral problems, and 3) whether parental concerns accurately reflect the severity of conduct problems. Results indicated that, when all factors were considered together with the exclusion of externalizing problems, sum of mother reported stress, child management behaviors, as well as SES were significant predictors of parental concern.

However, only SES remained significant as a predictor of parental concern above and beyond the presence of externalizing problems. No interaction effects were significant in this study; thus, this study was not able to identify any factors that influenced the accuracy of concerns as they relate to severity of conduct problems.

Keywords: Parental efforts, parenting practices, conduct problems, externalizing behaviors, seeking services

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INTRODUCTION

Conduct problems, as defined by Mash and Wolfe (2010), are age-inappropriate actions and attitudes that violate family expectations, societal norms, and the personal or property rights of others. Further, conduct disorder (CD) is defined as a form of disruptive behavior disorder in which the child exhibits an early, persistent, and extreme pattern of aggressive and antisocial acts that involve the infliction of pain on others or interference with others' rights through physical and verbal aggression, stealing, vandalism, truancy, or running away. Research by Richman, Stevenson, and Graham (1975, as cited by Kim-Cohen, Arseneault, Caspi, Taylor, Moffit, 2005) on conduct problems in children revealed that 15% of 3-4 year olds have mild conduct problems while 7% had moderate to severe conduct problems. This indicates that a large percent of children have conduct problems beginning at an early age, making it an important topic for research.

Conduct problems in childhood are troublesome, negatively impacting those in the social surroundings, and are linked with a host of negative outcomes, including criminal activity, poor educational results, and family instability (Maughan & Rutter, 2001). Conduct problems, as they are by definition inappropriate and are frequently persistent, are often cause for concern for parents and caregivers.

Individual differences in parenting behaviors and styles have been found to be associated with the development of conduct problems (Webster-Stratton, 1997). Parents of children diagnosed with conduct disorder exhibit less positive parenting behaviors and more aggressive and physical forms of discipline than parents of children without conduct disorder. In addition, parents of children with conduct problems are more likely to be inconsistent, overly permissive, and unpredictable, and less likely to provide surveillance of their child's behaviors (Griest, Forehand, Wells, & McMahon, 1980; Patterson & Stouthamer-Loeber, 1984; Webster- Stratton, 1985b, 1990c, 1991). These findings suggest that unskilled parenting may contribute to and result from child conduct problems.

Parental Importance in Seeking Treatment

Although parents may inadvertently contribute to (or, conversely, protect against) the development of their children's conduct problems, they also are critical to initiating efforts to treat these problems. They act as gatekeepers to diagnostic and intervention services for their children, and thus are critical to early identification and treatment of child conduct problems (Coghlan, Kiing & Wake, 2003). In addition, parents contribute to their children's diagnostic and treatment outcomes. For example, Mulhern, Dworkin and Bernstein (1994) found that parental concern about one symptom of ADHD was predictive of their child eventually receiving the diagnosis, while the lack of any concerns nearly eliminated the likelihood of a diagnosis of ADHD.

Parental impressions of their children's development appear to have substantial validity. For example, Mulhern et al. (1994) found that parental concerns about their child's behavioral problems were often confirmed by teacher reports. There is evidence,

however, that there is significant variability in the degree to which parents' show appropriate concern about their child's conduct problems. Glascoe, MacLean, and Stone (1991) evaluated 95 parent-child dyads in a pediatric care waiting room that were seeking medical care. Although one-fifth of the children were found to have serious behavioral difficulties, one-third of the parents in the study affirmed or raised concerns about their child's conduct. These findings suggest that some parents were concerned about behaviors that would be considered to be in the normal range.

In addition, of the parents in the study with children that were found to have serious behavioral problems, only 70% expressed concern, meaning that 30% of parents whose children were found to have clinically significant behavioral problems expressed no concern about their child's behavior (Glascoe, MacLean, and Stone, 1991). Thus, although parental concern was related to severity of child conduct problems, these findings suggest that parents' vary in the accuracy of their concerns, and that there are factors other than severity of conduct problems may influence the level and accuracy of parents' concerns.

Parents' perceptions of the inappropriateness and atypicality of their children's conduct are likely to be major determinants of whether children receive professional assessment and/or treatment, whether a diagnosis is provided, and whether parents alter their parenting strategies. However, despite the potential importance of parental concerns, little is known about the origins of these concerns. The proposed study seeks to identify child, family, and contextual factors that predict parental concern.

Factors that May Influence Parental Concerns

Gender is one child factor that may affect parents' concerns about conduct problems. Coghlan, et al. (2003) evaluated the use of the Parents' Evaluation of Developmental Status (PEDS) as a possible tool that would be effective for reporting concerns on the part of the parent for Australian preschool children. In general, parents reported more developmental concerns overall for boys than girls, suggesting that child gender may be influencing whether a parent becomes concerned or not about their child's behavioral issues. Ellingson, Briggs-Gowans, Carter, and Horwitz (2004) also found that parental worry was associated with child gender, with higher levels of concern being shown for boys versus girls. However, it is possible that differences in concerns related to child gender may have been attributable to gender differences in severity of conduct problems. These studies did not evaluate this possibility.

Temperament is another child characteristic that may impact whether a parent expresses concerns about their child's conduct. Bates et al. (1998) evaluated factors associated with identification of perceived externalizing problem behaviors, as perceived by the mother or teacher and found that temperamental resistance to control was associated with increased perception of problem behaviors. It is possible that children with difficult temperaments cause a strain in a relationship, whether with the parent or teacher, which contributes to the parent's perception that the behavior is serious and in need of treatment. However, it is unclear if child difficult temperament, which is associated with perceived increased levels of externalizing problems, predicts parental concerns over and above conduct problem levels.

Demographic factors also appear to be associated with parental concerns regarding child conduct problems. Several studies have found associations between race/ethnic backgrounds and use of mental health services. Elster, Jarosik, VanGeest, and Fleming (2003) found that African American and Hispanic adolescents were less likely than Caucasian adolescents to receive mental health services. In addition, Angold et al. (2002) found that while African Americans were equally as likely to receive services in certain settings as Caucasians (juvenile justice systems, welfare systems, pediatric care providers, educational system),they were significantly less likely to receive mental health care from a specialty mental health setting.

Research by Cuffe, Waller, Cuccaro, Pumariega, and Garrison (1995) compared the frequency of seeking professional mental health services between African-American and Caucasian males and females. Results showed a trend towards African-Americans receiving less frequent treatment than Caucasians. Additionally, results suggested that African-Americans receive treatment periods that are shorter when compared to Caucasians. The article suggests several explanations for the differences between the groups, including that it is possible that there are racial differences in terms of tolerance of symptoms for adolescents. In other words, they suggest it may be possible that African-Americans are receiving fewer services due to the fact that symptoms would have to be of higher intensity to constitute seeking services. Additionally, they suggest that African-Americans, as compared to Caucasians, may expect that professionals will be ineffective, possibly causing African Americans to seek non-professional help instead. Differences in utilization of mental health services related to race/ethnicity are also likely to be related to disparities in economic resources and availability of those services.

However, it is also possible that there are race/ethnicity differences in tolerance of child behavior problems that may also contribute to differences in levels of parental concern.

Family socioeconomic status may also be linked to levels and accuracy of parental concern. Davis-Kean (2005) found that parents with moderate to high incomes held expectations surrounding how much schooling they expect their child to receive that closely matched their children's school performance. Conversely, parents with low incomes held expectations for their children did not closely match their child's school performance. These findings suggest that low SES may be associated with inaccuracies in perceptions of child behaviors. If so, it is possible that parents with low socioeconomic status are less accurate in judging the severity of their child's behavioral issues.

In addition, low socioeconomic status has been found to be associated with less skilled parenting behavior. For instance, parents from lower class backgrounds are more likely than middle class parents to utilize physical discipline and less likely to provide verbal and cognitive stimulation with their children (Patterson, Debaryshe, & Ramsey, 1989). In addition to providing stimulation, middle class are more likely to use reason and nonphysical forms of discipline such as a "time out" method and express more positivity towards their children. All of these factors are associated with low levels of child conduct problems (Patterson, et al., 1989). Considering the association of low socioeconomic status with parenting difficulties and inaccurate child expectations, it is possible that disadvantaged parents may show inaccuracies in their concern over their children's behavior.

Several family factors are also potentially associated with parental concerns. As discussed previously, parenting behaviors itself is a risk factor for the development and persistence of conduct problems and their effects. Webster-Stratton (1997) stated that parents of children with diagnoses of conduct disorder "lack fundamental parenting skills" and express negative forms of parenting such as being more likely to use physical forms of punishment. Further, deficits in parenting behaviors may be related to inaccuracies in parents' perceptions of child behavior. It is possible that parents using harsher forms of child punishment may not accurately perceive the seriousness of their child's conduct problems. In other words, it is possible that parents use harsher forms of punishment if they perceive their children's behavior as being more atypical or developmentally inappropriate than it actually is.

Research suggests that family stress may also be associated with parental concern. Family stressors including unemployment and family violence are associated with not only conduct problems and delinquency, but adjustment problems for the child, in general (Patterson, et al., 1989). Additionally, Ellingson et al. (2004) found higher levels of parental concern if child behavior problems caused stressful disruptions in family routines. It is possible, then, that other sources of stress may also cause parents to be more sensitized to their child's conduct problems.

Research has indicated that there are differences between parents who show concerns about their child's behaviors and parents who lack such concerns. However, as indicated by the studies reviewed, our knowledge of the origins of parental concern is rather fragmented and incomplete. Although studies have considered dispositional, familial and contextual factors separately, none have considered these factors together,

leaving open the possibility that some of these factors are spuriously associated with parental concern. Furthermore, previous studies have not evaluated whether the previously identified dispositional, familial, and contextual factors predict parental concerns over and above the level of the child's conduct problems, which is likely to be the strongest predictor of parental concern. Finally, no research has evaluated what factors might account for discrepancies between parental concern and actual levels conduct problems. In other words, little is known about the sources of differences between a parent that shows appropriate concern about their child's conduct problems, and parents who either show concerns when no serious conduct problems are present or do not show concerns despite the presence of frequent or severe conduct problems.

Identifying the origins of variations in the presence and accuracy of parental concerns is likely to be critical to understanding individual differences in the development of children's conduct problems. Negative consequences could result if parents' are not appropriately responsive to child conduct problems. Parents who are under-responsive to child conduct problems may fail to take appropriate action, thereby allowing escalation of conduct problems and their negative consequences, including poor academic achievement and peer rejection. Over-concern may also be problematic. Pettit, Laird, Dodge, Bates, and (2001) found that some mothers exhibit a prevention-oriented parenting style when there is not a need to do so. This means that they are pre-emptively addressing conduct problems that have yet to emerge. Such an approach may be well suited for children with early behavioral difficulties, but for children who are rarely misbehave or test limits, preventative-oriented parenting might be viewed as intrusive by the child. As a result, parents who are over-responsive to mild behavioral difficulties may

take action that increases parent-child conflict and inadvertently increases risk for developing conduct problems.

There is great clinical significance in understanding the origins of parental concern. Better understanding of parental concerns may allow for clinicians to identify behavioral issues earlier, allowing for early intervention when needed, during a time in which it would have the most impact (Webster-Stratton, 1997). The study of parental concern may also improve understanding of how parental perception of child behavior is involved in the development of child conduct problems.

The Current Study

As previously discussed, accurate parental concerns may allow for early detection and earlier intervention of child psychopathology, which is critical to effective treatment and prevention of child psychopathology. Webster-Stratton (1997) noted that earlier onset of child conduct problems combined with a lack of an early intervention program greatly increases risk for negative psychosocial consequences in childhood and adulthood. Furthermore, she noted that early treatment is most effective when the treatment addresses the systems within a child's life. For example, treating children within their academic domain (i.e. school), social domain, and home domain (i.e. with parents, siblings) is most effective so that all treatment settings are in "support" or on the "same page." In other words, treatments are most effective when they are widely applicable and sustained (Webster-Stratton, 1997). Mostly, it is discussed that the early interventions for conduct problems leads to the most advantageous outcome for the child,

allowing for the best set of possible outcomes in terms of their developmental problems. Parental concern is critical to initiating effective early interventions.

The proposed research will evaluate dispositional, familial, and contextual factors that predict presence and accuracy of parental concerns. The factors that have been found in previous literature to have been associated with accuracy include gender of the child, temperament, ethnic/racial background, socioeconomic status, family stress, parents' child management behaviors, and levels of child conduct problems. Although it can be speculated that there might be various other factors that may impact the accuracy of concerns, previous research within this field was limited. Previous research has considered many of these factors; however, previous studies have not considered them together. Nor have previous studies tested whether dispositional, familial, or contextual factors predict levels and accuracy of parental concern over and above differences in levels of child behavior problems. It is possible that these factors are associated with parental concerns because of their associations with conduct problems. By statistically controlling for child conduct problems, the current research will be able to determine if these factors independently contribute to the presence and accuracy of parental concerns.

The proposed research seeks to answer the following questions: 1) Are child, familial, and contextual factors associated with parental concern regarding child conduct problems? 2) Are these factors associated with parental concern over and above the association of conduct problems with parental concern? 3) Are child, familial, and contextual factors associated with the degree to which concerns are associated with severity of conduct problems? That is, do any of these factors increase (or decrease) the degree to which parental concerns accurately reflect conduct problem severity?

METHODS

Participants

Two cohorts of participants were recruited (in 1987 and 1988) for the Child Development Project (CDP) from each of following geographical locations: Nashville, TN, Knoxville, TN, and Bloomington, IN. The CDP is a longitudinal, multisite project to evaluate factors influencing child adjustment (Broidy, et al., 2003). Parents were randomly approached at pre-kindergarten registration and asked by researchers to participate in a study about child development, with roughly 75% of parents consenting. First data collection was administered at this time, when most children were 5 years of age. Initial data collection included questionnaires and interviews with parents.

The CDP sample originally included 585 children, consisting of 48 percent females, and 26 percent from single parent households. Parents differentiated in level of concern about their child's behavior in the last two years when asked at age 11, 240 reporting they had not been concerned enough to initiate a focused effort to reduce their child's aggressive, rule breaking, and disrespectful behaviors, and 54 reporting they had. The sample was ethnically diverse, with 82 percent being European American, 16 percent African American, and 2 percent from other ethnic backgrounds (Pettit, et al., 2001). The sample was mostly middle class, which was indicated by an average Hollingshead (1979) score of 40.4 (SD = 14). However, a broad range of socioeconomic levels were

represented, with 26% of the sample falling in the two lowest of the five Hollingshead's classes.

Approval by the Research Review and Ethics Committee of the University of Dayton was obtained for the current study.

Measures

Externalizing Behavior Problems. Parents completed the Child Behavior Checklist (CBC; Achenbach, 1991a) at child age 10 & 11. The externalizing behavior scale of the CBC contains 33 items, such as: Argues a lot, Doesn't seem to feel guilty after misbehaving, Physically attacks people, Sets fires, Unusually loud, and Uses alcohol or drugs for nonmedical purposes. The items on these measures are scored as *not true* (0), *somewhat true* (1), and *very true* (2). Items from this measure assessing delinquent and aggressive behaviors were summed according to Achenbach (1991) to create a measure of conduct problems, or externalizing behavioral problems. The measure has been shown to have adequate levels of both reliability and validity (Goodnight, Bates, Pettit, & Dodge, 2008)

Parental Concern. When their children were 11 years of age, parents reported whether they had or had not become concerned enough during the previous two years to initiate a focused effort to reduce their child's aggressive, rule breaking, and disrespectful behaviors (See Appendix A for more information on how they inquired about concerns). Four-hundred and sixty parents completed the interviews, with 16.1 % responding that they enacted involvement focused efforts, and 19.1% responding that they utilized limit-setting efforts, totaling 96 parents indicating they were utilizing some kind of focused

effort to reduce child conduct problems. There are limitations with this particular item as a measure or parental concern as it is a singular item to indicate whether there is or is not concern; however this one-item response is believed to have face validity of the parental perception of their efforts against their child's conduct problems and has shown predictive validity in the form of associations with future child conduct problem levels (Pettit, et al., 2007; Goodnight, et al., 2008).

Stress. At child age 9, parents reported on whether 18 stressful life events had occurred within the last year (Changes and Adjustments Scale; Dodge, et al., 1994). The events inquired about were: family relocating, home repairs or remodeling, target child (TC) frequent or severe illness, TC accident or injury, other medical problems for TC, other close individuals' medical stress, financial problems, death of a close family member, death of another important person, divorce or separation of TC's parents, TC separation from parent, problems or conflict in extended family, birth of a sibling, TC school problems, parent work problems, parent loss of job, parent remarriage or reconciliation, and legal problems (See Appendix B for further information on wording of stress items). Total number of stressful life events experienced was used as the overall stress item (Schermerhorn, Bates, Goodnight, Lansford, Dodge, & Pettit, 2013).

Temperament—The Retrospective Infant Characteristics Questionnaire (RICQ) was used to measure temperament, and was completed by mothers when children were 5 years of age. The RICQ is a retrospective questionnaire aimed towards understanding temperament during infancy. The resistance to control scale was used in the present study. This 4-item scale has shown adequate internal consistency (α = .83). See Appendix C for a list of items from the resistance to control scale. The first question is

worded “Persisted in playing with objects when told to leave them alone.” The second question is worded “Continued to go someplace even when told ‘stop,” “come here,” “no-no.” The third question words “Upset when removed from something she or he is interested in but should not be getting into.” Finally, the last item is worded “How much cuddle and snug when held,” scaled from a lot to very little and seldom snuggles. These items are measured on a 7-point Likert-type rating scale, with higher numbers meaning more resistance to control features. Additionally, the measure demonstrates external validity, and shows a relationship with constructs such as externalizing behaviors, and scales on the Child Behavior Questionnaire, including, resistance (r = -.44) and predicted retrospective difficultness (r = .58; Bates et al., 1998).

Parents’ Child Management Behaviors. At child age 8, parents reported the frequency with which they engaged in a variety of behaviors aimed at managing their child’s behaviors (See Appendix D for information on how parents were asked about the actions they had taken to manage their child’s behaviors). Frequency was rated on a scale ranging from Never (0) to about every day (5). A composite measure of parent child management behaviors was constructed according to Goodnight et al. (2008) by averaging scores from variety of nonphysical practices that are consistent with content of parent training interventions such as that of Fleischman, Horne, and Arthur (1983), including timeout, denying privileges, instructing the child how they should behave, explaining to the child or having a discussion, having the child provide an apology, giving extra chores, and rewarding positive behaviors. This scales has been shown to have adequate internal consistency (α = .81; Goodnight, et al., 2008).

Gender, Socioeconomic Status & Race/Ethnicity. Parents reported on the race and gender of their child enrolled in the study during the summer before kindergarten, at the beginning of the CDP. Socioeconomic status (SES) was measured by parental report when the child was 9 years of age using Hollingshead (1979) Four Factor Index.

Analytic Plan—Analysis of the data were conducted using logistic regression. Before entering variables into the analysis, the non-categorical predictor variables were centered to reduce multicollinearity and aid in the interpretation of the interaction effects. By subtracting the sample mean from all of the individual scores for each variable, a new mean for zero was found for each, and the variables were centered. In block 1 of the analysis, child gender, socioeconomic status, race/ethnicity, child management behaviors, stress, and temperament were entered to test their predictive value for parental concerns. During block 2, the previously described predictor variables for parental concern remained in the analysis, and a child externalizing problems was entered so that the effect of the previously mentioned predictor variables was evaluated while the effect of child conduct problems is statistically controlled. In block 3, interaction effects between child externalizing behaviors and the factors of race/ethnicity, parenting behaviors, gender, socioeconomic status, stress, child management behaviors, and temperament were entered in order to determine whether any of the parent or child factors increase or decrease the magnitude of the association between child externalizing problems and parental concerns.

RESULTS

Descriptive statistics for the variables in the study are presented in Table 1 and include the means, standard deviations, and the ranges of the variables. Correlations between the variables are presented in Table 2. Results of independent t-tests comparing means of the categorical variables of race (Table 3), parental concern (Table 4), and gender (Table 5) for each continuous variable are also presented.

Logistic regression analyses were used to test the effects of each predictor while controlling for the other predictors on parental concern. Prior to entering the variables, the non-categorical variables were centered by subtracting the sample mean from all individual scores to reduce multicollinearity when testing interaction effects. In block 1 of the analysis, child gender, SES, child race/ethnicity, child management behaviors, sum of mother reported stress, and temperament were added to see if they were significant predictors of parental concern (the criterion variable). These variables remained in the equation, and the variable of child externalizing problems was added during block 2 to see its effect while controlling for the variables introduced in block 1 (Table 6).

In the third block of the analysis (Table 7), interaction effects between child externalizing problems, and the variables of child race/ethnicity, child gender, SES, sum of mother reported stress, child management behaviors and temperament were entered in order to determine if they increase or decrease the strength of the association between

child externalizing problems and parental concern. The equation used parental concern as the criterion variable, and included the variables of child race/ethnicity, child management behaviors, child gender, SES, sum of mother reported stress, temperament, and child externalizing problems from the previous block. In addition, the interaction terms, child race/ethnicity X externalizing problems, child gender X externalizing problems, SES X externalizing problems, sum of mother reported stress X externalizing problems, child management behaviors X externalizing problems, and temperament X externalizing problems in addition to see their effect.

Table 1
Descriptive Statistics for Variables

Variables	Mean	Std. Dev.	Range
Externalizing Problems	8.71	7.24	0.00-36.00
SES	39.10	13.96	5.00-66.00
Temperament	3.59	1.13	1.00-7.00
Child Management Behaviors	1.97	.77	0.00-3.75
Parental Stress	2.52	7.44	0.00-37.00

Table 2

Correlations Between Variables

Measure	Externalizing Problems	SES	Temperament	Sum Mother Reported Stress	Child Management Behaviors
Externalizing Problems	1.00				
SES	.23**	1.00			
Temperament	.32**	-.063	1.00		
Sum Mother Reported Stress	.40**	.18**	.11*	1.00	
Child Management Behaviors	.37**	.10	.26**	.23**	1.00

Note. **$p < .01$, *$p < .05$

Table 3

Results of t-test for Variables by Race

Race	White			Black			95% CI for Mean Difference	t	df	*p*
	M	SD	n	M	SD	n				
Externalizing Problems	8.56	7.20	310	9.66	7.54	59	-3.12-.93	-1.06	367	.288
SES	41.64	12.92	355	26.90	12.11	69	11.44-18.05	8.76	422	.000**
Temperament	3.56	1.33	366	3.56	1.33	68	-.26-.33	.26	432	.797
Child Management Behaviors	2.04	.71	394	1.64	.90	78	.22-.59	4.38	470	.000**
Sum Mother Reported Stress	2.49	2.15	349	2.79	2.32	70	-.86-.26	-1.05	417	.275

Note. **$p < .01$, *$p < .05$

Table 4

Results of t-test for Variables by Parental Concern

Parental Concern							95% CI for Mean Difference			
	No Concern			Concern				t	df	*p*
	M	SD	n	M	SD	n				
Externalizing Problems	6.95	5.68	292	14.92	8.65	83	-9.54—6.39	-9.92	373	.000**
SES	40.84	13.71	339	32.70	13.02	92	4.99-11.27	5.10	429	.000**
Temperament	3.49	1.15	344	3.96	1.01	96	-.72--.21	-3.61	438	.000**
Child Management Behaviors	1.87	.75	332	2.32	.74	93	-.62--.28	-5.15	423	.000**
Sum Mother Reported Stress	2.20	1.89	310	3.75	2.77	80	-2.07—1.04	-5.91	388	.000**

Note. **$p < .01$, *$p < .05$

Table 5

Results of t-test for Variables by Gender

	Gender						95% CI for Mean Difference			
	Male			Female				t	df	*p*
	M	SD	n	M	SD	n				
Externalizing Problems	9.72	7.42	183	7.76	6.96	192	.51-3.43	2.64	373	.008**
SES	40.05	13.89	216	38.14	14.00	215	.73-4.55	1.42	429	.156
Temperament	3.71	1.12	217	3.48	1.14	223	.02-.44	2.15	438	.032*
Child Management Behaviors	2.10	.75	251	1.83	.76	229	.14-.41	3.93	478	.000**
Sum Mother Reported Stress	2.52	2.16	225	2.52	2.20	202	-.42-.41	-.001	425	.999

Note. **$p < .01$, *$p < .05$

Primary Analyses

Research Question 1. Research question 1 asked to what extent child, familial, and contextual factors are associated with parental concern regarding child conduct problems. This question was tested in the first block. In the regression equation, parental concern was the criterion variable, and child gender, child race/ethnicity, SES, temperament, child management behaviors and sum of mother reported stress were entered into the regression to see their association with parental concern. This block indicated that SES had a significant negative relationship with parental concern. Child management behaviors and sum of mother reported stress had a significant positive relationship, results of which are shown in Table 6.

Research Questions 2. In the second block, the analysis aimed to evaluate the second question asked by this study: Are these factors associated with parental concern over and above the association of conduct problems with parental concern. This was tested by entering externalizing problems into the second block in addition to the previously entered variables of child gender, child race/ethnicity, SES, temperament, child management behaviors, and sum of mother reported stress to see if they remained significantly associated with parental concern. In this block, externalizing problems had a positive significant relationship with parental concern. When externalizing problems was entered, sum of mother reported stress and child management behaviors no longer had a significant association, meaning they were not significant above and beyond the presence

of conduct problems. SES remained significant, having a negative association with parental concern, above and beyond the presence of externalizing problems, as shown in Table 6.

Research Question 3. This research question aimed to test if child, familial, and contextual factors are associated with the degree to which severity of conduct problems are associated with parental concern. The equation evaluated this hypothesis by entering the interaction terms of child gender X externalizing problems, child race/ethnicity X externalizing problems, SES X externalizing problems, child management behaviors X externalizing problems, temperament X externalizing problems, and sum of mother reported stress X externalizing problems with the previously included variables of child gender, child race/ethnicity, SES, child management behaviors, temperament, sum of mother reported stress, and externalizing problems remaining in the equation. As shown in Table 7, none of the interaction effects were significant.

Table 6
Logistic Regression Analysis of Parental Concern

Variable	*B*	S.E.	*Odds Ratio*	*p*
Block 1:				
SES	-.81	.21	.45	.000**
Temperament	.28	.18	1.33	.112
Child Management Behaviors	.54	.18	1.72	.003**
Child Ethnicity	.72	.52	2.05	.164
Sum Mother Reported Stress	.51	.16	1.66	.002**
Child Gender	.51	.35	1.66	.153
Block 2:				
SES	-.67	.22	.51	.002**
Temperament	.11	.19	1.12	.556
Child Management Behaviors	.36	.20	1.43	.068
Child Ethnicity	.68	.53	1.98	.200
Sum Mother Reported Stress	.34	.17	1.40	.053
Child Gender	.45	.37	1.58	.215
Externalizing Problems	.72	.20	2.05	.000**

Note. **$p < .01$, *$p < .05$

Table 7
Logistic Regression Analysis of Parental Concern: Block 3

Variable	*B*	S.E.	*Odds Ratio*	*p*
Block 3:				
Gender	.45	.41	1.56	.276
Child Ethnicity	.60	.64	1.83	.345
SES	-.59	.24	.55	.013*
Temperament	.10	.21	1.11	.626
Child Management Behaviors	.40	.22	1.49	.071
Sum of Mother Reported Stress	.48	.20	1.62	.014*
Externalizing problems	.76	.57	2.14	.180
SES X Externalizing Problems	-.20	.24	.82	.407
Temperament X Externalizing Problems	.10	.21	1.10	.649
Mother Reported Stress X Externalizing Problems	-.24	.14	.79	.090
Child Ethnicity X Externalizing Problems	-.00	.54	1.0	.995
Child Gender X Externalizing Problems	.15	.39	1.16	.695
Child Management Behaviors X Externalizing Problems	-.20	.22	.82	.371

Note. **$p < .01$, *$p < .05$

DISCUSSION

The aim of this study was to evaluate dispositional, familial, and contextual factors that predict the presence of parental concerns and its link to offspring conduct problems. Factors previously found to be associated with parental concerns were included as predictors of parental concern (Coghlan et al., 2003; Bates et al., 1998; Angold et al., 2001), as previous research has considered these factors separately, not together. These factors included temperament, child race/ethnicity, SES, family stress, child management behaviors, gender of the child, and levels of mother-reported conduct problems. Further, the research aimed to see if these factors previously associated with parental concern were significantly associated above and beyond the level of externalizing problems, and whether these factors moderated the association between externalizing problems and parental concern.

Aligning with previous research (Coghlan et al., 2003; Bates et al., 1998; Angold et al., 2001), bivariate analyses results indicated a relationship between parental concern and the factors of externalizing problems, SES, temperament, child management behaviors, and sum of mother reported stress in t-tests. Previous research had considered these factors individually, and supporting their conclusions, when t-test analyses considered these factors individually in relationship with parental concern, their results were confirmed with significance for all variables.

When considered together, bivariate analyses indicated correlations between several of the previously mentioned variables. Externalizing problems was found to have a significant correlation with SES, temperament, sum of mother reported stress, child gender, and child management behavior, in addition to parental concern. It was not found to be significantly correlated to child race/ethnicity; however. SES was found to be significantly correlated with sum of mother reported stress and child race/ethnicity in addition, but not child gender. In addition to parental concern and externalizing problems, temperament was significantly correlated to parental concern and child gender, but not child race/ethnicity. Child management behaviors had additional correlations with sum of mother reported stress, child race/ethnicity, and child gender in the results of the bivariate analyses.

Contrary to previous research (Coghlan et al., 2003; Bates et al., 1998; Angold et al., 2001) not all factors included were significantly associated with parental concern when they were considered together. Only three variables were found to have a significant association with parental concern. These factors include SES, child management behaviors (parenting behaviors), and the sum of mother reported stress, or family stress. Results indicated that socioeconomic status was significantly associated negatively with parental concern. That is, parents of lower SES had significantly higher levels of parental concern than parents of higher SES. Child management behaviors indicated a positive significant association with parental concern, meaning that as parents exhibited more parental concern, they were more likely to have utilized non-physical parenting interventions. Lastly, familial stress, measured through sum of mother reported

stress, was positively and significantly associated with parental concern. As parental concern increased, so did the sum of the mother's reported stress levels/familial stress.

When these factors were considered with the addition of externalizing problems, or level of conduct problems, the results indicated that child management behaviors and sum of mother reported stress no longer had a significant association with parental concern. The results indicated that these two factors, child management behaviors (parenting behaviors) and mother of reported stress (familial stress) did not predict parental concern above and beyond the presence of externalizing problems (level of conduct problems). SES remained a significant predictor. This indicates that SES continued to have a significant negative association with levels parental concern, such that lower levels of socioeconomic status were associated with a greater likelihood of parental concern even after conduct problems were considered.

Previous research has found that parenting behavior may, itself, be a risk factor for the development and persistence of conduct problems. This research discussed that parents of children that had a diagnosis of conduct disorder express more negative forms of parenting, such as physical forms of punishment (Webster-Stratton, 1997). This research suggests that deficits in child management behaviors may be related to inaccuracy of the perception of the child's behavior. Consistent with this previous research, this study did find a significant association between parental concern and use of non-physical child management behaviors when variables were considered without externalizing problems included. Once externalizing problems were considered; however, child management behaviors was no longer a significant predictor of parental concern.

As suggested in previous research (Patterson, et al., 1989), family stressors including unemployment and family violence were associated with conduct problems, delinquency, and generalized adjustment problems for the child of family. Previous research also found that parental concern was higher, on average, if the child behavioral problems caused stressful disruptions in the family routines (Ellingson, et al., 2004). Consistent with this research, when all factors besides externalizing problems were considered, sum of mother reported stress was a significant predictor of parental concern. Although it was no longer significant once child conduct problems was considered in the analyses, it is important to note that sum of mother reported stress remained marginally significant.

Previous research has found that parents with moderate to high incomes held expectations about how much schooling they would expect their child to receive that closely matched their child's school performance, as compared to low-income parents, whose expectations did not match closely (Davis-Kean, 2005). These previous findings suggests that SES may be associated with levels of concerns in perceptions of the child behaviors over and above the levels of actual, present behaviors. Results from analyses in this study were consistent with these findings. Socioeconomic status was not only associated with parental concern when all variables were considered, but was significantly associated with parental concern above and beyond the presence of externalizing problems. This indicates further that those of lower SES may be more likely to have concerns about their children's behavior, above and beyond externalizing problems.

It is challenging to identify why parents of lower SES may be associated with generally higher levels of concern about their child's behavior, above and beyond the presence of conduct problems. It is possible that SES may have an association to frustration-tolerance, with those of lower SES having lower levels of tolerance for child misbehavior. The difference may also be possibly attributed to poor knowledge of age-typical levels of misbehavior. It is possible that parents of lower SES as unaware of what constitutes "within normal limits" behaviors and are demonstrating concern even for age-typical behaviors. Differences in SES may also be associated with family size. Previous research on contemporary US women identified a negative association between a woman's income and the number of children (Huber, Bookstein, & Fieder, 2010). It is possible that those of lower SES have more concerns due to having more children and child responsibilities, making them more sensitive to their children's behaviors and behavioral problems. Further research is necessary to understand this association.

In this study, results indicated that no interaction terms were significant. This indicates that none of the predictors were associated with the degree to which concerns were associated with the severity of conduct problems. That is, none of these factors were found to increase or decrease the degree to which parents express accurate levels of concern in reflection of the severity of the present conduct problems.

Clinical Implications

This study aimed to add to how much we know about the origins of parental concerns. This study found that SES, above and beyond the level of conduct problems, was a predictor of parental concern. This implies that those of lower SES indicated that

they had been concerned enough about their child behavior enough to engage a focused effort in an attempt to address their child's problem behaviors, above or beyond the presence of conduct problems more often than those of a higher SES, despite accounting for the actual level of reported behavioral problems by the parent.

Previous research (Pettit, Laird, Dodge, Bates, 2001) has shown that levels of over-concern on the part of parents may be problematic in many forms, such as pre-emptively addressing problem behaviors that have yet to be exhibited by the child. We had discussed how this over-identification of behavioral difficulties may be viewed as intrusive by the child, or increase parent-child conflict and increase the risk, unintentionally, for future or developing conduct problems. This could be clinically important, as parents from lower SES may be engaging in these inappropriate interventions, possibly contributing to the development of these conduct problems.

Further, previous research has indicated that parents from lower class backgrounds are associated with less skilled parenting behavior (Patterson, Debaryshe, & Ramsey, 1989). This research has indicated that those of lower SES are more likely to use physical discipline and less likely to engage with the child verbally or cognitively. Therefore, it is important to understand that parents of lower SES may be inaccurately identifying the level of concern in response to their child's externalizing problems and may be more likely to lack the appropriate parenting skills to enact focused and effective interventions. It is valuable to know that these parents may be more likely to have higher levels of concern in response to their child's behaviors, and address issues associated with accurate perception of the problems and appropriate campaign responses.

Further, stress and child management behaviors were both associated with stress without accounting for level of externalizing problems. When externalizing problems was added to the equation, both of these variables were no longer significant, but sum of mother reported stress was still marginally significant ($p = .053$). This indicates that presence of reported child externalizing problems is more predictive of parental concern than these variables and may account for part of their association with parental concern.

Lastly, none of the interaction variables were significant in this study, meaning that none of these variables were found to increase or decrease the degree to which conduct problems were associated with parental concern. Previous research from Glascoe, MacLean and Stone (1991) evaluate parents who did not demonstrate concern when there was the presence of behavioral problems, referred to as the "false negative group" as well as a "false positive group" of parents who were concerned even when there was not atypical behavior. This research considered demographic and other factors, basis of parent's level of education, area of residence, marital status, gender, number of offspring, perception that child had significant versus nonsignificant medical histories, research site, child's gender, birth order, participation in day care or school programs, race, age, and type of behavioral problem.

This study, however, did not to identify any factors that significantly moderated the link between conduct problems and parental concern. The failure to find any interaction effects does not prove that factors impacting the level and accuracy of problems is not clinically significant, but instead suggests the need for further research evaluating the association between accuracy/levels and conduct problems.

Limitations and Future Research

One limitation of the current study is that there were limited factors that had been collected from previous research as being associated with conduct problems. As discussed previously, it is easy to speculate other factors that may be considered when evaluating association to parental concern, but the previous research is limited and fractured.

Another consideration is that this study may not have sufficient statistical power to detect small effects. In this sample, there were only 57 parents that had indicated they had parental concern. Although this sample may be high enough to detect some larger effects such as SES, it may not be statistically significant enough to detect smaller effects. Additionally, it is important to note that these findings were correlational, and do not imply causation. For instance, this study is able to suggest that SES is a valid predictor for parental concern above and beyond the presence of conduct problems, we cannot state that parental concern is caused by SES.

Additionally, there is a limitation with the measure of parental concern. The evaluation of whether a parent had parental concerns was elicited through a single item that asks whether parents were concerned enough in the last year to enact a focused campaign to try and address their child's behavioral problems. Although this item appears to have sufficient face-validity for parental concern, it is a limited, single-item, categorical variable for measuring the domain of parental concern.

A further limitation with this item is that it asks parents to identify if they were concerned enough in the last two years to initiate a focused effort to reduce their

children's negative behaviors. It is possible there are parents that had concerns about their child's behaviors but had not gone as far to initiate these efforts or take action. Future research might want to use a broader-based operationalization of parental concerns that may help distinguish feelings and thoughts about child behavior from behavioral responses to those behaviors.

In conclusion, the goal of this study was to see if previously identified factors associated with parental concern remained associated when considered together. Further, the study aimed to see whether these factors remained significant above and beyond the level of externalizing problems. The current study was able to identify several factors that were associated with parental concern, but only one, SES, that remained significant above and beyond the presence of externalizing problems. This has added to the fractured and limited research that has considered these previous factors separately, but not in combination.

Future research is necessary to evaluate further factors that may be predictive of parental concern, particular above and beyond the presence of externalizing problems. Future research may want to evaluate additional factors not included in the present study, such as those utilized by Glascoe, MacLean and Stone (1991). This research used a broader list of factors that were not included in this research such as parent's level of education, area of residence, marital status, number of offspring, perception that child had significant versus nonsignificant medical histories, child's birth order, or participation in day care or school programs. Future research may also want to consider history of externalizing problems, such as differences in responses based on how long the problem has been going on.

Further, the study aimed to identify if any factors were associated with the level and accuracy of parental concerns in response to their child's externalizing problem. The current study was unable to do so, indicating that further research is necessary to identify these possible factors. This further magnifies how limited the research is and the needs of evaluating these factors.

REFERENCES

Achenbach, T. M. (1991a). "Comorbidity" in child and adolescent psychiatry: Categorical and quantitative perspectives. *Journal of Child and Adolescent Psychopharmacology, 1,* 1-8.

Achenbach, T. M. (1991b). *Manual for the Child Behavior Checklist/ 4-18 and 1991 Profile*. Burlington, VT: University of Vermont Department of Psychiatry.

Achenbach, T. M. (1991c), *Manual for the Teacher's Report Form and 1991 Profile.* Burlington, VT: University of Vermont, Department of Psychiatry.

Angold, A., Erkanli, A., Farmer, E. M. Z., Fairbank, J. A., Burns, B. J., Keeler, G., et al. (2002). Psychiatric disorder, impairment, and service use in rural African American and white youth. *Archives of General Psychiatry*, *59*, 893-901.

Bates, J. E., Pettit, G. S., Dodge, K. A., & Ridge, B. (1998). Interaction of temperamental resistance to control and restrictive parenting in the development of externalizing behavior. *Developmental Psychology, 34*, 982-995.

Broidy, L., Tremblay, R., Brame, B., Fergusson, D., Horwood, J., Laird, R., et al. (2003). Developmental trajectories of childhood disruptive behaviors and adolescent delinquency: A six-site, cross-national study. *Developmental Psychology, 39*(2), 222-245.

Coghlan, D., Kiing, J., & Wake, M. (2003). Parents' evaluation of developmental status in the Australian day-care setting: Developmental concerns of parents and careers. *Journal of Pediatric Child Health*, 49-54.

Cuffe, S. P., Waller, J. L., Cuccaro, M. L., Pumariega, A. J., & Garrison, C. Z. (1995). Race and gender differences in the treatment of psychiatric disorders in young adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, *34*(11), 1536-1543.

Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology*, 294-304.

Dodge, K. A., Pettit, G. S., & Bates, J. E. (1994). Socialization mediators of the relation between socioeconomic status and child conduct problems. *Child Development, 65*, 649-665.

Ellingson, K. D., Briggs-Gowans, M. J., Carter, A. S., Horwitz, S. M. (2004). Parent identification of early emerging child behavior problems: Predictors of sharing parental concern with the health providers, *Archives of Pediatrics and Adolescent Medicine*, *158*(8), 766-772

Elster, A., Jarosik, J., VanGeest, J., & Fleming, M. (2003). Racial and ethnic disparities in health care for adolescents: A systematic review of the literature. *Archives of Pediatric and Adolescent Medicine, 157,* 867-874.

Glascoe, F. P. (2003). Parents' evaluation of developmental status: How well do parents' concerns identify children with behavioral and emotional problems? *Clinical Pediatrics*, *42*, 133-138.

Glascoe, F. P., MacLean, W. E., & Stone, W. L. (1991). The importance of parents' concern about their child's behavior. *Clinical Pediatrics*, *30*(1), 8-11.

Goodnight, J. A., Bates, J. E., Pettit, G. S., & Dodge, K. A. (2008). Parents' campaigns to reduce their children's conduct problems: Interactions with temperamental resistance to control. *European Journal of Developmental Science*, *1*(4), 212-271.

Griest, D. L., Forehand, R., Wells, K. C., & McMahon, R. J. (1980). An examination of differences between nonclinic and behavior problem clinic-referred children and their mothers. *Journal of Abnormal Psychology, 89*, 497–500.

Hollingshead, A. A. (1979). Four-factor index of social status. Unpublished manuscript, Yale University, New Haven, CT.

Huber, S., Bookstein, F. L. and Fieder, M. (2010), Socioeconomic status, education, and reproduction in modern women: An evolutionary perspective. Am. J. Hum. Biol., 22: 578–587. doi:10.1002/ajhb.21048

Keiley, M. K., Lofthouse, N., Bates, J. E., Dodge, K. A., & Pettit, G. S. (2003). Differential risks of covarying and pure components in mother and teacher reports of externalizing and internalizing behavior across ages 5 to 14. *Journal of Abnormal Child Psychology*, 267-283.Kim-Cohen, J., Arsenault, L., Caspi, A.,

Mash, E., & Wolfe, D. (2010). *Abnormal child psychology* (4th ed.). Belmont, CA: Wadsworth CENGAGE Learning.

Maughan, B., & Rutter, M. (2001). Antisocial children grown up. In J. Hill & B. Maughan (Eds.), Conduct disorders in childhood and adolescence (pp. 507-552). Cambridge: Cambridge University Press.

Mulhern, S., Dworkin, P. H., & Bernstein, B. (1994). Do parental concerns predict a diagnosis of attention-deficit hyperactivity disorder?. *Developmental and Behavioral Pediatrics*, 348-352.

Patterson, G. R., Debaryshe, B., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist*, *44*, 329-335.Patterson, G. R., &

Pettit, G.S., Keiley, M. K., Laird, R. D., Bates, J. E., & Dodge, K. A. (2007). Predicting the developmental course of mother-reported monitoring across childhood and adolescence from early proactive parenting, child temperament and parents' worries. *Journal of Family Psychology*, *21*, 206-217.

Pettit, G. S. , Laird , R. D. , Dodge, K. A. , Bates, J. E. , & Criss, M. M. (2001). Antecedents and behavior problem outcomes of parental monitoring and psychologically control in early adolescence. *Child Development*, *72*(2), 583-598.

Richman, N., Stevenson, J. E., & Graham, P. J. (1975). Prevalence of behavior problems in 3-year old children: An epidemiological study in a London borough. *Journal of Child Psychology and Psychiatry, 16,* 277-287.

Rothbart, M. K., & Bates, J. E. (2006). Temperament. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Vol. 3, Social, emotional, and personality development (6th ed.)* (pp. 99-166). Hoboken, NJ: John Wiley & Sons Inc.

Schwartz, D., Dodge, K. A., Pettit, G. S., & Bates, J. E. (1997). The Early Socialization of Aggressive Victims of Bullying. *Child Development, 68*(4), 665-675.

Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. *Child Development*, *55*, 1299-1307.

Tomas, M.P., Taylor, A., & Moffit, T.E. (2005). Validity of DSM-IV conduct disorder in 4½–5 year old children: A longitudinal epidemiological study. *American Journal of Psychiatry, 162,* 1108–1117.

Webster-Stratton, C. (1997). Early intervention for families of preschool children with conduct problems. *The Effectiveness of Early Intervention: Second Generation Research*, 429-454.

APPENDIX A

PARENTAL CONCERNS QUESTIONNAIRE

G. Campaign:

Parents usually deal with children's misbehaviors, such as stubbornness and defiance, and other problems, such as being too inactive, through everyday discipline and motivational practices. However, it's also fairly common (as we have learned from the parents in this project in past years) that a parent decides that they will start a campaign--an extended effort--to change the child. Have you made such a decision in the past year?

_____ 1. **1=Yes** **0=No** (If "No," go to item 7)

2. If yes, what behaviors or attitudes did you try to change in your child?

(**1**=**free mention**, **0**=**no mention**) ***No prompts***.

a. ____ aggressiveness

b. ____ rule following, lack of respect

c. ____ lack of friends, overly shy

d. ____ fearfulness, worrying

e. ____ school work

f. ____ other (list) _____

APPENDIX B

CHANGES AND ADJUSTMENTS QUESTIONNAIRE

B. FAMILY CHANGES AND ADJUSTMENTS

1. Has your family undergone any of these changes and adjustments in the past year?

	Score: 0	1
a. moved	No	Yes
b. major repairs/remodeling to home	No	Yes
c. severe and/or frequent illness for child	No	Yes
d. accidents and/or injuries for child	No	Yes
e. other medical problems for child	No	Yes
f. medical problems for close family members	No	Yes
g. death of close family member	No	Yes
h. death of other important person	No	Yes
i. divorce and or separation from you and your husband/wife	No	Yes
j. parent and child were separated (due to illness, divorce, work, etc).	No	Yes
k. money problems	No	Yes
l. legal problems	No	Yes
m. problems and conflicts with relatives	No	Yes
n. birth of a baby	No	Yes
o. problems at school for child	No	Yes
p. problems at work for parents	No	Yes
q. loss of a job	No	Yes
r. remarriage or marital reconciliation	No	Yes

APPENDIX C

INFANT CHARACTERISTICS QUESTIONNAIRE—RETROSPECTIVE FORM

These are questions about the time when your child was 6-12 months old. Please take a moment to think back to this age. Your child probably was beginning to crawl or even walk then and may even have started using words. Your child may have changed quite a bit since that time, so it will be important for you to try and get a picture in your mind of what things were like back then.

On the following questions, please circle the number that describes what your child was like most of the time from 6 to 12 months. "About average" means how you think most babies would be scored.

Persists in playing with objects when told to leave them alone

Continue to go someplace even when told "stop, "come here," "no-no"

Upset when removed from something she or he is interested in but should not be getting into

How much cuddle and snuggle when held

1	2	3	4	5	6	7
A lot			Very little			Seldom

APPENDIX D

CHILD MANAGENT BEHAVIOR QUESTIONNAIRE

11. During the past year what kinds of things have you done to correct your child's behavior? Please circle the number that best describes how often you have used the following methods.

	never	less than once a month	about once a month	about once a week	about every day
a. sent to room or stand in corner ("time-out")	0	1	2	3	4
b. deny privileges (TV, dessert, candy)	0	1	2	3	4
c. tell child how or how not to behave	0	1	2	3	4
d. talk and explain reasons, discuss	0	1	2	3	4
e. yell or scold, raise voice	0	1	2	3	4
f. grab or shake	0	1	2	3	4
g. spank with hand	0	1	2	3	4
h. spank with object (switch or paddle)	0	1	2	3	4
i. get child to apologize; make amends	0	1	2	3	4
j. give child extra chores	0	1	2	3	4
k. threaten child with some punishment	0	1	2	3	4
l. shame or embarrass child	0	1	2	3	4
m. promise treat for good behavior	0	1	2	3	4

Use this space to tell us about other ways you correct your child's behavior that were not mentioned above.

n. _____	0	1	2	3	4
o. _____	0	1	2	3	4