

Gender Differences in Coping and Internalizing Symptoms Between
Adolescents With a Parent Diagnosed With Depression

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Abstract

The current study examines a sample of children ranging from 9-16 years in age with at least one parent that has been diagnosed with depression. The study's primary focus is to assess whether there are gender differences in internalizing symptoms, gender differences in coping styles, if there is an association between coping strategy and internalizing symptoms, and if there are gender differences in relation to coping style and symptoms. The findings indicate there are no gender differences in the reporting of internalizing symptoms. However, boys report more use of disengagement while girls report more primary control coping. Secondary control coping has no significant reported gender difference, and it was found to have the greatest inverse relationship with internalizing symptoms as reported by both genders and parent and child. There are no significant interactions between gender and coping style to predict internalizing symptoms.

Statement of the Problem

A considerable amount of empirical research has found parental depression to be a major stressor within the families, as well as a significant risk factor for emotional and behavioral problems in children and adolescents. Recently, it has been found that the way in which children and adolescents respond to and cope with a parent's depression is also a potential source of stress within the familial structure, as well as for the individual child (Jaser et al., 2005).

Stress has been defined as "environmental events or chronic conditions that objectively threaten the physical and/or psychological well-being of individuals of a particular age in a particular society" (Grant, Compas, Stuhlmacher et al., 2003). Stressors can take the form of either acute episodes or more unwavering, chronic conditions, and both types of stress are linked with a greater risk of psychopathology in both children and adolescents (Grant et al., 2003).

Stressful life events are considered to be part of normal development, but adolescence is a stage of development that is associated with increased vulnerability and exposure to more stressful experiences (e.g., failed romantic relationships, greater amounts of family conflict, etc.) (Compas, 2004). Noting this vulnerability, research suggests that increased exposure to stressful events at one point in time predicts greater amounts of internalizing and externalizing symptoms in adolescents that are greater and more intensive than initial symptoms of these behaviors (Grant et al., 2003). Stressors are also a universal, non-specific risk for psychopathology.

Since adolescence is a period of development marked by greater exposure and vulnerability to stressors, it is not surprising that adolescence is a time of marked increase in psychopathology (Compas, Champion, & Reeslund, 2005). Thus, children with increased exposure to the chronic stressors induced by parental depression were found to be at significant risk for increased rates of depression and internalizing symptoms, as well as elevated rates of anxiety and externalizing problems (Friedberg et al., 2003; Jaser et al.,

2005). Children of depressed parents are more likely to have considerable impairment in several areas, such as cognitive and academic performance, social competence, and peer relationships (Friedberg et al., 2003). It is estimated that 70% of children of depressed parents will develop at least one type of a psychiatric disorder (Compas et al., 2005).

Some children demonstrate a personal vulnerability to psychopathology based on the presence of increased risk factors, meaning that they are more likely to experience a negative outcome when faced with stress. Others exhibit protective factors, attributes that bring about positive outcome when faced with a stressful event (Compas et al., 2005). One common example that can apply to both risk and protective factors (based on the outcome of the specific behavior used) is coping.

Coping refers to volitional self-regulating behaviors in response to stressful experiences or circumstances. The processes of regulation are utilized towards one's emotion, cognition, behavior, physiology, and/or the environment (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). Although there are also involuntary responses to stress, coping is designated as voluntary processes that are conscious and under the individual's control. There are also two different dimensions of volitional and involuntary stress responses, engagement and disengagement. Engagement responses are those that are directed toward a stressor or one's reaction to it; disengagement responses are intended to move away from the stressor or one's reactions.

There are three basic forms of volitional coping strategies (Compas et al., 2001; Connor-Smith et al., 2000). The first is primary control engagement coping, which includes behaviors that are directly focused on changing the present stressful conditions or one's emotional responses to them, such as problem solving and emotional regulation. The next form is secondary control engagement coping, which is characterized as behaviors that are aimed to adapt to the problem or condition, such as acceptance and cognitive restructuring. The final form of volitional coping is disengagement, which is described above. Examples of disengagement coping include avoidance and denial. Consistent with this model, in a

study of preadolescents and adolescents, Dumont and Provost (1998) found problem-solving (a type of primary control coping) to be functional and avoidance coping (a type of disengagement coping) to be dysfunctional. They also found that high self-esteem is correlated with active-positive coping styles in preadolescents.

A number of studies have found a significant relation between greater parenting stress (which parents may have as a precursor to or a result of their depression) to problems in parenting and family functioning, including less favorable parent-child interaction (e.g., Östberg & Hagekull, 2000). Stress has been found to play a clear and significant role in the etiology and maintenance of psychopathology. That is why both exposure to stress and individuals' coping methods may be crucial for the prevention of psychopathology and other adjustment problem in childhood and adolescence (Compas et al., 2005).

Literature Review

Coping with Parental Depression

Recent research suggests that there are at least three identifiable types of stressors that derive from depressed parents (Langrock, Compas, Keller, Merchant, & Copeland, 2002). The first type of stressor that a child is exposed to in this type of family environment is parental withdrawal. This stressful behavior can be defined as avoidant, unsupportive, and unresponsive behavior towards the child and his or her needs (Langrock et al., 2002). The second identifiable stressor a child is exposed to when living with a parent diagnosed with depression is parental intrusiveness, which is characterized as over involvement in the child's life and irritability (Langrock et al., 2002). The third stressor is marital conflict, which is characterized as heightened levels of disagreement and lower levels of tranquility and calmness between the depressed parent and the spouse (Langrock et al., 2002). It has been found that exposure to these types of parental behaviors plays a significant role in creating a chronically stressful environment for the children.

The neglect of children and perceived marital quality are both associated with higher degrees of parenting stress (Östberg & Hagekull, 2000). Greater parenting stress has been

found to increase the chance of problems in parenting and family functioning, such as problems in parent-child interactions. Since the quality of mother-child interactions as indicated by maternal sensitivity, physical contact, flexibility, responsiveness, affect, and consistency (Albright & Tamis-LeMonda, 2002) is central to the well-being of children, it is crucial to identify whether these problems are carry over from toddlerhood to late childhood and adolescence through the exhibition of maladaptive coping skills.

Only two studies have examined how adolescents cope with the stressors of parental withdrawal and parental intrusiveness (Jaser et al., 2005; Langrock et al., 2002). Due to such minimal research on this potentially significant area of study, it is vital for future research and reference to study the effect of marital conflict in relation to child and adolescent coping styles as a third stressor that is exhibited in the environment of living with a depressed parent. By understanding how children and adolescents respond to all three of these stressors, and determining whether coping is influenced or affected by variables such as the child's sex or the prevalence of internalizing symptoms, the information can be used to generate further customized and effective intervention programs that could be generated and applied to more specific familial situations. The application of such knowledge into these programs would allow mental health professionals to teach the children and adolescents the coping skills and behavior they individually need to help them optimally adapt and react to their stressful home environments.

In the first studies that have examined how children and adolescents cope with stress that is associated with living with a depressed parent, it was found that high levels of stressors related to both withdrawn and intrusive behavior in depressed parents were significantly correlated with children's and adolescents' symptoms of anxiety/depression and aggression (Jaser et al., 2005; Langrock et al., 2002). Children's and adolescents' use of secondary control coping was significantly and negatively correlated with symptoms of anxiety and depression. These findings suggest that as the use of secondary control coping behaviors increased, levels of anxiety and depressive symptoms decreased. Langrock et al.

also found that children's and adolescents' involuntary engagement stress responses were significantly and positively correlated to symptoms of anxiety and depression. Both secondary control coping and involuntary engagement stress responses were found to mediate the relation between parental withdrawal and children's and adolescents' symptoms of anxiety and depression (Langrock et al., 2002). These findings indicate that children and adolescents used these methods of coping in response to parental withdrawal, which in turn serves as a trigger for either adaptive or maladaptive behavior. As indicated above, this was the first study to give evidence of stress responses and coping mechanisms serving as mediators of the effect of stress related to parental depression.

Jaser et al. (2005) conducted a modified replication study to test the significance of the results of the Langrock et al. (2002) study. Jaser et al. found in a sample of depressed parents and their children that stressors related to parental intrusiveness and irritability were related to higher levels of adolescents' symptoms of anxiety/depression and aggression. These authors also found that adolescents' use of secondary control engagement coping was related to lower levels of symptoms of anxiety/depression and aggression, while adolescents' involuntary engagement stress responses were related to higher levels of both types of symptoms (Jaser et al., 2005).

The findings reported by Jaser et al. (2005) replicate and support the results of Langrock et al. (2002). However, the more recent study was modified in the fact that it had two information sources as opposed to one. In the Langrock et al. study, the results were determined based on a parent report version of the Responses to Stress Questionnaire (RSQ; Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000; Langrock, 2002). Jaser et al. (2005) used both parent report and adolescent self-report versions of the RSQ because self-reports from the individuals who are actually experiencing the coping may allow better insight into the covert and, more importantly, cognitive aspects of coping (Jaser et al., 2005). The use of both sources of information was important for validity. One of the most noteworthy results that came from using these two sources of information was the

finding that secondary control coping is an adaptive response to the stress of living with a depressed parent, and involuntary engagement responses appear to be maladaptive. Thus, it was found that secondary control engagement coping and involuntary engagement coping were the only significant mediators of the relation between parental intrusiveness stressors and adolescents' anxiety/depression symptoms (Jaser et al., 2005).

Gender Differences and Coping in Adolescence

It is possible that sons and daughters of depressed parents cope differently with stress in their families. However, no studies of coping in children of depressed parents have examined possible gender difference. However, gender differences in coping have been studied in other contexts. Specifically, gender has been examined in studies on how the stressor of marital conflict affects adolescents. Since marital conflict is one of the more frequent types of stress associated with parental depression, these findings may have relevance for coping by children of depressed parents. One study conducted by Katz and Gottman (1993) actually found a link between conflict pattern and adolescent internalizing behaviors. In this longitudinal study, it was found that teacher reports of children's internalizing symptoms were significantly predicted by fathers' anger and withdrawal over a period of three years. One of the most interesting findings in this study was that there were no significant main effects of gender on any of the adolescent behavior variables, indicating that boys and girls did not differ on the amount of externalizing and internalizing behavior they exhibited. However, there was a statistically significant interaction between parental conflict and children's gender. For girls, internalizing symptoms were associated with fathers' belligerence and mothers' anger. For boys, internalizing symptoms were only associated with mothers' belligerence. Thus, based on these findings, it is suggested that to the extent that mothers or fathers act in a belligerent or angry manner while resolving a marital dispute, the opposite-sex adolescent will be rated by teachers as showing symptoms of anxiety and withdrawal three years later. These behaviors may be adaptive responses to the threatening nature of belligerence; however, these reactions of distress could eventually

lead to the development of long-term internalizing behavior problems (Katz & Gottman, 1993).

Although the previous study focused primarily on gender differences in behavioral outcomes of adolescents dealing with the stressor of marital conflict, there have been other studies devoted to the subject of gender differences in the reaction to stress in general and to depressive symptoms. In terms of dealing with general stress, it was found that both boys and girls developed higher rates of behavioral problems when they mismatched their coping and appraisals of control over the stressful situation (Compas, Malcarne, & Fondacaro, 1988). This mismatch occurred by participants generating either few problem-focused strategies when they believed they had control over the stressor, or several problem-focused strategies when they felt they had little control over the stressor. Overall, it was found that children less proficient at developing and using problem-focused coping experienced more adjustment problems (Compas et al., 1988).

In a study designed to determine why girls are more likely to develop internalizing disorders, Hampel and Petermann (2005) found that girls reported an increased perceived stress related to interpersonal stressors. When the perceived risk was met with the girls' higher scores on maladaptive emotional coping strategies, the end result was girls reporting higher levels of interpersonal stress and being at increased risk to develop internalizing disorders (Hampel, & Petermann, 2005). Li, DiGiuseppe, and Froh (2006) provided more evidence to support the finding that female adolescents and adults are more likely to become depressed, clinically and subclinically. The authors attributed this result on the idea that girls tend to use more emotion-focused coping, which involves techniques such as rumination. In their study it was found that adolescent girls were more depressed than boys, and were also more likely to use rumination, which was significantly related to depression. Thus, through this linear regression analysis, it is suggested that adolescent females may be more depressed than their male peers because of their increased likelihood of using rumination as a coping mechanism for stress (Li, DiGiuseppe, & Froh, 2006).

Based on results and findings of past studies, there is some evidence to support the equifinality hypothesis that claims multiple stressors lead to one outcome (Compas et al., 2005). It is also important to note that coping itself is situation specific; it is considered to be influenced by cognitive, behavioral, and emotional capacity of the individual and social environment (Compas et al., 2005). Thus, these theories help support the multiple-variable approach towards understanding specific influences on adolescent coping style when faced with the stressors of living with a depressed parent.

What We Know Now

Based on the results of previous studies, it has been shown that children exposed to high levels of stressors are more likely to respond to stress with high levels of arousal, which is associated with high levels of anxiety/depression and aggression symptoms (Dumont & Provost, 1998). Further, mothers' psychological functioning is a strong predictor of parenting sensitivity, the effects of which are described above. Another important result related to parental stress is that mothers who are older, care for several children, have a high domestic workload, low social support, and experience negative life events report more parenting stress which is positively related to depression (Östberg & Hagekull, 2000). Lastly, a final crucial finding from previous research is that adolescent reports of secondary coping and involuntary engagement stress responses mediate the relation between adolescents' reports of parental intrusiveness and parents' reports of adolescents' anxiety/depression symptoms. Thus, adolescents may be better at reporting on their own coping and stress responses, which are internal and covert to a significant degree (Jaser et al., 2005).

Unresolved Issues and Current Study

Research in the area of child and adolescent coping in relation to the stressors of living with a parent who has been diagnosed with depression is very limited. Only two studies (Jaser et al., 2005; Langrock, 2002), have examined child and adolescent coping and involuntary stress responses as mediators of the effects of stress on internalizing and

externalizing problems in offspring of depressed parents. However, it is crucial to note that the sample sizes of any child/adolescent coping studies have been small and homogenous in regard to both race and ethnicity, meaning these studies lack both diversity and generalizability (Jaser et al., 2005; Friedberg et al., 2003). Also, the majority of studies on parental depression have focused on the parents and effects on young children and few have investigated the effect of maternal depressive symptoms on adolescents (Albright & Tamis-LeMonda, 2002). Lastly, there has been no central investigation into the potential gender differences in the reactions to the stressors, and how these differences may translate to different coping strategies or behavioral symptoms.

Based on these gaps in the current research literature, the current study was designed to be one of the first to tackle these three limiting obstacles that have hindered the progress and validity of this area of study. The four main research questions in this study are: a) Are there gender differences in internalizing symptoms in children of depressed parents? b) Are there gender differences in the ways that children of depressed parents cope with stress related to their parents' depression? c) Are there correlations between children's coping and internalizing behaviors? d) Are there gender differences in the relation between coping and symptoms?

Methods

Participants and Procedures

As of March 2007, this study has enrolled a total of 96 families. Each enrolled family has at least one parent who has met the criterion for at least one episode of major depressive disorder at some point in the child's life. The 153 children enrolled in the study range from 9-15 years of age. The mean age of the 77 male participants was $M=11.5$ years, and the mean age of the 76 female participants was $M=11.4$ years. Participants were drawn from two sites: Nashville, Tennessee, and Burlington, Vermont.

Participants are being recruited through brochures made available at mental health centers, general medical centers, the Vanderbilt University Psychiatric Clinic, as well as with

advertisements in newspapers in the Nashville and Burlington areas. The second phase of recruitment involves the participant contacting the research team, and the participant's initial eligibility is determined through a phone screen. Those found to be eligible meet the following criterion: at least one parent has experienced at least one episode of major depression at some point in the child's life, and at least one child in the family ranges from 9 to 15 years of age. Those found to be ineligible for the study meet the following criterion: the parent has a history of psychosis or Bipolar I Disorder, the child has been found to meet the criterion for Conduct Disorder or a pervasive developmental disorder, the parent or child currently has active substance abuse or dependency, or the parent is currently actively suicidal.

After a participant's initial eligibility is determined through a phone screen, the parent and child are asked to come to the psychology department in on both the Vanderbilt University's and University of Vermont's campuses to undergo a baseline interview. If the family has more than one child that meets the criteria, each child is asked to accompany the parent for separate baseline interviews. During these sessions, the parent completes the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID), which is used to assess each parents' current and history of psychiatric diagnoses. The semi-structured psychiatric interview is also used to determine the severity and *chronicity* of the parents' depressive episodes. The children and the parent complete the Schedule for Affective Disorders and Schizophrenia for School-aged Children- Present and Lifetime Version (K-SADS-PL) in their baseline interviews in order to determine the child's present episode and lifetime history of psychiatric illness, according to DSM-IV criteria. These two diagnostic interviews make the final determination about the participant's eligibility. The parent and child also participate in a 30 minute videotaped interaction in which they first discuss a recent positive event in their family and second, a current source of stress in their family.

If the family is found to be eligible, the parents and children are asked to fill out a battery of questionnaires either at the baseline interview session, or anytime before the

family's start in the cognitive- behavioral family intervention study. The families also find out what group they will be participating in- the experimental group that partakes in the intervention, or the self-study control group that receives information on depression through the mail. The families are assigned to their respective groups based on a block randomization process.

Measures

Parents and children complete a set of questionnaires to assess current sources of stress, ways of coping, psychiatric symptoms (including depressive symptoms), family conflict and discord, and cognitive style.

Responses to Stress Questionnaire. Most pertinent to the present proposed study, all participants will complete the age-appropriate version of the Responses to Stress Questionnaire- Parental Depression Version in order to identify stressors associated with parental depression, as well as to assess children's responses to and ways of coping with these stressors (RSQ; Connor-Smith et al., 2000; Langrock et al., 2002). The identified depressed parents will complete the RSQ for each child participating in the study and children will complete the self-report version of the questionnaire. The first section of the RSQ determines how often in the past six months the child experienced each of the eleven stressful parent-child and marital interactions; the second section assesses how the child responded to and coped with the stresses. The 11 stressful situations are included in the RSQ to reflect three areas of parenting behavior that past research has demonstrated to be affected by parental depression. Four items reflect parental withdrawal, four items determine parental intrusiveness, and the remaining three items reflect marital conflict. The children and parents both use a four-point Likert scale to rate how often each of the stressors has occurred in the past six months. In a previous study, the internal consistency for the three parental stressors was parental intrusiveness, $\alpha = .59$; parental withdrawal, $\alpha = .54$; and marital conflict, $\alpha = .78$ (Langrock et al., 2002). Based on the moderate levels of these

internal consistency scores, it was determined that the occurrence of stressors in each of the domains were somewhat independent of each other.

The RSQ has 57 items that ask the parent or teen to report how the child responded in the past six months to the stressors they experienced. Previous factor analyses of the RSQ identified five primary factors (Connor-Smith et al., 2000): primary control engagement coping (emotional modulation, problem solving, emotional expression), secondary control engagement coping (positive thinking, distraction, acceptance, cognitive restructuring), disengagement coping (wishful thinking, denial, avoidance), involuntary engagement (rumination, impulsive action, emotional arousal, intrusive thoughts, physiological arousal), and involuntary disengagement (inaction, escape, cognitive interference, emotional numbing). The first three factors reflect voluntary coping mechanisms, and the last two reflect involuntary stress responses. In a previous study of children coping with parental depression (Jaser et al., 2005), internal consistencies of the five factors were primary control coping, $\alpha = .77$; secondary control coping, $\alpha = .75$; disengagement coping, $\alpha = .83$; involuntary engagement, $\alpha = .89$; and involuntary disengagement, $\alpha = .84$. The RSQ has demonstrated good internal consistency, as well as test-retest reliability, and convergent and discriminant validity.

Adolescents' internalizing and externalizing symptoms. The principle measure used today to assess a child or adolescent's internalizing or externalizing symptoms is the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983). The CBCL is a parent report index that includes 118 items, each rated on a 0-2 point scale, that comprise several behavior problem scales for both boys and girls at different age groups. The Internalizing Scale measures inward-directed behaviors (e.g., depression) and the Externalizing Scale measures outward-directed problems (e.g., aggression). The Total Behavior Problem score includes all items and reflects the overall severity of the child's dysfunction (Kazdin, Siegel, & Bass, 1992).

The Youth Self Report is a complementary index that measures a child or adolescent's internalizing and externalizing behavior problems based on the responses of the individual (YSR; Achenbach, & Edelbrock, 1991). Similar to the format of the CBCL, the YSR has 112 items, each of which are rated along a 0-2 point Likert scale, that cover 20 competence and problem items that parallel those of the CBCL, including the Internalizing and Externalizing Scales and Total Problem Score.

Results

Gender Differences in Symptoms and Coping

Adolescent boys and girls were compared on levels of internalizing symptoms and their use of primary control coping, secondary control coping, and disengagement coping in a series of independent sample *t*-tests. Contrary to expectations for Hypothesis 1, no significant main effect for gender was found on the amount of internalizing symptoms reported by either parent or child.

However, as expected and proposed in Hypothesis 2, some gender differences were found for type of coping used (please see Table 1). Specifically, males ($M = .21$, $sd = .04$) were more likely than females ($M = .20$, $sd = .03$) use of disengagement coping, $t(147) = 2.48$, $p < .05$. In contrast, females ($M = .18$, $sd = .04$) were more likely than males ($M = .16$, $sd = .04$) to report the use of primary control coping, $t(147) = -2.05$, $p < .05$. Boys and girls did not differ on their use of secondary control coping.

Correlations of Coping and Symptoms

The association of coping and symptoms was examined in a series of Pearson correlations (please see Table 2). First, the relationships between parent reports of children's coping, as well as parent reports of both children's anxious/depressed and internalizing symptoms were assessed. Parent reports of children's use of primary control coping were found to have a significant inverse correlation with parents' reports of their children's symptoms on both the internalizing and anxious/depressed scales

($r = -.43, p < .01$; $r = -.33, p < .01$; respectively). However, there was no significant relationship between parent-reported primary control coping and the children's self-reports on internalizing and anxious/depressed symptoms.

The parent reports on the children's use of secondary control coping was also significantly, negatively correlated with the parents' reports of their children's anxious/depressed symptoms ($r = -.44, p < .01$). This was the strongest relationship found across any of the correlations examining coping and symptoms, and indicates that as parents report more use of secondary control coping strategies, they also report fewer symptoms of anxiety and depression. In addition, parent reports of children's secondary control coping also indicated a significant negative relationship with parent-reported internalizing symptoms ($r = -.43, p < .01$), as well as with child reports of internalizing and anxious/depressed symptoms, although the relationships were not as strong ($r = -.26, p < .01$; $r = -.26, p < .01$; respectively).

For the use of disengagement coping as reported by parents, there was only a significant correlation found with parent-reported internalizing symptoms ($r = .27, p < .01$), which suggests that parents who report more disengagement coping in their children also report higher levels of internalizing symptoms.

Next, the relationship between children's self-reports of coping styles and both the parent and child reports of anxious/depressed and overall internalizing symptoms were examined. Primary control coping was found to be significantly negatively correlated with children's self-reports of internalizing symptoms ($r = -.44, p < .01$). The coping strategy was also significantly and negatively correlated with self-reported anxious/depressed symptoms ($r = -.41, p < .01$).

Child-reported secondary control coping was also found to be negatively associated with child-reported internalizing symptoms ($r = -.47, p < .01$) as well as with child-reported anxious/depressed symptoms ($r = -.45, p < .01$), parent-reported anxious/depressed symptoms ($r = -.20, p < .05$), and parent-reported internalizing symptoms ($r = -.17, p < .05$).

This indicates that the greater amount of secondary coping the children report using, the fewer internalizing and anxious/depressed symptoms they experience, as reported by both the parents and the children.

In regard to disengagement coping, the coping strategy shared its strongest significant relationship with child-reported overall internalizing symptoms ($r = .28$, $p < .01$), but was also significantly correlated with child-reported anxious/depressed symptoms ($r = .26$, $p < .01$). Child reports of disengagement coping were not significantly correlated with either parent report of symptoms.

Interaction of Gender and Coping in Predicting Symptoms

A series of hierarchical linear regression analyses were performed in order to determine if there was an interaction between the variables of gender and coping style. It is important to note that because parent and child reports of internalizing symptoms were so highly and significantly correlated, the scores were standardized and summed to create one comprehensive score that was used as the dependent variable for all of the analyses. Coping strategy variables were ratio scores, and were centered for use in these analyses. In regard to the centered variables regression analyses, there were a few interesting findings. The calculations indicated that within the child report of primary control coping, both child gender and centered primary control coping were found to significantly, independently predict the amount of the child's overall internalizing symptoms ($\beta = .17$, $p < .05$, $\beta = -.35$, $p < .01$, respectively). This suggests that children's gender did differentially impact children's internalizing symptoms, and that a child's use of primary control coping would significantly predict a decrease in the amount of internalizing symptoms reported. In the final step of this regression equation, which included the interaction term, child gender still had a significant effect ($\beta = .17$, $p < .05$) The interaction between the two variables was not significant. In the child gender and parent report centered primary control coping analysis, only the coping variable was found to significantly predict less internalizing symptoms ($\beta = -.31$, $p < .001$). Thus, when parents report on the use of primary control coping, only the

coping strategy itself has a significant impact on the child's internalizing symptoms. There also was no significant interaction.

In regards to the child self-report centered secondary control coping and child gender analysis, only the coping strategy was found to significantly predict fewer overall internalizing symptoms ($\beta = -.39, p < .001$). The interaction between the two variables was not significant. The regression analysis of the parent report centered secondary control coping and child gender resulted in only the coping significantly having the ability to predict fewer internalizing symptoms ($\beta = -.41, p < .001$). Again, the interaction of gender and coping was not significant. For the child report of the child gender and centered disengagement coping interaction, both variables were found to significantly, independently predict the existence of internalizing symptoms ($\beta = .17, p < .05$; $\beta = .26, p < .05$). Although the interaction was not found to be significant, both variables approached significance in this analysis.

For the parent report centered disengagement coping and child gender regression analysis, only the coping strategy was shown to significantly predict the presence of internalizing symptoms ($\beta = .24, p < .05$). However, gender showed values that approached significance both by itself, and within the interaction, which was also not found to be significant in predicting internalizing symptoms.

Discussion

The underlying theme of living in a household with a depressed parent is exposure to the stressors of parental withdrawal, parental intrusiveness, and marital conflict. These stressors appear to have a consistent effect on adolescents' symptoms of internalizing behavior that is the same across genders. This finding is most intriguing because it goes against the popular finding that females are likely to report more symptoms overall (Connor-Smith et al., 2000). However, this study lends support to past studies and current theory that in family environments characterized by stress, there is no gender difference in the reporting of these symptoms (Katz & Gottman, 1993). This finding could indicate that

parental depression is an equalizer, resulting in both sexes experiencing and reporting the same amount of symptoms. The equal reporting could also indicate that adolescent males experience more internalizing symptoms in these situations than the normative sample of males and females, which would result in increased symptoms that would not be mirrored by adolescent females coping with the same stressor. Based on the large discrepancy between what could be causing these effects, it is essential that future research look into the multiple variables and possible reasons as to why boys and girls do not differ in their experiences of the stress of parental depression in their families.

As previously mentioned, it was found that girls reported using a higher rate of primary control coping, which is characterized by problem-solving and emotion regulation techniques. Boys reported using more disengagement coping strategies, which involves avoiding the stressor altogether. The finding that both genders did not differ on their reports on secondary control coping is also potentially important. Mainly, it indicates that there is no gender difference on the use of secondary control coping skills. These findings are crucial in helping researchers and therapists understand how to approach an adolescent dealing with the stress of parental depression.

There were several important correlations found between coping strategy and internalizing symptoms (including symptoms of anxiety and depression). Most notably, it was found that children's use of secondary control coping (e.g. acceptance, distraction, positive thinking) had the strongest association with internalizing symptoms. Specifically, the more children used secondary control coping, the less they reported internalizing symptoms. In the children's self-report on coping, secondary control coping was again found to have the strongest effect on internalizing symptoms, which were also reported by the child. This inverse effect was found for both the anxious/depressed and overall internalizing symptoms subscales. The child's report on using secondary control coping was also the only self-reported coping strategy that had a significant effect on both of the parent-reported internalizing symptoms subscales. These correlations support the findings

of previous research which demonstrated that secondary control coping is the most effective coping strategy for adolescents dealing with the stressor of parental depression (Jaser et al., 2005; Langrock et al., 2002). However, by determining that the association of secondary control coping with internalizing symptoms is not moderated by gender, the present study has demonstrated that the coping strategy indeed has a robust effect for coping with the stress of parental depression. Such findings are also crucial for professionals in designing and developing interventions for adolescents who live with a parent that has been diagnosed with depression.

Due to the fact that both adolescent boys and girls of depressed parents report the same amount of internalizing symptoms and do not differ in the use of secondary control coping, and the strategy has been found to be the most effective in dealing with the stresses of parental depression, it is conceived that the ideal design for such an intervention would be to teach both sexes the skills necessary to acquire the secondary coping strategy.

In fact, the present study's findings are vital for supporting the direction and method of the parental depression intervention study these adolescents are involved in. The participants of this study, as well as their parents, are enrolled in a study of a family intervention that teaches both children and parents skills empirically determined to be beneficial and effective in coping with the stressors of parental depression. The skills that the children and adolescents are taught are all behaviors that fall under the category of secondary control coping, including positive thinking, distraction, and acceptance. It is crucial and beneficial that secondary control coping was not only found to be the most effective form of coping with parental depression, but that it was equally effective and beneficial for both genders, since the intervention teaches these coping skills to both genders simultaneously.

The series of hierarchical linear regressions revealed no significant interactions between the variables of child gender and reported coping strategies. Thus, there is no difference in how coping relates to internalizing symptoms. These results are interesting and

offer a good start in how to form a model of the relationship between coping and symptoms. It is important to note that there are several other types of symptoms that children may exhibit that could indicate depression, anxiety, and other forms of psychopathology. Thus, future research should begin to define and assess these symptoms' effects on problematic behaviors exhibited by children whose has at least one parent that has been diagnosed with depression.

This study helped lay some groundwork from which future research can build to design interventions and other forms of help for children who are dealing with the daily stresses of a parent that has been diagnosed depression. Due to the lack of previous work on this area of study, it appears that many more things need to be examined and learned. However, the awareness and study of children and adolescents who live in a household with a depressed parent has grown in the past several years, generating new types and directions of research every day. It is with these groundbreaking initiatives that professionals can gather the information necessary to develop and provide these children with the proper help they deserve.

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Table 1. *Mean T-Scores and Standard Deviations for Boys and Girls Internalizing and Anxious/Depressed Symptoms and Coping Responses*

	Boys	Girls
CBCL Internalizing	9.78 (6.5)	11.86 (7.6)
CBCL Anxious/Depressed	5.04 (4.1)	5.94 (3.7)
YSR Internalizing	12.04 (8.4)	12.93 (9.1)
YSR Anxious/Depressed	4.47 (4.1)	5.01 (4.2)
Child RSQ Primary Control Coping	.16 (.04)	.18 (.04)
Child RSQ Secondary Control Coping	.24 (.04)	.23 (.05)
Child RSQ Disengagement Coping	.21 (.04)	.20 (.03)
Parent RSQ Primary Control Coping	.17 (.04)	.18 (.04)
Parent RSQ Secondary Control Coping	.22 (.05)	.21 (.05)
Parent RSQ Disengagement Coping	.20 (.04)	.19 (.03)

Table 2. *Correlations of Coping with Internalizing and Anxious/Depressed Symptoms*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. CBCL Internalizing	--									
2. CBCL Anx/Dep	.86**	--								
3. YSR Internalizing	.31**	.31**	--							
4. YSR Anx/Dep	.34**	.38**	.91**	--						
5. C RSQ Primary	-.07	-.02	-.44**	-.41**	--					
6. C RSQ Secondary	-.17*	-.20*	-.47**	-.45**	.23**	--				
7. C RSQ Disengagement	.08	.04	.28**	.26**	-.66**	-.29**	--			
8. P RSQ Primary	-.43**	-.33**	-.07	-.04	.08	.04	-.02	--		
9. P RSQ Secondary	-.43**	-.44**	-.26**	-.26**	.14	.16	-.16	.36**	--	
10. P RSQ Disengagement	.27**	.16	.09	.05	-.16	.08	.11	-.68**	-.38**	--

* = $p < .05$; ** = $p < .01$

Note. Anx/Dep = Anxious/Depressed
 C RSQ = Child RSQ
 P RSQ = Parent RSQ