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## Mothers' Versus Fathers' Ratings of Child Behavior Problems

Jessica K. Curley  
*University of South Florida*

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Mothers' Versus Fathers' Ratings of Child Behavior Problems

by

Jessica K. Curley

A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Master of Arts  
Department of Psychology  
College of Arts and Sciences  
University of South Florida

Major Professor: Vicky Phares, Ph.D.  
Tammy Allen, Ph.D.  
Ellis Gesten, Ph.D.

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gender

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## Dedication

First, I would like to dedicate this thesis to my family who without them I would not have had the courage and strength to get to where I am today. Also, I want to thank them for their unconditional support throughout this project. In addition, I would like to dedicate this thesis to my boyfriend, Clay, for his encouragement through the stressful times and always lending a sympathetic ear. Lastly, I would like to dedicate this thesis to my major professor, Vicky Phares, whose knowledge, inspiration, and constant support have greatly impacted my graduate career thus far.

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# Mothers' Versus Fathers' Ratings of Child Behavior Problems

Jessica K. Curley

## ABSTRACT

The goal of this study was to examine how mothers and fathers view children's internalizing and externalizing behavior problems. More specifically, the relationship between certain factors, such as parental psychological symptoms, levels of interparental conflict, characteristics of the behaviors, and discrepancies in mothers' and fathers' ratings of behavior problems were studied in more depth. Using a between subjects, experimental design, mothers and fathers were randomly assigned to view a videotape and rate the behavior of a male or female child acting in either an internalizing, externalizing, or non-clinical manner. Results showed that there were no differences between mothers' and fathers' ratings of the videos and the parents' own psychological symptoms and interparental conflict were not associated with higher ratings of the child in the videos. However, main effects were found for the type of video that the participant watched and the gender of the child in the video. In addition, interactions between the type of video and the gender of the child in the video were found for ratings on the Anxious-Depressed, Withdrawn-Depressed, and Aggressive Behavior subscales of the Child Behavior Checklist (CBCL). In order to explain the present findings, level of contact with children, child socialization, and gender roles were explored in further depth.

## Introduction

Clinicians rely heavily upon the ratings of parents and teachers when assessing children for behavior problems. However, one of the difficulties in gathering information from informants on children is that the ratings of behavior problems often differ markedly. Achenbach, McConaughy, and Howell (1987) proposed that these differences may be due to situational specificity because children's behavior and emotional problems span a wide range of situations, such as at school, home, clinic, and neighborhood. Therefore, raters who see these children in different environments may differ in their ratings of internalizing, externalizing, and overall behavior problems. Children have been known to act graciously and obedient at school, but then act out at home perhaps due to a lack of structure set forth by parents. The opposite can be true as well. The correlation between different informants on children's behavior in similar situations is .60. However, informants' agreement on behavior in different situations, such as home and school is much lower, averaging about .28. The correlation for informants in similar situations is relatively high but it still only accounts for less than 40% of the variance in explaining children's behavior. Thus, it is important to gather information from more than one informant about a child's behavior (Achenbach et al., 1987).

Leaving teachers, mental health workers, and peers aside, mothers and fathers often differ in their ratings of their children's behaviors. Given that the

large majority of interactions between parents and children occur in the home, situational specificity should not account for these differences. Several factors have been shown to influence agreement between mothers and fathers on children's internalizing and externalizing behavior problems. These factors include, the amount of contact with the child, parental psychological symptoms and personality, interparental conflict and family distress, and characteristics of the behavior. Each of these factors will be reviewed in more depth.

### Amount of Contact

It is commonplace to include only mothers in research on children and to place less emphasis on fathers' roles in clinical settings (Phares, 1992; Phares & Compas, 1992; Phares, Lopez, Fields, Kamboukos, & Duhig, 2005). This process may be fueled by the fact that mothers tend to have significantly more contact with their children than do fathers. Additionally, there has been a tendency to rely too heavily upon mothers' ratings for assessment of children's behavior because mothers usually have the most contact with the child.

However, researchers have cautioned against overreliance on mothers' ratings due to the mother's own adjustment problems and psychological symptoms that may influence ratings of behavior problems (Chi & Hinshaw, 2002; Christensen, Phillips, Glasgow, & Johnson, 1983; Kroes, Veerman, & DeBruyn, 2003). Also, mothers who do spend more time with the child tend to report more behavior problems than fathers, especially in very young children (Achenbach, 1992).

Because mothers are more involved in child rearing and since they may have more awareness and insight into their child's behaviors, Christensen and

colleagues (1992) predicted that mothers would overreport child behavior problems in comparison to fathers. Their hypothesis was supported when mothers reported a significantly higher number of negative child behaviors than did fathers. Likewise, Webster-Stratton (1988) found that mothers see their children's behavior problems as occurring more frequently and are more likely to perceive these problems as a threat to their well-being. Mothers may internalize the challenge of raising a child with behavior problems and may become more distressed than fathers simply because mothers spend more time with the child. Another reason for the discrepancy between mothers' and fathers' ratings could be that children obey their fathers more frequently than their mothers and children are more likely to behave appropriately in front of their fathers even when in the presence of their mother (Campbell, 1991). Thus, the fathers' contact time could consist of fewer and less severe child behavioral problems than mothers' contact time and consequently, mothers and fathers may both be portraying their experience of the child's behavior accurately.

As suggested, mothers' greater likelihood of reporting negative behaviors could be due to their increased exposure to their child's behavior. Therefore, mothers may possibly be a more accurate informant of their child's behavior. Additionally, maternal psychopathology puts children at risk for developing the psychological symptoms. Likewise, a mother may be accurately reporting higher levels of behavior problems in their children as suggested by the accuracy model (Richters, 1992). Conversely, mothers' psychological symptoms may distort their perceptions of their child's behaviors, which may lead to an overreporting of

problem behaviors. Richters (1992) called this interpretation the distortion model. Najman et al. (2000) suggested that a combination of the two models is true such that, depressed mothers do report higher levels of child behavior problems but that parental psychopathology may lead to a real increase in child behavior problems. Since mothers have more contact with the child, they may provide more accurate accounts of behavior problems but their ratings may still be distorted. The connection between distortion and parental psychological symptoms is addressed next.

### Parental Psychological Symptoms

Phares, Compas, and Howell (1989) found that the correlation between parents' ratings of behavior problems is influenced by parental psychological symptoms. Several researchers have replicated this finding in mothers but evidence of the same pattern of findings with fathers is mixed. For instance, Phares et al. (1989) found that both mothers' and fathers' reports of their psychological symptoms and their reports of their children's behavior were significantly associated. Webster-Stratton (1988) found that mothers' psychological problems, in particular depression, were better predictors of maternal reports of child behavior problems than teachers' reports of the child's negative behaviors. In contrast, fathers' reports were much less influenced by personal adjustment measures. In addition, significant correlations between fathers' and teachers' reports were present; however, the correlation between mothers' and teachers' reports was small. Yet, the correlation between fathers and teachers was stronger for externalizing than for internalizing disorders in

children when examining the CBCL scales separately. Interestingly, mothers who were observed in the home as exhibiting critical and physically negative behaviors had higher ratings of child behavior problems. However, there were no significant correlations between fathers' reports and paternal behaviors in the home.

Kurdek (2003) studied the connection between personality and psychopathology in relation to parents' ratings of child behavior problems. For fathers, high ratings of child behavior problems were associated with personality characteristics such as high levels of neuroticism, low levels of conscientiousness, and low levels of openness. According to the big five model, individuals high in neuroticism are characterized as having difficulty controlling impulses and dealing with stress. Also, neuroticism has been identified as a facet of depression (Costa & McCrae, 1992). It seems plausible that fathers with these traits would find child behavior problems difficult. Similarly, fathers low on openness and conscientiousness would view unforeseen incidents and interferences in dealing with children as more problematic than those high on these personality traits. Mothers' reports of frequent child behavior problems were also correlated with high levels of neuroticism but not conscientiousness. Unlike fathers, a higher frequency of reported behavior problems was associated with higher levels of openness. Higher levels of openness were characterized as being unconventional and as experiencing positive and negative emotions more intensely. Therefore, mothers with high levels of openness may be unlike conventional mothers who see children's behavior problems as normal and may

be more distressed due to their experience of negative emotions. In short, both fathers' and mothers' personality traits and negative affect are related to their reports of their child behavior problems.

Other researchers have explored the association between maternal depression and high ratings of child behavior problems. In particular, Chi and Hinshaw (2002) investigated the depression distortion hypothesis (Richters, 1992) and found that mothers' depressive symptoms predicted elevated ratings of child ADHD symptoms and contributed to negative biases in reports of their own parenting behavior. This finding that the distortions transcended the maternal reports of their children's behaviors and incorporated views of the mothers' own parenting was unprecedented. Additionally, these biased maternal ratings were even higher than teachers' reports on hyperactivity, inattentiveness, and disruptiveness. One important limitation to research is the elucidation of this depression-distortion hypothesis. Unless experimental manipulations are performed, it will be difficult to assess the accuracy of informants. Child and teacher ratings were used as criterion for maternal ratings in the Chi and Hinshaw (2002) study, but because child behaviors differ across situations, one can only infer who is most accurate in each case (Achenbach et al., 1987). Overall, if elevated emotional distress and depressive symptoms in maternal raters are present, then assessment information should be evaluated with care, and when possible multiple informants should be accessed for information on the child's behavior.

A study by Kroes, Veerman, and De Bruyn (2003) also investigated how to interpret high ratings of problematic child behavior reported by mothers with high levels of psychopathology. This study again looked at Richters' (1992) two competing interpretations, the distortion and the accuracy models. Growing research has shown that parental psychopathology is related to emotional and behavioral problems in their children (accuracy model) and that parental psychopathology leads to distortions in parental reports (distortion model; Kroes et al., 2003). Multiple regression analyses were used to show the amount of variance in reports due to correspondence between mothers and teachers (reflecting accuracy) and the amount of variance due to maternal psychopathology (reflecting distortion). Mothers' symptomatology had a significantly greater distortion effect on the reports of internalizing child behavior problems than for externalizing behavior problems. This distortion was also related to the types of maternal psychopathology. For instance, maternal hostility produced distortions in reporting of externalizing behavior problems, but maternal depression did not.

The distortion model does appear to be related to maternal ratings and the authors suggested some alternative explanations for this association. These were the projection hypothesis (Moretti, Fine, Haley, & Marriage, 1985) and the social attribution theory (Dodge, 1986). The projection hypothesis states that mothers project their own symptoms onto their children. This assumption is more likely with internalizing symptoms since there is a degree of ambiguity and symptoms are not outwardly evident. Along this same line, the social attribution



theory states that ambiguous stimuli are more liable to distortion than more obvious or observable stimuli. Internalizing symptoms are seen as more ambiguous since the symptomatology takes place more within a person and therefore is less resistant to distortion as induced by parental psychopathology. Externalizing symptoms are more readily observable and therefore more resistant to distortion due to parental psychopathology.

Other studies found less evidence for the influence of parental psychological symptoms. Bingham, Loukas, Fitzgerald, and Zucker (2003) studied families with alcoholism and assessed parental ratings of child behaviors using the Child Behavior Checklist (CBCL; Achenbach, 1991). The parental level of functioning due to alcoholism did not impede accurate child behavior ratings. Parents' ratings corresponded to the theoretical structures of their son's behavior problems and accurately reflected the behaviors that each parent experienced. Although parental agreement was still low, mothers' and fathers' ratings accurately indicated differences in the behaviors that they witnessed. This pattern again points to the importance of obtaining multiple informants and including both parents in the assessment and research of children's behavior problems. The authors of this article argued that attention should be paid to individual cases involving excessive impairment in cognitions and perceptions due to long-term alcohol use. Limitations of this study warrant future research because the sample was primarily white and the children were all male. Also, the children were young (aged 3-5) and therefore, it might not be possible to generalize these findings to older children and adolescents. In short, the effects

of parental psychological symptoms on the ratings of child behavior problems are apparent. The theories underlying these effects, such as the distortion hypothesis and the social attribution theory were considered for the present study.

### Interparental Conflict and Family Distress

Marital discord and overall family distress have also been indicated as factors that could influence parental agreement on children's behavior problems. Family distress is particularly heightened when parents must tend to a child with severe emotional and behavioral problems. This process can lead to disagreements between parents on how the child should be cared for and can place an additional strain on a marital relationship. Christensen et al. (1992) studied three kinds of families: those with marital discord and child conduct problems, those with either marital discord or child conduct problems, and those with neither marital discord nor child conduct problems. Parental disagreement increased as levels of family distress increased, such that those families with neither marital problems nor child behavior problems had the lowest level of disagreement between parents. Families with one source of distress (either marital discord or child behavior problems) had less parental disagreement than families with both sources of distress, but were still higher on disagreement than those families with no distress.

Another study by Webster-Stratton (1989) compared maritally supported families, maritally distressed families, and single parent families on parental perceptions of child adjustment, child behavior problems, and parenting

behaviors. Single parent families only included single mothers', not single fathers', reports of children's behavior problems. Overall, single mothers reported more total child behavior problems and higher stress than maritally supported mothers. Both single and maritally distressed mothers reported more stress than maritally supported mothers, with single mothers reporting the most stress. It may be that single mothers were more negative in reports of children's behavior and their own parenting behaviors than maritally distressed mothers because single mothers are interacting more with the child and overcompensating for the lack of another parent whereas the maritally distressed mothers are not necessarily doing the work for both parents. A major limitation to Webster-Stratton's (1989) study is the lack of analyses of mothers' versus fathers' ratings of child behavior problems and the overwhelming focus on mothers' perceptions.

The current study focuses on differences between mothers and fathers and will analyze behavior ratings for both. Frosch and Mangelsdorf (2001) found no relationship between mothers' and fathers' reports of child behavior problems and observed marital behaviors. However, there was an association between observed marital problems and observers' ratings of child behavior problems. The lack of association between parental ratings and marital problems was due to the relatively high level of functioning that the parents reported. Overall, the association between marital discord, family distress, and parental agreement on child behavior problems have been neglected in research (Duhig et al., 2000). The present study will further analyze these relationships.

## Types of Child Behavior

Discrepancies in parental ratings of behavior problems can be examined for the types of child behaviors. Achenbach et al. (1987) discussed two types of behavior problems: overcontrolled versus undercontrolled. Overcontrolled problems are also referred to as internalizing behaviors and include designations such as, withdrawn, anxious, depressed, psychosomatic, and fearful. On the other hand, undercontrolled or externalizing behaviors are described as, antisocial, aggressive, hyperactive, assaultive, and sociopathic. Individual items assessing internalizing or externalizing behavior problems differ in their agreement across parents. Duhig et al. (2000) found that mothers and fathers exhibited fewer differences in their ratings of externalizing behavior problems than ratings of internalizing or total behavior problems. However, the differences across this meta-analysis were small and nonsignificant. As mentioned earlier, the social attribution theory (Dodge, 1986) states that more internalizing or ambiguous stimuli would be more prone to distortion and therefore lower agreement across parents than externalizing or more readily observable stimuli. Researchers have also suggested that internalizing child behaviors are less stable across situations than externalizing behaviors (Stanger & Lewis, 1993). An example of this scenario could be a child, whose mother displays psychological symptoms, may be more likely to show internalizing symptoms when at home and around the mother versus at school. Likewise, if internalizing behaviors are less stable, then the child may display different symptoms when around the mother versus the father.

In addition, parental agreement tends to differ depending on the age of the child. Achenbach et al. (1987) found that parents had more consistent agreement for younger children aged 6 to 11 years old and for externalizing problems than for adolescents and internalizing problems. Lastly, Christensen et al. (1992) studied specific items of the Child Behavior Checklist (CBCL; Achenbach, 1991) and analyzed the association of item characteristics on agreement. Items rated for high objectivity, observability, social undesirability, and disturbance evidenced lower discrepancies in parental ratings than those lower on these characteristics. Since items on the externalizing scales of the CBCL tend to be higher on observability, objectivity, and social undesirability than on the internalizing scales, these items show higher interparental agreement.

### Gender Differences

Inherent differences in how males versus females view behavior problems could exist regardless of parental status. Symptom perception differences have been found between men and women (Macintyre, 1993). Men's self report of common cold symptoms were more severe than those rated by clinicians, whereas women's reports had greater correspondence with clinicians' reports. Therefore, men appeared to exaggerate symptoms more often than women. However, there are differences between perceptions and reporting. For example, women may more often than men report a symptom once it is perceived (Mechanic, 1976). However, this difference gets smaller when objective measures of symptoms are used, when symptoms are more tangible or

observable, and when symptoms are more severe (Mechanic, 1976). This finding supports the social attribution theory regarding the greater agreement of parents on externalizing rather than internalizing behaviors in children.

There also could be differences in how mothers versus fathers view their daughters' versus their sons' behavior and their reactions to such behavior may also differ. Socialization differences were evident in a study that investigated mothers' reactions to videotapes of children engaging in injury-risk activities on a playground (Morrongiello & Dawber, 2000). Mothers of daughters were more likely to rate behaviors as posing a high degree of injury risk and they intervened more quickly than mothers of sons. Also, the speed to intervene was positively associated with their child's injury history, in that children with many injuries in the past had mothers who took longer to intervene in risk taking behaviors. Mothers' verbalizations to children's risk taking were also evaluated. Mothers of daughters gave more cautionary statements and communicated more vulnerability about potential injury whereas mothers of sons gave more statements encouraging risk taking behaviors. This study did not look at fathers' reactions to risk taking behaviors. It would be interesting to see if there would be a higher or similar degree of encouragement to boys by fathers than mothers given the tendency of parents in general to promote aggressive behaviors in their sons (Morrongiello & Dawber, 2000). Perhaps, fathers and mothers would both underreport dangerous or externalizing behaviors problems in boys and show more agreement given that they might have similar views on how boys should behave.

Gender role socialization may account for differences in how mothers versus fathers react to behaviors in their sons versus their daughters. Women are often concerned with relationships and acceptance (Timmers, Fischer, & Manstead, 1998). They may express emotions that strengthen relationships, such as sadness or empathy, and inhibit emotions that could be detrimental to relationships, such as anger or aggressiveness. Men, on the other hand, are more likely to express emotions of control and pride and are less likely to express emotions that make them more vulnerable (Timmers et al., 1998). Therefore, men could view a child's externalizing behavior as less negative given that they value expressions of power and anger. Women might see a child's internalizing behavior as less negative given that they value more vulnerable expressions of sadness and empathy. Gender and socialization differences offer alternative explanations for why parental disagreement on child behavior problems could exist.

### The Present Study

All of these issues relate to how mothers and fathers view children's behavior. More specifically, do mothers and fathers differ in how they rate children's internalizing and externalizing behaviors and do these differences depend upon the level of their own psychological symptoms, levels of interparental conflict, or the characteristics of the behaviors themselves? Because clinicians rely heavily upon parental ratings of child behaviors in assessing child psychopathology, this study attempted to identify those factors

that lead to the greatest disagreement between parents on child behavior problems.

The present study differed from previous research in that it controlled for the amount of contact between parents and the children they were rating. By taking one factor, amount of contact with the target child, out of the equation, it is possible to examine whether differences in ratings are accounted for by other factors. However, amount of general contact that these parents have with children for instance, in their home or profession was still evaluated. In contrast to previous studies that have looked at pairs of parents' ratings of their own child, this study was conducted on mothers and fathers who rated a videotape of a child whom they did not know acting in either an internalizing, externalizing, or non-clinical manner.

By controlling for the amount of contact with and actual knowledge of the child, it was possible to examine if other factors, such as parental psychological symptoms, interparental conflict, and type of behavior, were responsible for mothers' and fathers' disagreement in rating behavior. In addition, by using an experimental design with direct observation, errors due to retrospective ratings from memory were eliminated. The social attribution theory states that ambiguous environmental stimuli are more liable to infer and distort perceptions than more obvious stimuli (Dodge, 1986). Therefore, the first hypothesis stated that there would be smaller differences in ratings between mothers and fathers on externalizing behaviors of children than internalizing behaviors because externalizing behaviors are more observable and more resistant to distortion.



The second hypothesis stated that there would be a significant interaction between parent gender and type of behavior viewed, in that mothers would rate internalizing behavior problems higher than fathers. However, this difference was not expected for externalizing behaviors.

The distortion model states that parental psychological symptoms can inflate or distort ratings of child behavior problems (Richters, 1992). Therefore, the third hypothesis stated that higher levels of parental psychological symptoms and higher levels of interparental conflict in mothers and fathers would be related to higher ratings of children's behavior problems in the videos. In addition, because parents with more psychological symptoms tend to have children with greater psychopathology (Connell & Goodman, 2002; Kane & Garber, 2004), the fourth hypothesis stated that higher ratings of a parent's own child's behavior problems would be related to higher ratings of behavior problems of the child in the video.

## Method

### Participants

A total of 79 mothers and 71 fathers were recruited to participate in the study. A power analysis (with a power of .80, alpha set at .05, and expecting a medium effect size) showed that a minimum of 64 mothers and 64 fathers were needed to test for mean differences adequately (Cohen, 1992). Thus, the sample size should be adequate to test for main effects. However, a post-hoc power analysis revealed that the sample size may not have been adequate to test for an interaction effect. Specifically, in order to test adequately for interaction effects a total of 81 mothers and 81 fathers would have been required. Parents all had at least one child between the ages of 4 and 21. Mothers ranged in age from 18 to 56 years ( $M=42.71$ ,  $SD=7.19$ ) and fathers ranged in age from 25 to 58 years ( $M=45.35$ ,  $SD=6.44$ ). Regarding race and ethnicity, the sample was primarily Caucasian (mothers 90.9%, fathers 93.0%), with some parents of African American (mothers 7.8%, fathers 2.8%), Hispanic (mothers 0%, fathers 2.8%), and Asian (mothers 1.3%, fathers 1.4%) ethnicities. The majority of the sample was married (mothers 86.1%, fathers 95.8%), while the remainder were separated (mothers 1.3%, fathers 1.4%), divorced (mothers 5.1%), or single (mothers 7.6%, fathers 2.8%). Also, the majority of the sample was employed (mothers 77.2%, fathers 95.7%) while the remainder were unemployed (mothers 6.3%, fathers 1.4%), retired (mothers 1.3%) or other (mothers 15.2%, fathers

2.9%), which included being a student. Mothers' mean socioeconomic status (SES, Hollingshead, 1975) was 50.73, and fathers' mean SES was 53.01. Thus the sample showed relatively high SES. A total of 32.9% of mothers reported that either themselves or their child's father had received mental health services in the present or past, while 67.1% said that they had not. A total of 29.6% of fathers reported that either themselves or their child's mother had received mental health services, while 70.4% reported they had not. A total of 26.6% of mothers and 16.9% of fathers reported that at least one of their children had received mental health services. See Table 1 for other mothers' and fathers' demographics.

Overall, mothers and fathers did not differ significantly on socioeconomic status, the number of children they had living in their home, whether they had daughters only, sons only, or both sons and daughters, or how many siblings they had growing up (all  $p$ 's > .05). In addition, they did not differ on the gender and age of their child closest in age to 6 and the total behavior score of this child on the CBCL (all  $p$ 's > .05). They did, however, differ on marital status and age in which more mothers (14%) than fathers (4%;  $\chi^2(1, N=150)=4.16, p=.04$ ) were not married and mothers ( $M=42.71$  years old) tended to be younger than fathers ( $M=45.35$  years old;  $t(148)=-2.36; p=.02$ ). This difference could be due to the fact that single mothers tend to be younger on average.

Table 1. Mothers' and fathers' demographic variables.

Variable	Mothers (N=79)	Fathers (N=71)
Mean age	42.71 (7.19)	45.35 (6.44)
Mean number of children	2.53 (1.08)	2.49 (0.98)
Mean percentage of professional involvement with children	24.31 (38.34)	8.62 (22.70)
Mean experience with children	7.59 (2.52)	6.30 (2.43)
Mean weekday time	5.59 (3.21)	4.41 (3.70)
Mean weekend time	10.20 (3.54)	8.15 (4.48)
Mean SES	50.73 (8.88)	53.01 (9.11)
Race/Ethnicity (%)		
Caucasian	90.9	93.0
African American	7.8	2.8
Hispanic	0.0	2.8
Asian	1.3	1.4
Marital Status (%)		
Married	86.1	95.8
Separated	1.3	1.4
Single, with partner	5.1	1.4
Divorced	5.1	0.0
Single, no partner	2.5	1.4
Gender child (%)		
Male	59.7	57.7
Female	40.3	42.3
Type of children (%)		
Sons only	27.3	27.1
Daughters only	13.0	15.7
Both	59.7	57.1

Note: Standard deviations are in parentheses.

## Measures

Interview/Videotape Stimulus. Videotapes were developed by the researchers and included an 8 year old boy and an 8 year old girl child actor being interviewed for five minutes using questions from the Semistructured Clinical Interview for Children and Adolescents (SCICA, McConaughy & Achenbach, 2001; Appendix A). The age of eight was chosen because children can still show visible manifestations of their behavior (e.g. throwing a toy, turning away from the interviewer and sulking) but can also verbalize their own experiences (e.g. reporting anger or sadness). The SCICA is a protocol of questions pertaining to a child's school, activities, friends, family relations, fantasies, self perceptions, and parent/teacher problems. The SCICA can be used with children from ages 6 to 18. Mean test-retest reliability over a 12-day period was .78 across empirically based syndrome scales and broad DSM-oriented scales. For 6-11-year-olds, internal consistency reliability ranged from .61-.88 across empirically based syndrome scales and from .58-.74 across broad DSM-oriented scales. The SCICA was chosen so that extensive information could be conveyed through the videotaped observations-both from what the child says and how the child behaves.

Child Behavior. The participants rated the videotape using 4 subscales from the Child Behavior Checklist (CBCL, Achenbach & Rescorla, 2001; Appendix B). The CBCL is a parent-report measure of child behavior problems for children ranging in age from 6-18 years old. The four subscales that were used were the Anxious/Depressed subscale, the Withdrawn/Depressed

subscale, the Aggressive Behavior subscale, and the Rule Breaking Behavior subscale. These four subscales were chosen to provide a thorough assessment of internalizing (anxious-depressed, withdrawn-depressed) and externalizing (aggressive behavior, rule-breaking behavior) symptoms.

Participants also rated their own child on the entire CBCL (not included in appendix due to copyright issues). If the parent had more than one child, then the child closest in age to 6 was rated. The age of six was chosen because children can show visible manifestations of their behavior, can verbalize their own experiences, and are similar in age and development to the child in the video. If the child closest in age to 6 was younger than 6, then the preschool version of the CBCL (Child Behavior Checklist for Ages 1 ½ to 5) was used. If the child closest in age to 6 was older than 18 then the adult version of the CBCL (Adult Behavior Checklist for Ages 18 to 59) was used. All of these measures lead to T-scores of internalizing, externalizing, and total behavior problems. Higher scores indicate higher child behavior problems. The CBCL has good psychometric properties. The internal consistency reliability ranges from .80-.94 for the broadband Internalizing, Externalizing, and Total Behavior Problems and the test-retest reliability over a two-week period ranges from .82-.91 for the four subscales used for rating the child in the video (Achenbach & Rescorla, 2001). In the current sample, internal consistencies ranged from .93-.94.

Parental Psychological Symptoms. In addition, participants were asked to report on their own psychological symptoms using the Brief Symptom Inventory (BSI, Derogatis, 1993; not included in appendix due to copyright issues). The

BSI is a self-report measure used to identify clinically relevant psychological symptoms in adolescents and adults. It contains 53 items covering nine symptom dimensions: Somatization, Obsession-Compulsion, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism; and three global indices of distress: Global Severity Index, Positive Symptom Distress Index, and Positive Symptom Total. These indices measure current level of symptomatology, intensity of symptoms, and number of reported symptoms, respectively. Good internal consistency (.71-.85) is reported for the nine dimensions. Test-retest reliability for the nine dimensions ranged from .68-.91 and test-retest reliability for the three Global Indices ranged from .87-.90. In the current sample, the internal consistency was .92. The Global Severity Index was used for this study. Higher scores on the BSI indicate greater psychological symptoms.

Interparental Conflict. Participants were also asked to report on the levels of interparental conflict in their family using the O'Leary Porter Scale (OPS, Porter & O'Leary, 1980; Appendix C). This measure is a 10-item parent-report measure on the frequency of various forms of marital hostility, including quarrels, sarcasm, and physical abuse, that take place in front of the child. Higher scores on the OPS indicate greater interparental conflict. Internal consistency reliability was .86 and test-retest reliability over a two-week period was .96. One item about father/husband's role in the family (item #11) has been added to balance out the inclusion of item #4 about mothers. Internal consistency remains high

with the addition of this item (Epstein, Renk, Duhig, Bosco, & Phares, 2004). In the current sample, the internal consistency was .80.

Demographics and Time Spent. Participants were also asked to fill out a basic demographic questionnaire including questions about the amount of time spent with their own child(ren), number of siblings in their childhood family, professional involvement, and general amount of contact with children (Appendix D).

### Procedures

Development of Videos and Pilot Study. The development of the videos began with the selection of two child actors, one male and one female, both around the age of 8. The boy child actor was the brother of a research assistant in the research group. The mother and actor signed a brief informed consent before coming in to tape the video. The boy child actor, his mother, and his sister came into the lab for the training session for the development of the video. He was instructed to think of a time when he was really sad and upset in order to act in an internalizing manner. He then practiced answering the questions from the SCICA (Appendix A) acting in this manner. Next, he was instructed to think of a child who is very active, “bouncing off the walls”, and who can’t sit still, in order to act in an externalizing manner. He then practiced answering the same questions acting in this manner. Finally, he was instructed to answer the questions acting as he normally would, neither upset, nor too active. After each set of questions were asked, the principal investigator and the child actor discussed how he would act in a free play situation in each of these manners.



The child actor and the principal investigator (PI) then taped a rehearsal of the PI interviewing the boy child actor and three minutes of free play behavior while acting in each of three manners. The taping was held in one of the child rooms in the university psychological clinic. The room contained a long table in which the boy child actor sat in view of the camera and the PI sat behind the camera. The room also contained several toys, including toy cars, board games, and coloring book for the child actor to engage with during free play. A week later, the child actor and the PI taped the final videos. Two different segments of the externalizing free play were taped. One was thought to be more intense than the other. The more intense segment was used in the initial pilot study.

The girl child actor was selected due to her similarity in appearance and age of the boy child actor. The girl child actor was the daughter of a departmental faculty member. Again, the parent and daughter signed an informed consent form before coming in to tape the video. The girl child actor and the PI practiced each of the segments in the same manner as the boy child actor. In addition, the girl watched the segments of the boy child actor in order to match her behaviors and intensities of behaviors to his. Later, the girl child actor and the PI taped the final video segments of the interview and free play in each of the three manners. Both child actors were given gift certificates for their participation.

The pilot study began after several copies of the videos of the boy child actor segments and girl child actor segments were made. Ten upper level doctoral clinical psychology graduate students who had clinical and research

experience with children were recruited. The participants (N=10) were all female. Nine were Caucasian (90%) and one was African American (10%). Six participants already had their Master's Degree and four were currently working on their Master's thesis. They had a mean of 1.75 years (SD=1.25) working with child clients and a mean of 3.40 years (SD=2.58) of professional experience with children. They had taken a mean of 2.70 (SD=1.89) classes in child development and psychopathology. Each participant was given a copy of the video that contained all six segments (boy-internalizing, boy-externalizing, boy-nonclinical, girl-internalizing, girl-externalizing, girl-nonclinical) and a rating form (Appendix E) that asked to rate whether the segment showed internalizing, externalizing, or non-clinical behavior and to rate the intensity of the behavior in each segment. The rating form comprised of a forced-choice design in which the participants could only rate one boy child actor segment internalizing, one externalizing, and one non-clinical. Each category needed to be used once and only once. The same rules applied to the girls' segments. Based on the pilot study results, there was 100% agreement across all ten participants on whether the video segments showed internalizing, externalizing, or non-clinical behavior. Using a dependent t-test, the intensities between the participants' ratings of the girl-internalizing and boy-internalizing, girl-externalizing and boy-externalizing, and girl-nonclinical and boy-nonclinical behaviors were compared. Non-significant results between boy and girl intensities were expected. There were non-significant differences between the intensity ratings of the girl and boy internalizing segments ( $t(9)=-.612$ ,  $p=.555$ ) and the intensity ratings of the girl

and boy non-clinical segments ( $t(9)=1.00$ ,  $p=.343$ ). However, there were significant differences between the intensity ratings of the girl and boy externalizing segments ( $t(9)=-6.00$ ,  $p<.01$ ), with higher ratings for the boy.

Because there were significant results between the girl and boy externalizing intensity ratings, the video for the boy acting in an externalizing manner was modified and re-piloted. Two minutes of the less intense free play of the boy externalizing behavior and one minute of the more intense free play were combined, instead of the full three minutes of the more intense free play that was initially piloted. Using the same ten participants, a video with the boy externalizing interview and free play segment was distributed and the participants were again asked to rate whether the segment showed internalizing, externalizing, or non-clinical behavior and to rate the intensity of the behavior on an additional rating form (Appendix F). Again, there was 100% agreement across participants that the boy segment showed externalizing behavior. There also were non-significant results between the girl-externalizing segment and the modified boy-externalizing segment ( $t(9)=-.429$ ,  $p=.678$ ). Rather than have the participants rate the video within-subjects, perhaps, the participants should have rated the videos between-subjects in order to correspond more closely to the design of the actual study. In short, the pilot study was successful and actual data collection using the modified videos began.

Present Study. Mothers and fathers were recruited via flyers throughout the campus of a southeastern university and around the community, through an online participant pool through the Psychology Department at the university, via

letters that were sent out to researchers' friends and family, and through word of mouth. Participants who were students in the Psychology Department were given extra credit points towards one of their psychology courses for partaking in the study. If participants were not students, then they were entered into a raffle to receive one of two \$50 cash prizes, or a \$100 cash prize. To meet eligibility, the participant needed to be a parent of a child. A "parent" was defined as an individual who has at least monthly face-to-face contact with the child. Thus, biological parents, step-parents, and adoptive parents were all included if they had sufficient contact with their child. It is important to note that parents' inclusion was based on the age of their own child. Parents were screened to ensure that they had at least one child who was between 4 and 21 years old.

Once mothers and fathers were recruited and had met the criteria to participate (i.e., they must be a parent of at least one child between the ages of 4 and 21 and must have at least monthly face-to-face contact with the child) they were asked to sign the informed consent form (Appendix G) and then were assigned to view a videotape. Using a between subjects, experimental design, they were randomly assigned to one of 6 conditions that reflect the type of video: girl-internalizing, girl-externalizing, girl-nonclinical, boy-internalizing, boy-externalizing, and boy-nonclinical. After viewing the video, they rated the child in the video using the 4 subscales from the CBCL. After they completed the behavior ratings, they were asked to complete the demographic questionnaire, the BSI, and the OPS. Additionally, they were asked to rate their own child using the CBCL. If they had more than one child, they were asked to rate the child that

is closest in age to 6 years old but also still within the 4-21 age range. These measures were given after the videotape and after completion of the behavior ratings in order to reduce demand characteristics on their behavioral ratings of the child actor on the CBCL. Participants viewed the videotapes either alone or in small groups (with instructions to remain silent during viewing) and if in small groups they completed their measures individually in the same room. At the completion of the study, the participants were given assigned extra credit points for their participation in the study or gave their name, address, email, and phone number on a separate sheet of paper from their materials to be entered into the raffle. They were given a debriefing form (Appendix H), and thanked for their participation.

Because of some difficulty in recruiting participants to participate in person, some participants participated by having the materials sent to them by mail. One mother (1.3%) and six fathers (8.5%) were mailed packets containing detailed instructions, a DVD of one of the 6 segments, the informed consent, the 56 behavioral items from the CBCL, the demographic form, the BSI, the OPS, the CBCL to rate their own child, and a debriefing form. In addition, an index card was included for the participant to write their name, address, email, and phone number so that they could be entered into the raffle. A postage paid envelope was also enclosed for the participant to send back all completed materials.

Participants who completed the study in person versus those who completed the study via mail did not differ on many variables including age, socioeconomic status, number of children, number of siblings growing up,

percentage of professional involvement spent with children, amount of experience with children other than their own, their child's age and gender closest to six, their child's total behavior problems, their marital status, and the type of children they have (all  $p$ 's > .05). There was a significant difference between the number of mothers and the number of fathers recruited by mail because fathers were more difficult to recruit in person and therefore, the researchers were able to recruit more fathers by allowing them to participate on their own time in their own home ( $p < .05$ ).

At least 10 mothers and 10 fathers were randomly assigned, viewed, and rated each video. A total of 11 mothers (13.9%) and 11 fathers (15.5%) viewed the girl-internalizing video, 13 mothers (16.5%) and 10 fathers (14.1%) viewed the girl-externalizing video, 10 mothers (12.7%) and 11 fathers (15.5%) viewed the girl-nonclinical video, 17 mothers (21.5%) and 16 fathers (22.5%) viewed the boy-internalizing video, 16 mothers (20.3%) and 13 fathers (18.3%) viewed the boy-externalizing video and, 12 mothers (15.2%) and 10 fathers (14.1%) viewed the boy-nonclinical video.

## Results

### Randomization and Reliability Checks

ANOVAs and Chi-square tests were performed in order to verify that random assignment was successful in equalizing parental characteristics across the groups. It was determined that the parents' gender, age, marital status, socioeconomic status, number of children they had, number of siblings they had, percentage of professional involvement spent working with children, amount of experience they had with children other than their own, the gender of their child closest in age to 6, and their child's total behavior problems (total T-score on CBCL) did not differ depending on which video they rated (all  $p$ 's > .05; See Table 2). However, the age of participants' child closest to 6 did differ between videos ( $p < .01$ ). Therefore, follow up analyses were performed and Pearson correlations showed that the child's age closest to 6 was not related to any of the dependent variables (the four subscale ratings of the videos, the internalizing mean, the externalizing mean, and the total mean). In addition, the parents' externalizing ratings of their own child on the CBCL did differ depending on which video they saw, such that those who saw the boy-nonclinical video had a higher externalizing T-scores for their own child versus those who saw the girl-externalizing video ( $p < .05$ ). This result could be the case of randomization not being completely effective. It also could be because the parent rated their own child after viewing the video and the boy-nonclinical video primed the parent to

view their own child more severely. This question should be followed up in future research. Overall, randomization across videos appeared to be effective other than these minor differences which do not appear to be related to the dependent variables in the study.

Table 2. Analysis of variance and chi-square tests to determine whether random assignment across videos was effective.

Variable	Total df	F	p
Age	149	.99	.43
SES	138	2.21	.06
Number children	149	.77	.57
Number siblings	149	1.40	.23
Professional involvement	142	.63	.68
Experience with children	148	.08	.99
Age of child	147	4.19	.00**
Internalizing behavior	147	.40	.85
Externalizing behavior	147	2.47	.04*
Total behavior	147	1.93	.09

Variable	Df	X <sup>2</sup>	p
Parent gender	5	.54	.99
Marital status	5	7.73	.17
Gender of child	5	10.08	.07

\* p<.05, \*\*p<.01

### Differences Between Mothers and Fathers on Video Ratings

Descriptive statistics for mothers' and fathers' mean subscale, internalizing, and externalizing ratings of the videos are provided in Table 3. To test the first two hypotheses, a series of four 3x2x2 multivariate analyses of variance (MANOVAs) were used because the dependent variables, the scores of the four subscales of the CBCL, show multicollinearity with each other. The factors include: type of video (internalizing versus externalizing versus non-



Table 3. Mothers' and fathers' descriptive statistics of their mean ratings averaged across the six videos.

	Mothers		Fathers	
	Mean	SD	Mean	SD
Girl Internalizing				
Anxious-Dep	0.45	0.29	0.47	0.53
Withdrawn-Dep	1.32	0.42	1.56	0.37
Rule-Breaking	0.16	0.17	0.21	0.28
Aggressive-Beh	0.29	0.33	0.29	0.35
Internalizing	0.78	0.26	0.88	0.40
Externalizing	0.22	0.24	0.25	0.30
Girl Externalizing				
Anxious-Dep	0.57	0.30	0.63	0.24
Withdrawn-Dep	0.33	0.23	0.42	0.26
Rule-Breaking	0.27	0.14	0.38	0.44
Aggressive-Beh	0.74	0.32	0.89	0.54
Internalizing	0.48	0.25	0.54	0.22
Externalizing	0.51	0.21	0.65	0.46
Girl Non-Clinical				
Anxious-Dep	0.32	0.12	0.31	0.25
Withdrawn-Dep	0.16	0.21	0.10	0.21
Rule-Breaking	0.19	0.16	0.18	0.22
Aggressive-Beh	0.12	0.13	0.23	0.41
Internalizing	0.26	0.14	0.23	0.23
Externalizing	0.16	0.14	0.21	0.31
Boy Internalizing				
Anxious-Dep	0.95	0.57	0.71	0.39
Withdrawn-Dep	1.22	0.52	1.08	0.43
Rule-Breaking	0.15	0.18	0.08	0.12
Aggressive-Beh	0.19	0.19	0.21	0.24
Internalizing	1.05	0.51	0.85	0.38
Externalizing	0.17	0.16	0.15	0.17
Boy Externalizing				
Anxious-Dep	0.42	0.35	0.44	0.37
Withdrawn-Dep	0.37	0.27	0.36	0.23
Rule-Breaking	0.50	0.42	0.38	0.20
Aggressive-Beh	1.05	0.52	1.04	0.46
Internalizing	0.40	0.30	0.41	0.28
Externalizing	0.78	0.44	0.72	0.32
Boy Non-Clinical				
Anxious-Dep	0.27	0.13	0.70	0.39
Withdrawn-Dep	0.06	0.10	0.33	0.35
Rule-Breaking	0.13	0.07	0.34	0.25
Aggressive-Beh	0.26	0.25	0.79	0.59
Internalizing	0.19	0.10	0.56	0.30
Externalizing	0.20	0.15	0.57	0.41

clinical behaviors), parent gender (mother versus father), and child gender (boy child actor versus girl child actor).

The first hypothesis stated that there would be smaller differences in ratings between mothers and fathers on externalizing behaviors of children than internalizing behaviors because externalizing behaviors are more observable and more resistant to distortion. Therefore, it was expected that there would be a significant difference between mothers' and fathers' ratings of the internalizing behavior videos but there would not be a significant difference for the externalizing behavior videos. The second hypothesis stated that there would be a significant interaction between parent gender and type of behavior in the video whereby, mothers would have significantly higher ratings on the CBCL subscales for the internalizing behavior videos compared with the fathers but there would not be a significant difference between mothers and fathers on their ratings for the externalizing behavior videos. Although the overall MANOVA was significant ( $F(4, 135)=141.35, p<.001$ ), results showed that there was no main effect for parent gender ( $F(4, 135)=1.50, p=.21$ ) nor was there a significant interaction for parent gender and type of video ( $F(8, 270)=1.04, p=.41$ ). See Table 4. Thus, hypothesis 1 was not supported in that there were no differences between mothers and fathers on their ratings of the internalizing videos. Likewise, hypothesis 2 was not supported given that there was not a significant interaction between parent gender and type of video in which mothers rated internalizing videos higher than fathers.

Table 4. Multivariate and univariate F values for Parent Gender by Type of Video by Child Gender of Video interactions for parents' ratings of the video on the four subscales of the CBCL.

Variable	Multivariate		Univariate		
	All	Anxious Depressed	Withdrawn Depressed	Rule Breaking	Aggressive Behavior
Parent Gender (P)	1.50	0.68	1.31	0.56	4.55*
Type of Video (T)	55.23***	5.15**	163.51***	12.52***	48.16***
Child Gender of Video (C)	5.47***	4.00*	2.06	0.45	6.68*
P by T	1.04	2.32	0.11	0.65	2.16
P by C	0.99	0.12	0.24	0.32	.54
T by C	8.25***	7.14**	3.82*	1.79	4.40*
P by T by C	1.38	2.71	3.33*	2.68	1.81

\*p<.05 \*\*p<.01 \*\*\*p<.001

The following results are summarized from the MANOVAs but were not part of the hypothesis testing. There was a significant main effect for the type of video ( $F(8, 270)=55.23, p<.001$ ) and the child's gender in the video ( $F(4, 135)=5.47, p<.001$ ). Follow-up univariate tests showed that all subscale mean scores were significant for the type of video: Anxious-Depressed ( $F(2, 138)=5.15, p<.01$ ), Withdrawn-Depressed ( $F(2, 138)=163.51, p<.001$ ), Rule-Breaking ( $F(2, 138)=12.52, p<.001$ ), and Aggressive Behavior ( $F(2, 138)=48.16, p<.001$ ). The Anxious-Depressed subscale mean ( $F(1, 138)=4.00, p<.05$ ) and the Aggressive Behavior subscale mean ( $F(1, 138)=6.68, p<.05$ ) were found to be

significant for the child's gender in the video. See Table 4. Tukey post hoc follow-up tests for type of video showed that on the Anxious-Depressed subscale, the internalizing videos ( $M=0.64$ ,  $SE=0.05$ ) differed significantly from the non-clinical videos ( $M=0.40$ ,  $SE=0.06$ ) and the externalizing videos ( $M=0.52$ ,  $SE=0.05$ ) but the non-clinical videos and the externalizing videos did not differ significantly. Thus, the internalizing videos were rated as showing more anxious-depressed symptoms than the other two videos.

On the Withdrawn-Depressed subscale, the nonclinical videos ( $M=0.16$ ,  $SE=0.05$ ), the externalizing videos ( $M=0.37$ ,  $SE=0.05$ ) and the internalizing videos ( $M=1.29$ ,  $SE=0.05$ ) all differed significantly from each other. Again, the internalizing videos were rated as showing the most withdrawn-depressed symptoms overall and the externalizing videos were rated as showing more withdrawn-depressed symptoms than the non-clinical videos.

On the Rule-Breaking subscale, the internalizing videos ( $M=0.15$ ,  $SE=0.03$ ) and the nonclinical videos ( $M=0.21$ ,  $SE=0.04$ ) differed significantly from the externalizing videos ( $M=0.38$ ,  $SE=0.03$ ) but the internalizing videos did not differ significantly from the nonclinical videos. This finding suggests that the externalizing videos were rated as showing more rule-breaking symptoms than the other videos.

Lastly, on the Aggressive Behavior subscale, the internalizing videos ( $M=0.24$ ,  $SE=0.05$ ) and the nonclinical videos ( $M=0.35$ ,  $SE=0.06$ ) differed significantly from the externalizing videos ( $M=0.93$ ,  $SE=0.05$ ) but the internalizing videos did not differ significantly from the nonclinical videos. Thus, the

externalizing videos were rated as showing more aggressive behavior symptoms than the other videos.

Tukey post hoc follow-up tests for child gender show that on the Anxious-Depressed subscale, the boy child actor videos ( $M=0.58$ ,  $SE=0.04$ ) were rated significantly higher than girl child actor videos ( $M=.46$ ,  $SE=0.05$ ). On the Aggressive Behavior subscale, again the boy child actor videos ( $M=0.59$ ,  $SE=0.04$ ) were rated significantly higher than the girl child actor videos ( $M=0.43$ ,  $SE=0.05$ ). Therefore, the boy's behavior was seen as more extreme overall.

A significant interaction between the type of video and the child's gender was found ( $F(8,270)=8.25$ ,  $p<.001$ ). Univariate follow-up tests showed that the interaction was significant for the Anxious-Depressed subscale mean ( $F(2,138)=7.14$ ,  $p<.01$ ), the Withdrawn-Depressed subscale mean ( $F(2,138)=3.82$ ,  $p<.05$ ), and the Aggressive Behavior subscale mean ( $F(2,138)=4.40$ ,  $p<.05$ ). Tukey post hoc tests showed that the participants' ratings on the Anxious-Depressed subscale for the boy-internalizing video ( $M=.83$ ,  $SE=.07$ ) were significantly higher than the girl-nonclinical video ( $M=.315$ ,  $SE=.08$ ), the boy-externalizing video ( $M=.43$ ,  $SE=.07$ ), the girl-internalizing video ( $M=.46$ ,  $SE=.08$ ), and the boy-nonclinical video ( $M=.47$ ,  $SE=.08$ ). However, ratings on the boy-internalizing video did not differ significantly from the ratings on the girl-externalizing video ( $M=.60$ ,  $SE=.08$ ). See Table 5 and Figure 1. Thus, participants rated the boy-internalizing video as showing more anxious-depressed symptoms than the girl-internalizing video but similar amounts of symptoms to the girl-externalizing video.

Table 5. Tukey post hoc tests for the Type of Video by Child Gender interaction across the Anxious-Depressed, Withdrawn-Depressed, and Aggressive Behavior subscale scores.

Video	Anxious-Depressed Mean			
	1	2	3	4
Girl-NC	.32			
Boy-Ext	.43			
Girl-Int	.46			
Boy-NC	.47			
Girl-Ext	.60	.60		
Boy-Int		.83		

Video	Withdrawn-Depressed Mean			
	1	2	3	4
Girl-NC	.13			
Boy-NC	.18			
Boy-Ext	.36			
Girl-Ext	.37			
Boy-Int		1.15		
Girl-Int			1.44	

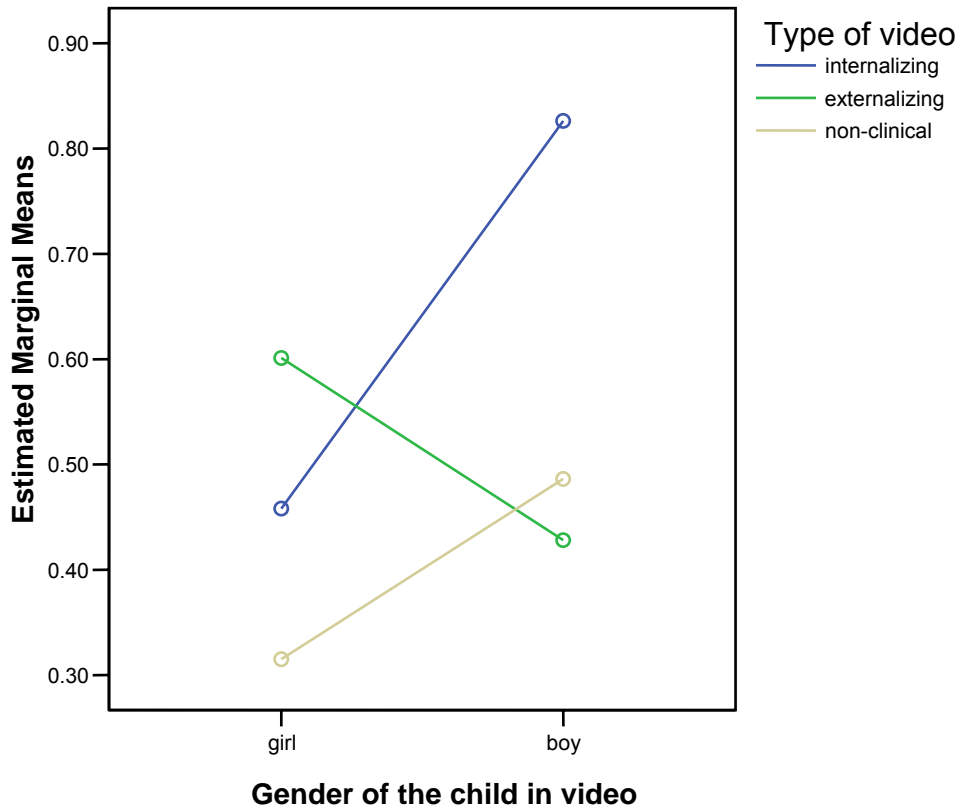
  

Video	Aggressive-Behavior Mean			
	1	2	3	4
Girl-NC	.18			
Boy-Int	.20	.20		
Girl-Int	.29	.29		
Boy-NC		.50	.50	
Girl-Ext			.81	.81
Boy-Ext				1.05

Tukey post hoc tests also showed that participants' ratings on the Withdrawn-Depressed subscale for the girl-internalizing video ( $M=1.44$ ,  $SE=.07$ ) were significantly higher than the girl-nonclinical video ( $M=.13$ ,  $SE=.07$ ), the boy-nonclinical video ( $M=.18$ ,  $SE=.07$ ), the boy-externalizing video ( $M=.36$ ,  $SE=.06$ ), the girl-externalizing video ( $M=.37$ ,  $SE=.07$ ), and the boy-internalizing video ( $M=1.15$ ,  $SE=.06$ ). The ratings on the boy-internalizing video were also found to

be significantly higher than the girl-nonclinical, the boy-nonclinical, the boy-externalizing, and the girl-externalizing videos but still less than the girl-

Figure 1. Interaction between type of video and child gender for participants' ratings on the Anxious-Depressed subscale of the CBCL.

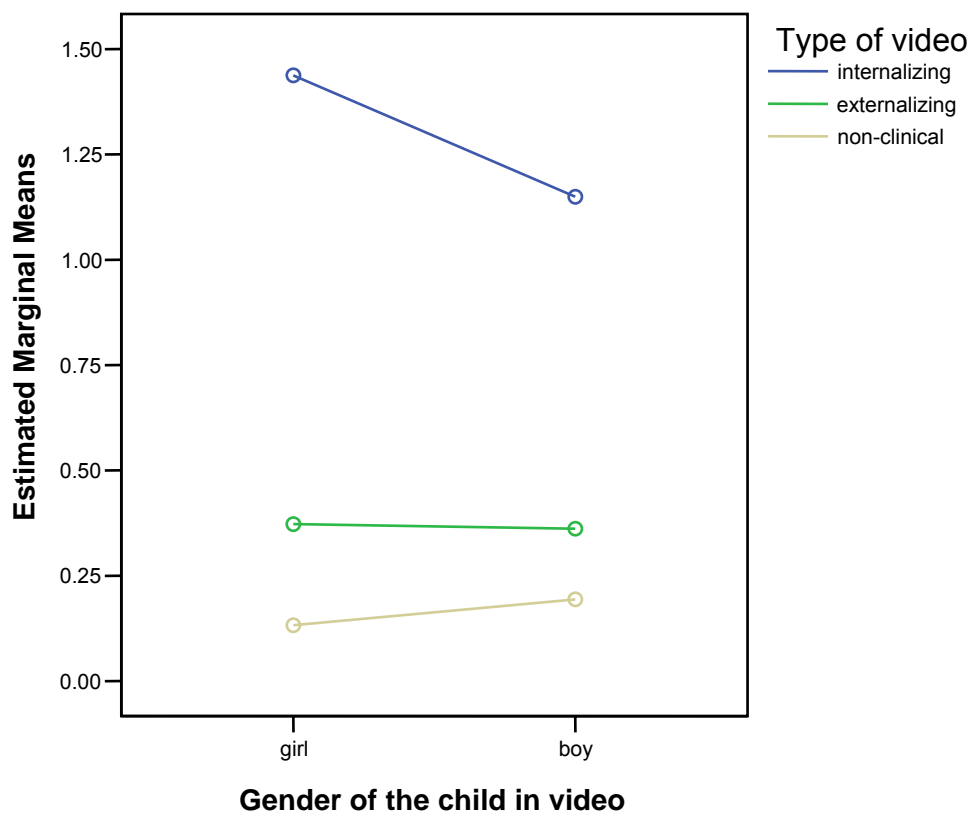


internalizing video. See Table 5 and Figure 2. Thus, participants rated the girl-internalizing video as showing more withdrawn-depressed symptoms than the boy-internalizing video but overall these two videos were rated higher on withdrawn-depressed symptoms than any of the other videos.

Tukey post hoc tests showed that participants' ratings on the Aggressive-Behavior subscale for the boy-externalizing video ( $M=1.05$ ,  $SE=.07$ ) were

significantly higher than the girl-nonclinical video ( $M=.18$ ,  $SE=.08$ ), the boy-internalizing video ( $M=.20$ ,  $SE=.07$ ), the girl-internalizing video ( $M=.29$ ,  $SE=.08$ ), and the boy-nonclinical video ( $M=.50$ ,  $SE=.08$ ), but not the girl-externalizing

Figure 2. Interaction between type of video and child gender for participants' ratings on the Anxious-Depressed subscale of the CBCL.

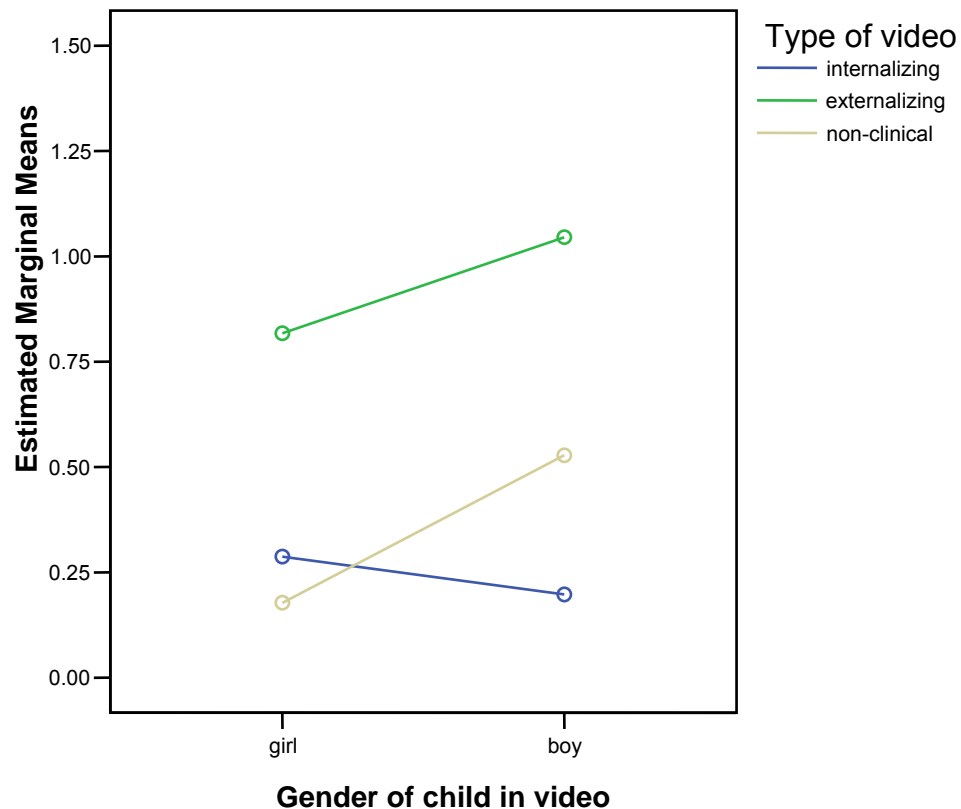


video ( $M=.81$ ,  $SE=.08$ ). The ratings on the girl-externalizing video were found to be significantly higher than the girl-nonclinical, boy-internalizing, and girl-internalizing video but not higher than the boy-nonclinical video. Lastly, the boy-nonclinical video was found to be significantly higher than the girl-nonclinical



video but not higher than the boy or girl internalizing videos. See Table 5 and Figure 3. Thus, the boy-externalizing and the girl-externalizing videos were rated higher on aggressive behavior symptoms than any of the other videos. However, while the boy-externalizing video was rated higher than the boy-nonclinical video

Figure 3. Interaction between type of video and child gender for participants' ratings on the Aggressive Behavior subscale of the CBCL.



on aggressive behavior symptoms, there was no difference in ratings between the girl-externalizing and the boy-nonclinical videos.

In order to get a global internalizing mean, externalizing mean, and total mean the participants' ratings on the internalizing subscale scores (Anxious-

Depressed and Withdrawn-Depressed) were combined, the participants' ratings on the externalizing subscale scores (Rule Breaking Behavior and Aggressive Behavior) were combined, and the participants' ratings on all of the subscale scores were combined. Another 2x2x3 MANOVA was run looking at these three dependent variables. The overall MANOVA was found to be significant ( $F(3,136)=158.16, p<.001$ ). Results from this MANOVA (Table 6) showed a significant main effect for the type of video ( $F(6,272)=41.42, p<.001$ ) and a significant interaction between type of video and child gender of the video ( $F(6,272)=3.65, p<.01$ ).

Table 6. Multivariate and univariate F values for Parent Gender by Type of Video by Child Gender of Video interactions for the Internalizing Mean, Externalizing Mean, and Total Mean of the parents' ratings.

Variable	Multivariate		Univariate	
	All	Internalizing Mean	Externalizing Mean	Total Mean
Parent Gender (P)	1.25	1.07	2.99	2.74
Type of Video (T)	41.42***	44.91***	36.77***	14.30***
Child Gender of Video (C)	2.14	0.76	4.01*	3.16
P by T	1.10	1.45	1.70	2.03
P by C	0.86	0.04	0.07	0.05
T by C	3.65**	2.24	3.50*	1.36
P by T by C	1.99	3.64*	2.44	3.34*

\* $p<.05$  \*\* $p<.01$  \*\*\* $p<.001$

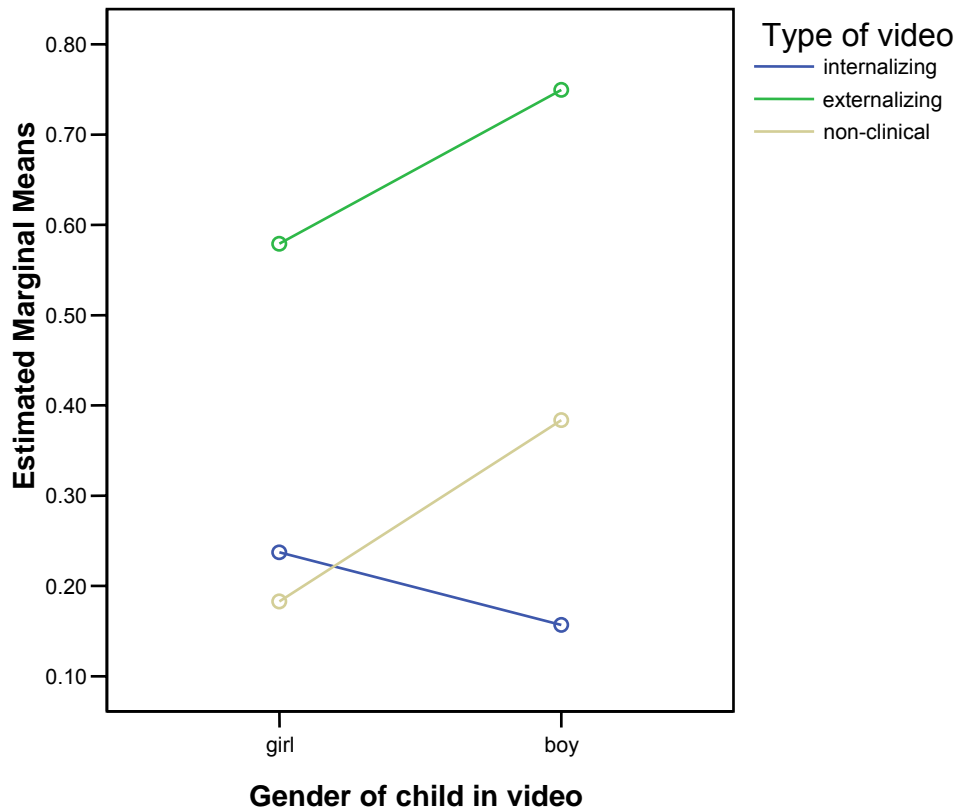
Follow-up univariate tests showed that the Internalizing Mean, Externalizing Mean, and Total Mean were significant for the type of video ( $F(2,138)=44.91,$

$p < .001$ ), ( $F(2, 138) = 36.77$ ,  $p < .001$ ), ( $F(2, 138) = 14.30$ ,  $p < .001$ ), respectively) and the Externalizing Mean was significant for the interaction between type of video and child gender of the video ( $F(2, 138) = 3.50$ ,  $p < .05$ ). Tukey post hoc tests showed that the participants' ratings on the Internalizing Mean for the internalizing videos ( $M = .89$ ,  $SE = .04$ ) were significantly higher than the nonclinical videos ( $M = .31$ ,  $SE = .05$ ) and the externalizing videos ( $M = .46$ ,  $SE = .04$ ). On the Externalizing Mean, participants' ratings for the externalizing videos ( $M = .66$ ,  $SE = .04$ ) were significantly higher than the internalizing videos ( $M = .20$ ,  $SE = .04$ ) and the nonclinical videos ( $M = .28$ ,  $SE = .05$ ). On the Total Mean, participants' ratings for the externalizing videos ( $M = .59$ ,  $SE = .04$ ) were significantly higher than the internalizing videos ( $M = .46$ ,  $SE = .04$ ) and the nonclinical videos ( $M = .29$ ,  $SE = .04$ ). Additionally, the internalizing videos were rated significantly higher than the nonclinical videos on overall behavior problems.

For the interaction between type of video and child gender of the video, Tukey post hoc tests for the Externalizing Mean showed that the participants' externalizing ratings for the boy externalizing video ( $M = .75$ ,  $SE = .06$ ) were significantly higher than the boy-internalizing video ( $M = .16$ ,  $SE = .05$ ), the girl-nonclinical video ( $M = .18$ ,  $SE = .07$ ), the girl-internalizing video ( $M = .24$ ,  $SE = .06$ ), and the boy-nonclinical video ( $M = .37$ ,  $SE = .06$ ) but not the girl externalizing video ( $M = .57$ ,  $SE = .06$ ). The girl-externalizing video was found to be significantly higher than the boy-internalizing, girl-nonclinical, and girl-internalizing video but not the boy-nonclinical video. See Figure 4. This pattern of results suggests that the externalizing videos were rated higher on externalizing symptoms than any other

videos and there was no difference in ratings of externalizing symptoms between the boy and girl-externalizing videos. Also, while the boy-externalizing video was rated higher on externalizing symptoms than the boy-nonclinical video, there was

Figure 4. Interaction between type of video and child gender for participants' ratings of the Externalizing Mean (items from both externalizing scales of the CBCL).



no difference in ratings of externalizing symptoms between the boy-nonclinical video and girl-externalizing video.

Note that MANOVA analyses were not Bonferroni corrected given that multivariate analyses are more conservative and therefore have less power than univariate tests that are Bonferroni corrected. Therefore, by Bonferroni correcting, even more power would have been taken away from these analyses and the ability to detect a significant difference when there really was one would have been lessened greatly (Nakagawa, 2004; Overall & Atlas, 1999). Overall, hypothesis 1 was not supported because there were no significant differences between mothers and fathers ratings on the internalizing videos and hypothesis 2 was not supported because there was no interaction between parent gender and the type of video they saw. However, these results showed that there were interactions between the type of video the participants saw and the gender of the child in the video.

#### Parents' Psychological Symptoms, Interparental Conflict, and Own Child Ratings

The third hypothesis stated that higher levels of parental psychological symptoms and higher levels of interparental conflict in mothers and fathers would predict higher ratings of child behavior problems in the videos. A series of eight multiple regression analyses were conducted to evaluate the prediction of the Anxious/Depressed, Withdrawn/Depressed, Aggressive Behavior, and Rule-Breaking Behavior subscale scores of the CBCL from levels of parental psychological symptoms (based on scores from the Brief Symptom Inventory), and levels of interparental conflict (based on scores from the O'Leary Porter Scale), for both mothers and fathers. Thus, there were four regressions for mothers and four for fathers. In addition, another series of six multiple regression

analyses were conducted to evaluate the prediction of the overall Internalizing Mean, Externalizing Mean, and Total Mean. Multiple regression analyses were conducted because significant beta weights would identify the unique variance of each variable to ratings of child behavior problems. Descriptive statistics for both mothers and fathers on the BSI and OPS can be found in Tables 7 and 8.

Table 7. Mothers' descriptive statistics for Brief Symptom Inventory (BSI), O'Leary Porter Scale (OPS), and their ratings of their own child on the Child Behavior Checklist (CBCL).

	Mean	SD	Minimum	Maximum
BSI Total	0.33	0.25	0.00	1.45
OPS Total	9.26	5.20	1.00	21.00
Internalizing T	49.74	9.16	33.00	70.00
Externalizing T	46.53	7.44	33.00	61.00
Total T	47.83	7.79	31.00	64.00

Table 8. Fathers' descriptive statistics for Brief Symptom Inventory (BSI), O'Leary Porter Scale (OPS), and their ratings of their own child on the Child Behavior Checklist (CBCL).

	Mean	SD	Minimum	Maximum
BSI Total	0.24	0.23	0.00	1.04
OPS Total	9.03	5.07	2.00	27.00
Internalizing T	47.89	10.12	31.00	69.00
Externalizing T	46.65	8.38	33.00	69.00
Total T	46.79	9.28	26.00	71.00

Results from the multiple regression analyses can be found in Tables 9 and 10, for the four subscales and the three summary means, respectively. Overall, the third hypothesis was not supported. Participants' level of psychological

Table 9. Multiple regression analyses of mothers' and fathers' ratings on the Brief Symptom Inventory (BSI) and O'Leary Porter Scale (OPS) predicting ratings of the videos across four behavior subscales.

Dependent Variable	Mothers			Fathers		
	B	Std. Error	p	B	Std. Error	p
<b>Anxious-Depressed</b>						
BSI	0.02	0.20	0.94	-0.11	0.21	0.59
OPS	0.01	0.01	0.35	-0.01	0.01	0.34
<b>Withdrawn-Depressed</b>						
BSI	-0.19	0.28	0.51	-0.23	0.31	0.47
OPS	-0.00	0.01	0.83	-0.03	0.01	0.06
<b>Rule Breaking</b>						
BSI	0.12	0.12	0.35	-0.02	0.15	0.91
OPS	-0.00	0.01	0.78	0.00	0.01	0.93
<b>Aggressive Behavior</b>						
BSI	0.11	0.23	0.63	-0.10	0.29	0.75
OPS	0.00	0.01	0.92	0.01	0.01	0.56

Table 10. Multiple regression analyses of mothers' and fathers' ratings on the Brief Symptom Inventory (BSI) and O'Leary Porter Scale (OPS) predicting ratings of the videos across Internalizing Mean, Externalizing Mean, and Total Mean.

Dependent Variable	Mothers			Fathers		
	B	Std. Error	p	B	Std. Error	p
<b>Internalizing Mean</b>						
BSI	-0.06	0.20	0.77	-0.16	0.20	0.44
OPS	0.00	0.01	0.65	-0.02	0.01	0.09
<b>Externalizing Mean</b>						
BSI	0.11	0.17	0.50	-0.06	0.21	0.79
OPS	0.00	0.01	0.97	0.00	0.01	0.66
<b>Total Mean</b>						
BSI	0.05	0.13	0.72	-0.09	0.17	0.57
OPS	0.00	0.01	0.82	-0.00	0.01	0.67

symptomatology and level of interparental conflict in their home were not related to their ratings of the child's behavior in the video.

The fourth hypothesis stated that higher ratings of a parent's own child's behavior problems would be related to higher ratings of behavior problems of the child in the video. Pearson correlations were conducted to look at the relationship between participants' ratings of their own child on the CBCL (Internalizing T, Externalizing T, and Total T) and the mean behavior ratings of the child in the video (Internalizing Mean, Externalizing Mean, and Total Mean). When mothers were looked at separately, there was a significant correlation between mothers' Total Mean ratings of the child in the video and the Internalizing T score of their own child on the CBCL ( $r(77)=.34, p<.01$ ). There also was a significant correlation between mothers' Total Mean ratings of the child in the video and the Total T score of their own child on the CBCL ( $r(77)=.23, p<.05$ ). Lastly, there was a significant correlation between mothers' Externalizing Mean ratings of the child in the video and the Total T score of their own child on the CBCL ( $r(77)=.25, p<.05$ ). In contrast, there were no significant correlations between fathers' ratings of the child in the video and their ratings of their own child. Fischer's z tests were performed to see if there were significant differences between the mothers' correlations of their ratings of the child in the video and their own child and the fathers' correlations. These comparisons were non-significant (all p's > .05). Therefore, although mothers did show some association between their ratings, they did not differ significantly from fathers. Pearson correlations were performed for the entire sample to see if there were



significant correlations between both mothers' and fathers' ratings of the child in the video and their own child. As can be seen in Table 11, none of these correlations were significant.

In short, the proposed hypotheses were not supported. However, there were significant differences in ratings of the child in the video based on the type of video the participant saw and the gender of the child in the video.

Table 11. Pearson correlations of parents' ratings of the child in the video on items from four subscales of the CBCL (Internalizing Mean, Externalizing Mean, and Total Mean) and the parents' ratings of their child closest in age to 6 on the CBCL (Internalizing T-score, Externalizing T-score, and Total T-score).

	1	2	3	4	5	6
1. Internalizing Mean		.14	.63**	<b>.10</b>	<b>.02</b>	<b>-.00</b>
2. Externalizing Mean			.86**	<b>.10</b>	<b>.01</b>	<b>.11</b>
3. Total Mean				<b>.14</b>	<b>.02</b>	<b>.08</b>
4. Internalizing T					.35**	.76**
5. Externalizing T						.74**
6. Total T						

\*\*p<.01

Note: Variables 1-3 are for parents' ratings of the video and variables 4-6 are for parents' ratings of their own child. Bold signifies the results of the hypotheses tested.

## Discussion

### Lack of Mother-Father Differences in Ratings

Overall, the hypotheses regarding discrepancies between mothers' and fathers' ratings were not supported. Thus, when mothers and fathers have equivalent rates of contact with a child (in this case, no contact) they do not differ in their ratings of child behavior. Because of the experimental design of the study, using a child in a video that the participants did not know and had no contact with previously, the results lend support to the idea that differential contact of mothers and fathers with their children could be related to disagreement about child behavior problems in their own children. At the same time that similar contact or lack thereof could be related to stronger agreement. Duhig et al. (2000) reported that mothers tended to report more behavioral problems than fathers due to the greater amount of contact. By being more involved in child rearing and having more awareness and insight into their child's behaviors, mothers appeared to overreport child behavior problems in comparison to fathers (Christensen et al., 1992). Also, Schaughency and Lachey (1985) and Seiffge-Krenke and Kollmar (1998) stated that fathers lack accuracy in their ratings due to the lower amount of time that they interact with their children. Therefore, the inaccuracy of paternal ratings would lead to discrepant ratings between parents. In contrast to these studies, in the present study,

mothers and fathers had the same amount of “contact” or viewing time of the child in the video, and therefore, contact was not a differential factor.

When rating their own children, Rowe and Kandel (1997) stated that parents may have differing access to samples of their children’s behavior, a term Achenbach et al. (1987) termed “situational specificity.” Also, fathers may see more appropriate behavior given that children obey their fathers more frequently and therefore, fathers might rate their child differently than mothers (Campbell, 1991). In the present study, not only did participants view the child in similar situations but participants did not have to rely on retrospective ratings but rather were able to rate the child’s behaviors immediately after viewing the behaviors. Therefore, there was less time to have factors, such as psychological symptoms and stress, distort ratings. Kroes, Veerman, and De Bruyn (2005) reported that being familiar with a target that you are rating influences the over-reporting of behavioral problems, perhaps because one has greater access to many instances of behavior rather than one distinct episode or event. Therefore, the greater amount of access that mothers tend to have with their children’s behavior may inflate their ratings of their own children. However, in the present study both mothers and fathers had the same amount of access to the behavior of the child in the video and this fact could have contributed to the lack of differences between mothers’ and fathers’ ratings.

Although many studies have found differences in mothers’ and fathers’ ratings of child behavior problems, two major meta-analyses have shown these differences to be small and insignificant (Achenbach, et al., 1987; Duhig et al.,

2000) and many other studies have found moderate to high parental correspondence (Hay et al., 1999; Jensen et al., 1988; Rowe & Kandel, 1997; Seiffge-Krenke, 1998; Webster-Stratton, 1988). Achenbach et al. (1987) found that parents did not differ across ratings for externalizing and internalizing behavior problems of their child. In addition, they stated that there was a higher correspondence for six to eleven year old children than there was for adolescent children. In the current study, the child in the video was eight years old. However, Duhig et al. (2000) found that when rating internalizing and externalizing behavior problems, greater correspondence was found for adolescents rather than for younger children. Therefore, evidence for the effect of child age is inconclusive. Duhig et al. (2000) also found that correlations were significantly higher for informants in similar roles who recorded behavior simultaneously. Likewise, participants in the present study rated the child in the video by viewing the child in a similar context and in a role as an outside observer. Epkins (1996) stated that scales that are equivalent or parallel across informants also lead to better agreement. That was also the case in the present study in which participants rated the child in the video on the same 56 behavioral items from the CBCL. Duhig et al. (2000) found that overall mothers and fathers displayed very small and insignificant differences in their ratings of children's behavior problems. In looking at moderators that may influence ratings, higher socioeconomic status of the parents was found to be associated with greater correspondence between mothers and fathers. Similarly, in the present study

where socioeconomic status of the parents was relatively high, there were no differences between mothers and fathers in ratings of children's behavior.

Several studies have also found a lack of difference between mothers' and fathers' ratings of child behavior. An early study by Thompson and McAdoo (1973) found no differences between mothers' and fathers' ratings of their children across seven subscales of the Missouri Children's Behavior Checklist. Guerney, Shapiro, and Stover (1968) found low to moderate correlations between parents' ratings of their maladjusted children on a problem list of behaviors and an interpersonal list of behaviors. Although correlations ranged from .32 to .74, all were significant except one and the magnitude of the correlations showed a strong degree of agreement. Webster-Stratton (1988) also found no differences between mothers' and fathers' ratings on the CBCL, the same measure used in the present study. Lastly, Rowe and Kandel (1997) found that parental ratings of children contained a substantial trait component in which a large amount of variance in ratings was shared amongst parents, rather than an individual view in which variance was unique to only one rating source. This example also supports the idea that parents do correspond on ratings of children.

#### Lack of Influence of Psychological Symptoms and Interparental Conflict

The present study did not find that high levels of parental psychological symptoms and interparental conflict predicted higher ratings of the child in the video. Despite research on the distortion hypothesis and other studies that have shown parents', most often mothers', ratings were influenced by their own

psychopathology (Chi & Hinshaw, 2002; Phares et al., 1989; Richters, 1992), other studies have found a lack of influence. In Kroes et al.'s (2005) study, parents watched videotapes of children, some of whom they were familiar with and some whom they were not. When one was acquainted with the child, they reported more problems. However, mothers' psychological symptoms and stress did not play a factor as expected given that the video created an emotional distance and reduction of stress. Therefore, the lack of impact of their own traits appeared to reduce mothers' ratings. Similarly, in this study, psychological symptoms and interparental conflict may not have played a role given the structure and experimental design of the study.

Some studies have found the effect of psychological symptoms and interparental conflict to be a factor for maternal ratings but not paternal ratings. Webster-Stratton (1988) found that mothers' ratings were influenced by low marital satisfaction and negativity but not fathers' ratings. It was suggested that mothers may have felt more guilt and stress related to their own parenting role, especially given the high level of conduct problems in their children in the study. In contrast, fathers may not have felt as guilty and may have dealt with their stress differently from mothers. However, because participants in the present study rated a child that was not their own, stress and guilt over their own parenting role should not have been a factor. Thus, there would be little influence of psychological symptoms and conflict on participants' ratings.

Seiffge-Krenke and Kollmar (1998) also found similar results in which mothers who experienced stress inflicted by marital problems perceived greater

symptoms in their children than fathers who were relatively unaffected by their own personal adjustment. In addition, Hay et al. (1999) found that mothers' reports were more influenced by their own mental state and view of their marriage while fathers' reports were based on the child's cognitive ability. Fathers' reports tended to correspond more accurately with teachers' reports. Therefore, mothers seem to be more influenced by their own psychological symptoms and marital conflict and this pattern of results may explain why fathers' psychological symptoms and interparental conflict did not predict higher behavioral ratings. For mothers in the present study, however, a lack of significant findings as mentioned before may have been due to the distant nature of the child in the video who did not evoke the same stress and guilt about their parenting role had the child been their own.

While mothers' ratings in the present study were not influenced by their own psychological symptoms and interparental conflict, there was an association between their ratings of the child in the video and their ratings of their own child. Connell and Goodman (2002) pointed out that within families there exist bidirectional influences in that a child's psychopathology may lead to a parent's psychopathology and stress at the same time that a parent's psychopathology may lead a child to exhibit more negative functioning. If one's child has a high level of dysfunction, then there is added stress to the family regardless of where it originated. Given that mothers are more influenced by psychological stress and conflict (Webster-Stratton, 1988), then the mothers who saw the child in the video act in a distressing manner may have been influenced to rate their own

child higher. Or, rather than pinpointing mothers' distress to their own psychological symptoms, it could be that their child's own psychological symptoms influenced their ratings of other children, such that they saw another child in a more negative light. Because the participants saw the video before they rated their own child, the former explanation is more probable. Murray and Sacco (1998) found that when a mother held a negative conception of a child, she was more likely to make negative affective reactions to child behavior. Therefore, future research should look into how viewing a video of a child portraying negative behaviors, influences how one rates their own child.

#### Child Gender Differences

Several significant interactions were found for the type of video and the gender of the child in the video. Therefore, there existed a relationship between how participants viewed boys versus girls and the types of behaviors the children displayed. The first interaction between type of video and child gender in the video was found significant for participants' ratings on the Anxious-Depressed subscale, such that the boy-internalizing video was rated higher than any of the other videos but not significantly higher than the girl-externalizing video. The similarity in ratings on the Anxious-Depressed scale for the boy-internalizing video and girl-externalizing video speaks to how parents rate boys versus girls on these items. The Anxious-Depressed scale has more action oriented and aggressive items than the Withdrawn-Depressed scale of the CBCL. Such items include, "fears he/she might think or do something bad," "nervous, highstrung, or tense," "talks about killing self," "cries a lot," and "fears certain animals,



situations, or places.” In contrast, Withdrawn-Depressed items include more passive and internal items like, “too shy or timid,” “withdrawn, doesn’t get involved with others,” “unhappy, sad, or depressed,” and “there is very little he/she enjoys.”

Research has shown that the items on the Children’s Depression Inventory (CDI), another measure of internalizing behavior, have been criticized because they seemed to be tapping into features other than depression (Liss, Phares, & Liljequist, 2001). More specifically, certain items may be measuring features of aggression and externalizing behaviors in addition to depressive symptoms. In addition, the CDI was unable to distinguish between children diagnosed with internalizing disorders versus children with externalizing disorders. Therefore, the Anxious-Depressed subscale may also be measuring features of externalizing disorders and may lead participants to rate boys higher than girls on such items.

More classic externalizing symptoms, like in the case of Attention-Deficit/Hyperactivity Disorder (ADHD) features such as impulsivity, aggression, and inattentiveness, tend to be rated higher in boys whereas girls tend to be rated higher on more indirect relational aggression (Jackson & King, 2004). Therefore, participants may have rated the girl-externalizing video higher on Anxious-Depressed features given the more aggressive nature of the items and the fact that girls do not normally display classic externalizing symptoms to the extent that boys do. Gender-role research has shown that girls are socialized to express internal emotions such as sadness and empathy and to inhibit external

emotions like anger or aggressiveness. On the contrary, boys are socialized to repress emotions that make them look vulnerable and express those that make them appear more powerful and in control (Timmers et al., 1998). Due to socialization factors, participants may have viewed the boy-internalizing video as possessing more features of the Anxious-Depressed scale and more typical to boys' display of internalizing symptoms (more outwardly and aggressive) rather than girls' internalizing symptoms that may be more inward and passive in nature.

Likewise, in the interaction of child gender and type of video for the Withdrawn-Depressed subscale, the girl-internalizing video was rated significantly higher than the boy-internalizing video. Therefore, even though the boy and girl showed the same behaviors in the video, participants viewed their behavior differently. In Morrongiello and Dawber's (2000) study in which mothers viewed a videotape of a boy and girl engaging in similar risk-taking behavior, parents encouraged boys' risk taking behavior and cautioned girls' risk taking behavior. Therefore, girls may be more likely to internalize what can happen in risk taking behaviors more than boys and may be more aware of their vulnerability. These internalizing characteristics are more accepted in girls than boys and could contribute to higher ratings of girls' internalizing symptoms than boys' internalizing symptoms. Seiffge-Krenke and Kollmar (1998) stated that males are less inclined to discuss private worries and problems and to reveal emotional stress and therefore, parents are less aware of how sons are coping emotionally. If parents are not aware then these behaviors may be perceived as

less common in boys and therefore, less accepted. Participants in the present study may have seen the girl as possessing more stereotypical female internalizing characteristics and thus, may have rated her higher than the boy displaying the same behavior. However, Jensen, Traylor, Xenakis, and Davis (1988) stated that when girls display less characteristic and stereotypical behaviors, such as externalizing symptoms, they will be rated higher than boys because the behavior is less tolerated. Also, teachers' expectancies were found to vary by gender. Specifically, girls did not need to portray as many externalizing behaviors to be diagnosed with ADHD as boys did because the behavior is less frequent in girls and is not as socially acceptable (Jackson & King, 2004). Therefore, evidence is inconclusive and needs further research into gender-stereotypes and ratings of children's behavior.

Block (1973) stated that socialization is a primary reason why boys and girls act the way they do. Boys are taught to control their feelings and girls are taught to express their emotions and concerns for others. Boys are taught to be assertive and independent while girls are taught to control this assertion. Also, parenting styles can be instrumental in developing these stereotypical behaviors (Maccoby, 1998). Parents tend to handle their daughters more gently and ask them about their feelings. On the other hand, parents are more tolerant of fighting with their sons and more likely to use physical punishment. Thus, a boy's play is more likely to be rougher and centered around physical and outward behaviors while girls' play is more likely to be centered around emotions and internalizing behaviors. Recently, Diamantopoulou, Henricsson, and Rydell

(2005) found that even peers of children adhere to what they call the “gender appropriateness hypothesis” in which they tolerated higher levels of externalizing behaviors in boys rather than girls. Overall, females do not express all emotions more than males but some emotions are more likely in females, such as happiness, sadness, fear, guilt, and shame. In contrast, males are more likely to express anger, pride, and contempt (Brody & Hall, 1993). Hence, socialization differences and the adherence to stereotypes in which emotional and inward reflecting behaviors are reinforced and socialized in girls and outward and physical behaviors are reinforced and emotions are repressed in boys may reflect why participants rated the girl higher than the boy on internalizing behaviors and why boys tend to be rated higher on externalizing behaviors than girls.

In the final two interactions, even though the boy-externalizing video was rated highest, there was no significant difference between the participants’ ratings on Aggressive-Behavior subscale and the overall Externalizing Mean for the boy and girl-externalizing video. However, while the boy-externalizing video was rated higher than the boy-nonclinical video, there was no significant difference between the girl-externalizing video and the boy-nonclinical video. Socialization and gender role differences may account for why the boy-externalizing video was rated higher than all of the other videos on these externalizing scales. Maniadaki, Sonuga-Barke, and Kakouros (2005) recently found that boys with ADHD show more externalizing and disruptive behaviors than girls and that parents attribute these behaviors as more intentional and

therefore impose stricter responses. Therefore, parents would be more likely to see the boy's behavior as more severe and rate it accordingly. Similarly, several studies have found that boys tend to be rated higher and exhibit more overall symptoms than girls (Duhig et al., 2000; Jackson & King, 2004; Seiffge-Krenke & Kollmar, 1998). As Christensen et al. (1992) pointed out, parents may pay closer attention to boys overall and discuss boys' behavior at greater length than girls' behavior. Therefore, regardless of the type of behavior the boy is displaying, it will be rated higher than girls. Also, because externalizing behavior is more accepted and expected in boys, parents may be more likely to think they remember seeing those behaviors when reporting because they are more prototypical. This phenomenon is related to social schemas, as first proposed by Bartlett (1932), about how males are supposed to act and therefore affects the information that is recalled. This research would explain the lack of difference between the girl-externalizing and boy-nonclinical videos and would explain why boys were rated higher on male stereotypical externalizing symptoms regardless of the behaviors they portrayed.

In short, socialization and gender-role differences account for why participants viewed the videos that portrayed a girl and boy engaging in similar behaviors so differently. Implications for these findings suggest that even if parents agree on children's behaviors there still may be some biases in how they view boys' versus girls' behavior. Professionals should be aware of these gender stereotypes and take them into account when parents, teachers, and other professionals are rating children. Is a girl being rated higher on internalizing

symptoms simply because that is more appropriate female behavior or does the girl truly present distressing behaviors in need of treatment? Likewise, is a boy being rated higher on externalizing symptoms simply because he is displaying stereotypical acting out behavior or does this boy show dysfunctional behavior that is in need of school and psychosocial interventions? These questions and others should be looked into further.

### Limitations and Future Research

There were several limitations to this study. First, the sample was primarily comprised of participants with medium to high socioeconomic status. In addition, the sample was primarily Caucasian. Future research would benefit from looking at parental ratings of child behavior problems with a lower SES and more diverse ethnic and racial population. Second, the participants were primarily married. However, the researchers did not include a choice on the demographic form to indicate whether they were in their first marriage or had been remarried. Therefore, it is not known if the participants had ever been divorced or separated in the past.

Additionally, the lack of single or divorced parents may have been related to the relatively low ratings of interparental conflict, psychological symptoms, and their own child behavior problems. Epstein et al. (2004) reported that using a community sample as in the present study, the mean maternal ratings of interparental conflict on the OPS was 12.24 and mean paternal ratings was 12.12. In the present study, mean maternal and paternal ratings were quite a bit lower (9.26 and 9.03, respectively). Therefore, lower ratings may have been due

to the majority of the sample being married. In addition, all of the parental ratings of their own child were well below the borderline-clinical level of behavior problems on the CBCL (T-score=60). Maternal mean of the total T-score was 47.83 and paternal mean of the total T-score was 46.79. Lastly, the maternal mean on the BSI was .33 and the paternal mean was .24. These results demonstrate minimal psychological symptoms across the sample and are comparable to the Adult Nonpatients from the BSI Normative sample (Females,  $M=.35$ ; Males,  $M=.25$ ; Derogatis, 1993). The low ratings of psychological symptoms, interparental conflict, and child behavior problems may have been associated with why these factors did not predict higher behavior ratings of the child in the video. Future research would benefit from looking at parental ratings of a child in a video, or one they do not know, in a clinical rather than community sample. The influence of psychological symptoms and interparental conflict on ratings of children's behavior may be more pronounced in a clinical sample due to the high prevalence of these problems.

Other limitations in the current study include the length of the video. The video was only eight minutes in length and therefore did not cover a wide range of symptoms and perhaps did not allow enough time to gauge the full range of the child's functioning. Therefore, parental ratings of the child may have been lower than if they viewed the child in the video for a longer period of time. Future research should look at parents' ratings of a child who is videotaped for a longer period of time or observed in a naturalistic setting. By changing the surroundings and the length of time, parents would be able to get a better range of behaviors

and be able to make more accurate ratings. Another limitation was that both children in the videos were White and around the age of 8 years old. Therefore, some parents may not have identified with the child in the video due to having children of differing races and ages. This may have been associated with less accurate ratings. Future research would benefit from including children with multiple races and ages to see if parental ratings are different depending upon race and age. Lastly, only parents were included in this sample. Therefore, future research would benefit from including non-parents to see if they differ from parents in how they view children's behavior. Perhaps, by not having contact with children of their own non-parents may take a more objective and accurate view of other children's behavior.

### Conclusions

In the present study, mothers and fathers did not differ on their ratings of a child with whom they had no contact and did not know. Therefore, knowing one's child and having a range of behaviors and experiences to reflect upon may influence parents' ratings and lead to more disagreement about their child's overall behavioral problems. In addition, mothers' and fathers' psychological symptoms and interparental conflict were not related to their ratings of the child in the video. Perhaps, due to the distant nature of the video and rating a child they did not know, their own problems were less likely to be related to how they rated a child who was not their own. There was an association between mothers' ratings of the child in the video and their own child. Therefore, instead of being related to their own psychological symptoms, mothers' ratings were more related



to their own child's symptoms. Future research would benefit from looking further at how one's own child is related to how parents see other children. Lastly, parents did view the children in the video very differently dependent upon the child's gender and the type of behavior the child portrayed. Future studies should examine the influence that stereotypical and non-stereotypical behaviors have on parental ratings. Overall, it is important for clinicians, parents, and other professionals to be aware of how factors, like the amount of contact, the type of behavior, and a child's gender, affect ratings of children's behavior. As always, gathering information from multiple informants will provide the best assessment of a child's functioning.

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## Appendices



## Appendix A

Sample questions from the “Semistructured Clinical Interview for Children and Adolescents (SCICA) Ages 6-18 Protocol Form.” These items were used to interview the child actor for the videotape stimulus.

### Activities:

1. What do you like to do in your spare time, like when you’re not at school? Do you participate in any sports/hobbies/clubs?

### School:

2. Do you ever get in trouble in school? Do you ever worry about school?
3. If you could change one thing about school, what would it be?

### Friends:

4. What do you do with your friends? Do they come to your house? Do you go to their house? How often?

### Family Relations:

5. Who are the people in your family? Who lives in your home?
6. Who makes the rules in your home? What happens when kids break the rules? Do you think the rules are fair or unfair?

### Self Perception, Feelings:

7. Tell me a little more about yourself. What makes you happy? What makes you sad? What do you do when you’re sad? What makes you mad? What do you do when you’re mad? What makes you scared? What do you do when you’re scared?

## Appendix B

Selected Child Behavior Checklist Items (broken down by narrowband scales).  
Participants rated the child in the videotape on these items.

0=Not true

1=Somewhat True

2=Very True

### Externalizing Subscales:

#### Rule Breaking Behavior

1. Drinks alcohol without parents' approval  
(describe): \_\_\_\_\_
2. Doesn't seem to feel guilty after misbehaving
3. Breaks rules at home, school, or elsewhere
4. Hangs around with others who get in trouble
5. Lying or cheating
6. Prefers being with older kids
7. Runs away from home
8. Sets fires
9. Sexual problems (describe): \_\_\_\_\_
10. Steals at home
11. Steals outside the home
12. Swearing or obscene language
13. Thinks about sex too much
14. Smokes, chews, or sniffs tobacco
15. Truancy, skips school
16. Uses drugs for nonmedical purposes (**don't** include alcohol or tobacco)  
(describe): \_\_\_\_\_
17. Vandalism

#### Aggressive Behavior

1. Argues a lot
2. Cruelty, bullying, or meanness to others
3. Demands a lot of attention
4. Destroys his/her own things
5. Destroys things belonging to his/her family or others
6. Disobedient at home
7. Disobedient at school
8. Gets in many fights
9. Physically attacks people
10. Screams a lot
11. Stubborn, sullen, or irritable
12. Sudden changes in mood or feelings
13. Sulks a lot
14. Suspicious

Appendix B (Continued)

15. Teases a lot
16. Temper tantrums or hot temper
17. Threatens people
18. Unusually loud

Internalizing Subscales:

Withdrawn/Depressed

1. There is very little he/she enjoys
2. Would rather be alone than with others
3. Refuses to talk
4. Secretive, keeps things to self
5. Too shy or timid
6. Underactive, slow moving, lacks energy
7. Unhappy, sad, or depressed
8. Withdrawn, doesn't get involved with others

Anxious/Depressed

1. Cries a lot
2. Fears certain animals, situations, or places, other than school  
(describe): \_\_\_\_\_
3. Fears going to school
4. Fears he/she might think or do something bad
5. Feels he/she has to be perfect
6. Feels or complains that no one loves him/her
7. Feels worthless or inferior
8. Nervous, highstrung, or tense
9. Too fearful or anxious
10. Feels too guilty
11. Self-conscious or easily embarrassed
12. Talks about killing self
13. Worries

## Appendix C

### O'LEARY-PORTER SCALE REVISED VERSION: Parents

Please answer all of the following questions to the best of your ability. The questions refer to your son/daughter, \_\_\_\_\_, only. PLEASE NOTE: The term "spouse" refers to your son's/daughter's other parent, regardless of whether you are currently married to him or her.

1. It is difficult in these days of tight budgets to confine financial discussions to specific times and places. How often would you say you and your spouse argue over money matters in front of this child?

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

2. Children often go to one parent for money or permission to do something after having been refused by the other parent. How often would you say this child approaches you or your spouse in this manner with rewarding results?

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

3. Husbands and wives often disagree on the subject of discipline. How often do you and your spouse argue over discipline problems in this child's presence?

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

4. How often has this child heard you and your spouse argue about the wife's role in the family? (Hours of work, mothering behaviors, etc.)

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

5. How often does your spouse complain to you about your personal habits? (drinking, nagging, sloppiness, etc.) in front of this child?

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

6. How often do you complain to your spouse about his/her personal habits in front of this child?

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

7. In every normal marriage there are arguments. What percentage of the arguments between you and your spouse would you say take place in front of this child?

Less than 10% \_\_\_ 10-25% \_\_\_ 26-50% \_\_\_ 51-75% \_\_\_ More than 75%

8. To varying degrees, we all experience almost irresistible impulses in time of great stress. How often is there physical expression of hostility between you and your spouse in front of this child?

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

9. How often do you and/or your spouse display verbal hostility in front of this child?

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

10. How often do you and your spouse display affection for each other in front of this child?

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

11. How often has this child heard you and your spouse argue about the husband's role in the family? (Hours of work, fathering behaviors, etc.)

Never \_\_\_ Rarely \_\_\_ Occasionally \_\_\_ Often \_\_\_ Very Often

Appendix D

**PARENTAL DEMOGRAPHIC FORM**

*Please complete the following:*

4. This form is being completed by a:

Mother  Stepmother  Adoptive mother   
Father  Stepfather  Adoptive father   
Guardian  Other

2. How old are you?

3. What is your race/ethnicity?

4. How many children (biological, stepchildren, and other children) are presently living in your home?

5. List the ages of the children who are presently living in your home:

6. In all, how many children (biological, stepchildren, and others) do you have?

7. How many siblings did you have growing up?

8. Were you the oldest, youngest, or middle child?

9. Are you:

Married  Single, living with partner  Single, no partner  
 Separated  Divorced  Widowed  
 Other

10. Your employment status:

Mother or Female Guardian  
(either you or your partner)

Father or Male Guardian  
(either you or your partner)

Employed as   
Unemployed   
Retired   
Other

Employed as   
Unemployed   
Retired   
Other

Appendix D (Continued)

11. What percentage of your professional involvement is spent working with children (0-100%)? \_\_\_\_\_

12. On a scale of 1-10, where 1=Not at all and 10=A lot, how much experience have you had with children other than your own (either in a work or personal capacity)? \_\_\_\_\_

13. Highest education level completed:

Mother/Female Guardian—Years of Education: \_\_\_\_\_

Father/Male Guardian—Years of Education: \_\_\_\_\_

14. Total household income per year: \_\_\_\_\_

15. Average hours per week you spend at work and/or school, including commuting time? \_\_\_\_\_

16. In an average week day, how much time do you spend with your child(ren) during waking hours? \_\_\_\_\_

17. In an average weekend day, how much time do you spend with your child(ren) during waking hours? \_\_\_\_\_

18. Has either of your child(ren)'s parents received mental health services (such as therapy, counseling, or medication) in order to deal with something that was psychologically distressing? \_\_\_\_\_ Yes \_\_\_\_\_ No

If Yes: Please note who received the services, what type of services were received (e.g., psychiatrist, pastoral counseling, etc.), and how long ago the services were received. Please use back of page if you need additional space.

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19. Have any of your children received mental health services in order to deal with something that was psychologically distressing? \_\_\_\_\_ Yes \_\_\_\_\_ No

If Yes: Please note who received the services, what type of services were received, and how long ago the services were received.

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Appendix E  
Questionnaire for Raters

1. Your Name: \_\_\_\_\_
2. Your Gender: 1. Male  
2. Female
3. Your Race: 1. African American  
2. Caucasian  
3. Hispanic  
4. Asian  
5. Other (please specify): \_\_\_\_\_

4. Your year in Grad school (put "N/A" if Faculty): \_\_\_\_\_

- Which program? 1. Clinical  
2. I/O  
3. CNS  
4. Other (please specify): \_\_\_\_\_

*If Clinical*, how many years of experience have you had with child clients? \_\_\_\_  
Please explain briefly: \_\_\_\_\_  
\_\_\_\_\_

5. Year as faculty (put "N/A" if grad student): \_\_\_\_\_

- Which program? 1. Clinical  
2. I/O  
3. CNS  
4. Other (please specify): \_\_\_\_\_

*If Clinical*, how many years of experience have you had with child clients? \_\_\_\_  
Please explain briefly: \_\_\_\_\_  
\_\_\_\_\_

6. How many classes have you taken on child psychopathology/development?  
\_\_\_\_\_

7. How many classes have you taught on child psychopathology/development?  
\_\_\_\_\_

8. How many years of professional experience (including paid and volunteer) have you had working with children? \_\_\_\_\_  
Please explain briefly:  
\_\_\_\_\_

Appendix E (Continued)

**Girl Child Actor Video**

Instructions: Please select the behavior and the intensity of the behavior that the child actor displays. Note that you will watch three video segments with a girl child actor, one of which displays internalizing behavior, one of which displays externalizing behavior, and one of which displays non-clinical behavior. Thus, this is a **forced-choice** design in which you can only choose each answer once (i.e., internalizing, externalizing, or non-clinical).

**Segment 1**

***Child displays which of the following (please circle):***

Internalizing Behavior      Externalizing Behavior      Non-Clinical Behavior

***Degree of Intensity of Behavior displayed (please circle):***

1	2	3	4	5
Not intense at all		Somewhat intense		Very intense

**Segment 2**

***Child displays which of the following (please circle):***

Internalizing Behavior      Externalizing Behavior      Non-Clinical Behavior

***Degree of Intensity of Behavior displayed (please circle):***

1	2	3	4	5
Not intense at all		Somewhat intense		Very intense

**Segment 3**

***Child displays which of the following (please circle):***

Internalizing Behavior      Externalizing Behavior      Non-Clinical Behavior

***Degree of Intensity of Behavior displayed (please circle):***

1	2	3	4	5
Not intense at All		Somewhat intense		Very intense



Appendix E (Continued)

**Boy Child Actor Video**

Instructions: Please select the behavior and the intensity of the behavior that the child actor displays. Note that you will watch three video segments with a boy child actor, one of which displays internalizing behavior, one of which displays externalizing behavior, and one of which displays non-clinical behavior. Thus, this is a **forced-choice** design in which you can only choose each answer once (i.e., internalizing, externalizing, or non-clinical).

**Segment 1**

***Child displays which of the following (please circle):***

Internalizing Behavior      Externalizing Behavior      Non-Clinical Behavior

***Degree of Intensity of Behavior displayed (please circle):***

1	2	3	4	5
Not intense at all		Somewhat intense		Very intense

**Segment 2**

***Child displays which of the following (please circle):***

Internalizing Behavior      Externalizing Behavior      Non-Clinical Behavior

***Degree of Intensity of Behavior displayed (please circle):***

1	2	3	4	5
Not intense at all		Somewhat intense		Very intense

**Segment 3**

***Child displays which of the following (please circle):***

Internalizing Behavior      Externalizing Behavior      Non-Clinical Behavior

***Degree of Intensity of Behavior displayed (please circle):***

1	2	3	4	5
Not intense at all		Somewhat intense		Very intense

Appendix F  
**Additional Rating Form**

Name: \_\_\_\_\_

**Boy Child Actor Video**

Instructions: You will watch one video segment with a boy child actor. Please indicate if the child displays internalizing, externalizing, or non-clinical behavior and the intensity of his behavior.

***Child displays which of the following (please circle):***

Internalizing Behavior      Externalizing Behavior      Non-Clinical Behavior

***Degree of Intensity of Behavior displayed (please circle):***

1	2	3	4	5
Not intense at all		Somewhat intense		Very intense

## **Informed Consent**

Social and Behavioral Sciences  
University of South Florida

### **Information for People Who Take Part in Research Studies**

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The following information is being presented to help you decide whether or not you want to take part in a minimal risk research study. Please read this carefully. If you do not understand anything, ask the person in charge of the study.

**Title of Study:** Ratings of Children's Behavior

**Principal Investigator:** Jessica K. Curley

**Study Location(s):** University of South Florida Psychology Department

You are being asked to participate because you are a parent of a child between the ages of 4 and 21.

### **General Information about the Research Study**

The purpose of this research study is to better understand factors that contribute to parental ratings of children's behavior.

### **Plan of Study**

You will be asked to do the following: Watch an 8 minute video of a child being interviewed and engaging in free play. You will then be asked to rate the child's behavior on several dimensions. You will also be asked to fill out a demographics questionnaire and 2 questionnaires relating to your functioning. The entire study should take about 30 minutes.

### **Payment for Participation**

You will not be paid for your participation in this study. However, if you are a psychology student from the USF Participant Pool, you will receive extra credit points towards a psychology course for your participation. If you are not a psychology student, or if you do not want the extra credit points, you will be entered into a drawing for one of two \$50 prizes or one \$100 prize.

### **Benefits of Being a Part of this Research Study**

By taking part in this research study, you may increase your overall knowledge of how children's behavior is viewed. You will also be contributing to the understanding of factors that influence ratings of children's behavior.

## Appendix G (Continued)

### **Risks of Being a Part of this Research Study**

This study should pose no physical or psychological harm to you. The questionnaires may result in minimal levels of distress in that they ask you about potentially troubling behaviors, emotions, and events. However, all measures have been standardized and utilized previously in research settings with no known adverse effects.

### **Confidentiality of Your Records**

Your privacy and research records will be kept confidential to the extent of the law. Authorized research personnel, employees of the Department of Health and Human Services, and the USF Institutional Review Board may inspect the records from this research project.

The results of this study may be published. However, the data obtained from you will be combined with data from others in the publication. The published results will not include your name or any other information that would personally identify you in any way.

All records will be identified by numbers and your identity will not be placed on any of the completed forms. Access to the data will be restricted to relevant students and faculty of the Psychology Department at the University of South Florida.

### **Volunteering to Be Part of this Research Study**

Your decision to participate in this research study is completely voluntary. You are free to participate in this research study or to withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive, if you stop taking part in the study.

### **Questions and Contacts**

- If you have any questions about this research study, please contact Jessica K. Curley, Department of Psychology, University of South Florida, 4202 E. Fowler Ave. PCD 4118G, Tampa, FL 33620, 813-974-9222, jcurley2@mail.usf.edu
- If you have questions about your rights as a person who is taking part in a research study, you may contact the Division of Research Compliance of the University of South Florida at (813) 974-5638.

### **Consent to Take Part in This Research Study**

By signing this form I agree that:

- I have fully read or have had read and explained to me this informed consent form describing this research project.

Appendix G (Continued)

- I have had the opportunity to question one of the persons in charge of this research and have received satisfactory answers.
- I understand that I am being asked to participate in research. I understand the risks and benefits, and I freely give my consent to participate in the research project outlined in this form, under the conditions indicated in it.
- I have been given a signed copy of this informed consent form, which is mine to keep.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Printed Name of Participant

\_\_\_\_\_  
Date

**Investigator Statement**

I have carefully explained to the subject the nature of the above research study. I hereby certify that to the best of my knowledge the subject signing this consent form understands the nature, demands, risks, and benefits involved in participating in this study.

\_\_\_\_\_  
Signature of Investigator  
Or authorized research  
investigator designated by  
the Principal Investigator

\_\_\_\_\_  
Printed Name of Investigator

\_\_\_\_\_  
Date

## Appendix H

### Debriefing Form

The goal of this study was to examine how mothers and fathers view children's behavior. More specifically, we wanted to see how certain factors, such as parents' experiences with children, parents' functioning, and certain characteristics of children's behaviors are related to mothers' and fathers' disagreement on ratings of children's behavior. Previous research has not examined parental ratings of children's behavior using a videotape with a child actor like the one that you just viewed. Therefore, in this study, we controlled for your knowledge of the child that you were rating and had different parents rate different videotapes.

The knowledge to be gained by this research will include identifying other factors, beyond those controlled for, which influence parental disagreement about child behavior. When children's behavior is problematic, parents may want to have a clinician address such issues as better family relations and proper treatment for a child. Custodial parents are most commonly the ones who refer children for treatment. If the parents disagree on the problems a child is exhibiting, then that child may be restricted from receiving proper treatment. Focusing on factors that are associated with disagreement can lead to prevention efforts that will allow for parents to engage their child in treatment before the problems become too severe.

If you would like to learn more about parental ratings of child behavior problems, here are three journal articles to consult:

Achenbach, T.M., McConaughy, S.H., & Howell, C.T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin, 101*, 213-222.

Duhig, A., Renk, K., Epstein, M., & Phares, V. (2000). Interparental agreement on internalizing, externalizing, and total behavior problems: A meta-analysis. *Clinical Psychology: Science and Practice, 7*, 435-453.

Phares, V., Compas, B.E., & Howell, D.C. (1989). Perspectives on child behavior problems: Comparisons of children's self-reports with parent and teacher reports. *Psychological Assessment: A Journal of Consulting and Clinical Psychology, 1*, 68-71.

If you or someone you know is concerned about their child's behavior or their own behavior, here are some resources to consider:

USF Counseling Center (for USF students who are seeking help for themselves—No cost to students): 813-974-2831

USF Psychological Services Center (for students and their families as well as for individuals from the community—small fee on sliding scale based on ability to pay): 813-974-2496

Northside Community Mental Health Center (for individuals from the community who are seeking help—sliding scale based on ability to pay): 813-977-8700

Some insurance companies also cover mental health services, so please feel free to check with your health insurance company to see if they can cover psychological evaluations or treatments if you are interested.

If you have any questions or concerns regarding this study, please contact Jessica Curley at 813-974-9222 or email, [jcurley2@mail.usf.edu](mailto:jcurley2@mail.usf.edu).

Thank you for your participation!!