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ADULTS' RESPONSES TO DEPRESSED PARENTS: EFFECTS OF GENDER AND CAUSAL CONTROL ON INTERPERSONAL PROCESSES

by

VIRGINIA G. WADLEY

A DISSERTATION

Submitted to the graduate faculty of The University of Alabama at Birmingham, in partial fulfillment of the requirements for the degree of Doctor of Philosophy

BIRMINGHAM, ALABAMA

1997

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ABSTRACT OF DISSERTATION GRADUATE SCHOOL, UNIVERSITY OF ALABAMA AT BIRMINGHAM

Degree Ph.D. Program Psychology
Name of Candidate Virginia G. Wadley
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Title Adults' Responses to Depressed Parents: Effects of Gender and Causal
Control on Interpersonal Processes

Although attitudes toward depressed individuals have been well documented, the responses of adult children toward depressed parents have seldom been examined. No studies known to the author have addressed this issue within an experimental paradigm. The present project examines potential mediators of the attributions and affective responses of adult children that may lead them to help rather than neglect, to contact rather than avoid, and ultimately to ameliorate rather than maintain the parent's depression. Using vignettes, the influence of three factors is examined; these factors are participant gender, parent gender, and parental control over the onset of depression (control, no control, or no information). These factors are varied systematically, while depressive symptoms are held constant. After reading the vignettes, participants rated their affect, attributions, desire for contact, and willingness to help the depressed parent.

Participants experienced more anger and frustration and less sympathy toward depressed fathers than mothers, irrespective of control over the cause of depression.

Toward mothers only, control over cause made a difference in levels of anger and frustration, such that participants experienced lower levels when mother was described as having no control over precipitating events. When described as having substantial

control over these events, mothers nonetheless evoked significantly more concern than fathers. Moreover, both male and female participants were more willing to help mothers than fathers.

Female participants expressed greater sympathy and concern than male participants and also were more willing to help on all indices of helping. These results are consistent with literature, which has shown caregiving to be largely a female phenomenon. The results also suggest that a mechanism beyond mere availability may account for this phenomenon.

Willingness to help depressed parents was quite high overall, suggesting the specific impact of the parental bond. However, desire for extended contact was modest and did not vary as a function of causal control, participant gender, or parent gender. It is likely that the array of depressive behaviors is sufficiently aversive that a conflicted behavioral response (i.e., wishing to avoid while also wanting to help) occurs in spite of the high levels of concern that are aroused.

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INTRODUCTION

A considerable amount of literature has emerged over the past 20 years, demonstrating across studies and methodologies that depressed individuals elicit more negative interpersonal responses than do nondepressed individuals (Boswell & Murray, 1981; Coyne, 1976a; Elliott, MacNair, Herrick, Yoder, & Byrne, 1991; Elliott & MacNair, 1991; Gotlib & Beatty, 1985; Gotlib & Robinson, 1982; Hammen & Peters, 1977, 1978; Sacco & Dunn, 1990; Sacco, Milana, & Dunn, 1985). It is not clear, however, whether depressed individuals also elicit negative interpersonal reactions from their immediate family members.

In a clinical setting, Jacob, Frank, Kupfer, and Carpenter (1987) found that relatives of depressed individuals were intolerant of deviant behaviors and distorted cognitions, harbored resentment toward the depressed family member, and suffered considerable distress. On the other hand, McKeon and Carrick (1991) found that relatives of depressed persons expressed more "positive" attitudes toward depression and its management than did individuals who had not encountered depression within their families. However, it is not known whether attitudes toward depression as a disembodied construct directly correspond to attitudes toward the depressed family members themselves.

It is of importance theoretically to understand the nature of familial reactions to depressed family members and to identify the mechanisms underlying those reactions.

For example, do certain beliefs about depression, such as the belief that its onset is beyond the depressed person's control, translate into positive and helpful interactions with depressed family members, or do the actions of depressed persons engender negative responses irrespective of any such beliefs? Do depressed females evoke a response set that differs from that evoked by depressed males? The present study was designed to examine these issues.

Understanding the nature and mechanisms of responses to depressed family members has value beyond the potential contribution of this understanding to psychosocial theory. Identifying the mechanisms that dictate specific interpersonal reactions has value for clinical purposes, as well. Researchers with a clinical focus have shown increasing recognition that family members assume crucial roles in relation to depressed individuals. In particular, it is recognized that spouses and adult children of older adults with depression and other disorders often assume the role of caregiver (Hinrichsen, Hernandez, & Pollack, 1992; Silverstone & Hyman, 1982). Clinicians who work with these families should benefit from a fuller understanding of the inter- personal familial processes that might serve to support the depressed individual versus those that serve to maintain his or her depression.

Within this paper, two models that apply to reactions toward depressed individuals will be described and compared, and the research generated by each of these models will be reviewed. In addition, the relationship of depression and gender will be discussed, and the special case of parent gender will be explored. The importance of investigating the responses of adults toward their depressed parents will be emphasized. Finally, a study employing role-enactment methodology will be described. Specifically,

this study examines college students' reactions toward depressed parents--reactions chosen for study because of their clinical significance. The study provides a test of contrasting affective and attributional mechanisms for subsequent behavioral reactions toward depressed parents. It also provides the first examination of the influence of two variables on these reactions: parent gender and the parent's control over the cause of depression.

Interpersonal Process Models of Responses to Depressed Individuals

Current social models of depression are traced to Coyne (1976a, 1976b). These models posit that depressed individuals engender negative reactions that serve to perpetuate their depression. In his seminal study, Coyne (1976a) examined the interpersonal reactions of college women to depressed female outpatients from a community mental health clinic immediately after they had telephone contact with the outpatients. He found that depressed outpatients elicited devaluation, rejection, and negative mood states in the students. These results spawned widespread interest in the interpersonal consequences of depression.

Coyne's (1976b) model suggests that depressed individuals have exaggerated needs for support. They engage others in efforts to obtain this support but do so in such an aversive fashion that their attempts not only fail to elicit support but instead elicit rejection. Rejection then leads to exacerbation of depressive symptomatology.

Coyne (1976b) hypothesized that the arousal of negative mood mediates rejecting responses. Although some studies have found evidence to support this hypothesis (Boswell & Murray, 1981; Gotlib & Beatty, 1985; Hammen & Peters, 1978; Sacco et al., 1985), the evidence has been equivocal insofar as it consists of modest positive

correlations between rejection and negative mood. In addition, some studies have found rejection to occur in the absence of negative mood states (e.g., Gotlib & Robinson, 1982; Howes & Hokanson, 1979). One study failed to replicate either negative mood or rejection (King & Heller, 1984). The investigators who conducted that study suggested that future research should ask the question, "Who elicits a negative reaction from whom and under what condition" (King & Heller, 1984, p. 480)?

In a review of Coyne's (1976a) original study and King and Heller's (1984) attempted replication, Gurtman (1986) concluded that, within a given situation, rejection is a product of the source, the target, and the interplay between them. He stressed the importance of identifying rejection-inducing characteristics associated with each component of this formula. Perceptions and attributions associated with the source; behaviors, attributional styles, and affective characteristics associated with the target; and characteristics associated with the dynamic interplay between source and target all must be delineated. Indeed, several investigators have begun to examine these variables.

Gotlib and Beatty (1985) explored the effects of one target characteristic: depressive attributional style. They predicted that subjects would experience more negative mood states and would be more rejecting of both depressed and nondepressed targets who displayed characterological self-blame (attributing a negative outcome to aspects of his or her own personality) than behavioral self-blame (attributing the negative outcome to aspects of his or her behavior). Characterological self-blame was considered to represent a depressive attributional style. Although subjects exposed to nondepressed targets did respond more negatively to the characterological (depressive) attributional style than to the behavioral attributional style, subjects exposed to depressed targets

responded negatively irrespective of the targets' attributional styles. These subjects reported more negative mood overall. These findings suggest that a depressive attributional style, in the absence of other symptoms, evokes negative responses; however, depressive attributional style does not have an additive effect on negative responses in the presence of other depressive symptoms.

Sacco and Dunn (1990) examined a source characteristic: others' attributions concerning the successes and failures of depressed and nondepressed target individuals. Subjects made significantly more internal, stable, and global attributions for the failures of depressed targets compared with those made for nondepressed targets. They also believed that depressives' failures were more controllable than failures of nondepressed targets. With regard to successes, an opposite pattern of attributions was obtained. Subjects' attributions for the successes of the depressed targets were more external, unstable, and specific than those for the successes of nondepressed targets. Moreover, the successes of depressed targets were seen as less controllable. Thus, depressed individuals were seen as responsible for their failures but not their successes. It is interesting to note that others' attributions about the outcomes of depressed individuals' behaviors mirror those commonly found among depressed persons themselves (see Mirowsky & Ross, 1990, for a discussion of depressed individuals' sense of control over outcomes).

Subjects in the Sacco and Dunn (1990) study experienced both more anger and more concern for depressed than nondepressed targets. They were equally willing to help depressed and nondepressed targets but expressed significantly less desire for future contact with depressed targets. (Lack of desire for future contact is considered a measure of rejection in this and other studies.) Analyses conducted to determine the influence of

prior contact with depressed individuals on subjects' responses revealed no difference in the obtained pattern of results as a function of prior contact.

Sacco and Dunn (1990) conducted path analyses, generating causal models to explain willingness to help and desire for future contact. With regard to willingness to help, the presence of depression was found to influence attributions, and attributions were found to influence affective reactions. However, neither depression nor attributions determined helping directly. Helping ultimately was determined by affective reactions. Desire for future contact was mediated by a different configuration of the variables. Attributions about success and failure, affective responses, and the presence of depression all directly influenced desire for future contact. As the investigators point out, a large negative parameter estimate for the path leading from depression to desire for future contact indicates that additional, unmeasured characteristics of depressed persons cause others to reject them.

Sacco and his colleagues (1985) also explored the effects of length of acquaintance, a characteristic of the interplay between source and target. As in the later study
described above (Sacco & Dunn, 1990), they examined subjects' affective and rejecting
responses as well as their willingness to help depressed or nondepressed targets. They
found that depressed targets elicited more anger than did nondepressed targets, and longterm acquaintances (of 1 year) elicited more concern than short-term acquaintances,
irrespective of whether the targets were depressed. Willingness to help also was greater
for long-term than for short-term acquaintances. Finally, desire for future contact was
found to depend on the interaction of depression level (present or absent) and length of
acquaintance. Long-term acquaintance produced greater increases in subjects' desire for

future contact with nondepressed individuals than with depressed individuals. Moreover, future contact with nondepressed individuals, irrespective of length of acquaintance, was desired more highly than future contact with depressed individuals.

Hokanson (in an unpublished 1979 manuscript cited by Sacco et al., 1985) and Sacco and Dunn (1990) proposed a modification of Coyne's interpersonal process model of depression. Within their investigations, they partially substantiated the mediating role of negative affective responses, but this role appeared more complex than that hypothesized by Coyne (1976b). Specifically, the investigations by Sacco and Dunn (1990) and Sacco and his colleagues (1985) suggest that negative affective responses such as anger and guilt are mixed with concern. The composite of emotions produces both a willingness to help and a desire to withdraw from the depressive individual.

The ambivalent intentions and desires produced by affective reactions might be expected to convey a mixed message to the depressed individual—a message that might cause him or her to question the sincerity of others' supportive gestures. In line with the Coyne model, such doubts would lead to an escalation of depressive behaviors in an attempt to gain more convincing support. Thus, mixed behavioral reactions toward depressed individuals may inadvertently reinforce their dependency behaviors.

In summary, current interpersonal process models suggest that depressive behavior elicits in others conflicting affective responses, causing both a willingness to help and a desire to avoid or reject the depressed individual. Attributions about depressed individuals' control over their outcomes influence both the mood states and behaviors of others. Finally, although people tend to be more concerned about individuals they have

known for a long time, they would rather have contact with a virtual stranger who is not depressed than with someone they have known for some time who is depressed.

A limitation of the experimental research on interpersonal processes implicated in depression is that the research has been confined to examination of reactions toward strangers, acquaintances, or casual friends with depression (a limitation acknowledged by Gotlib & Beatty, 1985). Whether the same processes apply to family relationships remains to be determined. The finding of Sacco and his colleagues (1985) that long-term acquaintance increases concern and willingness to help is likely to generalize to family relationships. It is quite likely that, within the context of family, both concern and anger toward the depressed family member are magnified. Thus, family relationships should provide a potent and meaningful test of the interpersonal processes implicated in depression.

Weiner's Motivational Model of Responses to Stigmatized Individuals

Several researchers exploring interpersonal process models of depression (Boswell & Murray, 1981; Coates & Wortman, 1980; Gotlib & Beatty, 1985; King & Heller, 1986; Wortman & Dunkel-Schetter, 1979) have noted that responses to depressed individuals should be viewed as a subset of the reactions people have to all stigmatized individuals. Conversely, it stands to reason that models of reactions to stigmatized individuals, though they may not single out depression as a stigmatizing syndrome, should apply to depression nonetheless. It is this reasoning that leads the author to examine Weiner's model of responses toward stigmatized individuals and its bearing upon the specific case of depressed individuals.

Weiner and his colleagues (e.g., Weiner, 1980; Weiner, Graham, & Chandler, 1982) have posited that, in general, attributions influence emotions, and emotions in turn influence actions and intentions, including the intention to help. Both Weiner (1980) and Karasawa (1991) have suggested that the decision to help another is a function of the perceived cause of need. When people are believed to be responsible for their own plights, others are more likely to neglect than to give help. Weiner (1992) has proposed two possible pathways when one is confronted with a need for help: (a) Attributions that the one in need has personal control over the cause of need lead to anger, and anger leads to neglect; and (b) attributions of a lack of personal control over the cause of need lead to sympathy, and sympathy leads to helping.

Weiner has extended this general model of motivated behavior to include reactions to the stigmatized. A body of research (e.g., Brewin, 1984; Elliott & Mac-Nair, 1991; Meyer & Mulherin, 1980; Weiner, Perry, & Magnusson, 1988) has revealed that both the stigmatized person and others search for the origin of the stigma and the possible presence of personal responsibility. This search is evident in questions, such as "Why me?" and "How did this happen?" Some stigmas, of course, imply their cause. For example, for many individuals, AIDS implies unprotected sexual behavior and personal responsibility. Perceived responsibility for a given stigma should guide affective reactions toward the stigmatized individual as well as a variety of behavioral responses, including personal assistance.

Weiner and his colleagues (1988) directly examined the relationships among stigma, perceived responsibility, affect, and intended action. Ten stigmatizing conditions, including AIDS, Alzheimer's Disease, blindness, drug addiction, and obesity,

were rated as to the degree of responsibility and blame associated with each. Affective reactions and help-related actions also were measured. Stigmas that were rated high on the dimension of perceived personal responsibility (AIDS, child abuse, drug addiction, and obesity) were primarily seen by subjects as behavioral problems rather than medical/physical problems. Persons with these stigmas evoked little pity and much anger; they also elicited fewer help-giving responses.

Weiner and his colleagues (1988) reported a follow-up study within their analysis of reactions to stigmas. In this study, they directly manipulated perceptions of causal controllability for each of the 10 stigmatizing conditions. For example, AIDS was attributed either to a blood transfusion or to leading a promiscuous sex life. Blindness was attributed either to an industrial accident or to an industrial accident from repeated carelessness; obesity was attributed either to glandular dysfunction or to excessive eating without exercise; drug addiction either developed from prior treatment of pain after an injury or from experimentation with recreational drugs, and so on. The manipulation of perceptions of causal controllability resulted in attributional shifts that caused subsequent shifts in affective responses and helping judgments. However, alteration of the original attributions of responsibility was not equally possible for all the stigmatizing conditions. Furthermore, depression was not tested within this investigation. Nevertheless, the reactions of others toward depressed individuals suggest that depression is well within the scope of stigmatizing conditions. Indeed, Weiner (1993) cites reactions toward the depressed in a recent overview of perceived responsibility and social motivation.

If, as Weiner's (1988) research suggests, attributions about the perceived controllability of a condition's onset influence affective and behavioral responses, it is

important to examine attributions about the onset of depression, particularly among depressed individuals and their family members. Jacob and her colleagues (1987) discovered that 68 of 90 (76%) family members and friends of depressed persons who were asked to endorse one or more causes of depression identified external events or situations as causes of depression, while 56 (62%) agreed that depression has a biological basis. Few respondents agreed, however, that depression "runs in the family" or "is a sickness he/she [the depressed individual] will always have" (Jacob et al., 1987, p. 399). Respondents to a survey on depression, conducted by McKeon and Carrick (1991), included individuals with and without a depressed family member. The groups combined identified stress, bereavement, and heredity as the most frequent causes of depression.

A comparison of lay persons' beliefs about the causes of depression with those of depressed patients and clinical psychologists was reported by Kuyken, Brewin, Power, and Furnham (1992). Depressed patients tended to endorse biological factors as causing depression to a much greater extent than either lay persons or clinical psychologists. Clinical psychologists assigned more importance to the causal roles of stress and childhood vulnerability factors. Lay persons most often cited unfulfilled desires, hopes, and ambitions as the cause of depression. Thus, beliefs about the cause of depression are complex and vary depending on their source.

The degree to which depression is believed to be biologically versus psychologically caused is of particular interest. As mentioned above, Weiner et al. (1988) found that perceived personal control tended to be judged as greater for those with behavioral/mental syndromes than for those with medical/physical syndromes. Within an unpublished study conducted by the present author (Wadley, 1994), 221 female

undergraduates were asked to rate on a bipolar scale the relative psychological versus biological origins of various disorders. In addition, they were asked to rate the degree to which a person with each disorder could control his or her behavior. On a 0 to 10 scale, with 0 representing <u>primarily biological</u> and 10 representing <u>primarily psychological</u>, Major Depression received a mean rating of 7.36 (whereas Alzheimer's Disease received a mean rating of 3.00). Thus, Major Depression was seen as primarily caused by psychological factors.

As for control over behavior, a depressed individual was rated as having moderate control, whereas an Alzheimer's patient was rated as having almost no control over his or her behavior. These results correspond to Weiner's (1993) observation that behavioral/mental conditions tend to be associated with judgments of greater personal control, although Weiner's analysis referred to control over the condition's onset rather than over behavior.

Similarities and Differences in the Models

In Weiner's (1980) model of motivated behavior, as well as in interpersonal process models of depression, affective responses assume a central role in mediating subsequent behaviors toward another. However, the subsequent behaviors predicted to occur in the presence of anger differ in the models. Weiner's (1980) model predicts that high levels of sympathy lead to helping, while high levels of anger lead to neglect. Interpersonal process models predict that, in the case of depressed individuals, high levels of concern lead to helping even when high levels of anger are also present. Thus, the models make opposing predictions about helping (operationalized as willingness to help) in the presence of anger. On the other hand, both models predict a desire to avoid

extended contact in the presence of high levels of anger. Interpersonal process models specify that concern does not serve to temper this avoidant reaction, just as anger does not serve to curb willingness to help. Paradoxically, a conflicted behavioral response-helping while wishing to avoid—is thought to perpetuate negative cognitions and behaviors in the depressed.

Attributions about the cause of a stigmatizing condition that brings about a need for help, especially attributions about the degree of personal control over the cause, assume an important position in Weiner's model but not in interpersonal process models of depression. In the case of depression, these attributions have not been studied systematically under the purview of either model. If Weiner's model is correct, attributions that the depressed individual had personal control over the cause of depression should lead to high levels of anger, low levels of sympathy, unwillingness to help, and lack of desire for extended contact. Attributions that the depressed individual had no control over the cause of depression should lead to precisely opposite reactions.

The present study experimentally manipulates control over the cause of depression. It also tests contrasting hypotheses regarding willingness to help in the presence of anger. Finally, it examines the possible role that parent and participant gender may play in determining affective and behavioral responses.

Depression and Gender

An extensive amount of existing literature examines depression and gender. For the most part, this literature discusses difference in rates, diagnoses, and manifestations of depression by gender (Burvill, 1990; Feinson, 1986; Golding, 1988; Hirschfeld, Klerman, Clayton, Keller & Andreasen., 1984; Newmann, 1986; Oliver & Toner, 1990; Perugi et

al., 1990; Potts, Burnam, & Wells, 1991; Sowa & Lustman, 1984; Stallones, Marx, & Garrity, 1990; Umberson, Wortman, & Kessler, 1992; Weissman & Klerman, 1985; Wilcox, 1992). Differences in reactions to depressed individuals as a function of their gender have been studied less extensively.

The few investigations that have examined the influence of a depressed target's gender have yielded mixed results. Gotlib and Beatty (1985) found no differences in responses as a function of target gender. Boswell and Murray (1981) found that psychiatric diagnoses of depression versus schizophrenia differentiated the extent to which males were rejected, but not females, who were equally rejected across diagnoses. At the same time, females aroused more affection than males within this investigation.

A study by Hammen and Peters (1978) found that depressed persons tended to be rejected more strongly by members of the opposite sex. In a separate study, these same researchers (Hammen & Peters, 1977) found a somewhat different result: depressed males elicited more rejection than depressed females irrespective of subject gender, especially in the context of close relationships. Both of these studies used college undergraduates as subjects and as depressed targets, and both studies employed role-enactment methodology. Family relationships were not among the close relationships examined in either study.

In summary, studies examining the effect of a depressed person's gender on the responses of others have yielded mixed results. Moreover, the effects of gender within the context of family have not been examined. This gap in the research extends to the effects of a depressed parent's gender on the responses of adult children.

Depression and Parents

Examining responses toward depressed parents is of interest for three reasons.

First, this paradigm allows examination of the responses dictated by gender. Second, it allows examination of responses within close familial relationships, a context that has not yet been examined within an experimental paradigm. Finally, examining responses toward depressed parents may provide information of practical importance and clinical relevance.

Parent gender, of course, encompasses more than strictly gender. "Your mother" and "your father" connote unique relationships that necessarily incorporate gender but also entail relationship dimensions from which gender cannot be isolated. Reactions toward depressed mothers as opposed to those toward depressed fathers have not been reported in the literature.

An unpublished study (Wadley, 1994) did examine these reactions in a preliminary fashion. The results of this preliminary investigation can be summarized as
follows. First, among exclusively female subjects, fathers elicited more anger than
mothers for a display of symptoms attributed to either Major Depression, Alzheimer's
Disease, or no diagnosis. Sympathy was elicited equally by fathers and mothers. Second,
mothers, but not fathers, were held just as responsible for their behaviors when diagnosed
with Major Depression as when no diagnosis was given. The degree to which depressed
fathers were held responsible was equivalent to the extent of responsibility assigned
mothers with or without depression. However, fathers were held significantly more
responsible for their behaviors when no diagnosis was given. Third, willingness to help
fathers and mothers did not differ and was generally high. The generalizability of these

findings was limited by the use of only female subjects. In addition, the validity of these results may have been compromised by the inadvertent use of stimulus materials that included gender-specific behaviors. A small follow-up study using these same stimulus materials revealed that, when the gender of the target parent was not specified, the target most often was perceived as male.

The practical importance and clinical relevance of studying responses toward depressed parents have been stressed by investigators concerned with the special issues of aging parents (Silverstone & Hyman, 1982) and family caregiving (Hinrichsen et al., 1992; Parmelee & Katz, 1992). Silverstone and Hyman (1982) and Mirowsky and Ross (1992) point out that the prevalence of depressive symptomatology increases with age and associated life changes in employment, economic well-being, and marital status (see Thompson, Gallagher-Thompson, Futterman, Gilewski, & Peterson., 1991, for an examination of the special effects of bereavement). The high incidence of depression in later life makes it likely that many adult children will deal with a depressed parent as that parent ages.

Adults feel an almost universal obligation toward their parents. This obligation forms the basis of the caregiving phenomenon in which one "parents one's parents" in their later years. Adult children often try to intervene when a parent experiences somatic and affective symptoms of depression, lacks interest in usual activities, or both. They may "take up the slack" when the parent neglects household or work-related obligations. Given the potential impact of a parent's depression on his or her adult children, it is important to identify not only what happens but also why it happens. And given the potential maintenance or exacerbation of depression that can occur if negative or

ambivalent responses toward the parent are allowed to go unmitigated, knowledge of what happens and why can be used to effect positive change.

The Current Study

The present experiment examines attributions, affective responses, intentions to help, and desire to interact with depressed parents. Participants were presented with hypothetical situations designed to evoke these reactions. Because differences in responses to depressed versus nondepressed individuals have been documented sufficiently, comparison conditions in which the parent is not depressed were not included in this study.

Three factors determining attributions, affective responses, and behavioral intentions were considered. First, personal control over the cause of depression was manipulated (controllable, uncontrollable, or no information). Parent gender also was manipulated (mother or father), and subject gender (male or female) was the third factor. Thus, the experiment consisted of three factors (controllability of cause, parent gender, and subject gender) in a 3 x 2 x 2 factorial design.

Two basic vignettes were used, each depicting an interaction between "you" (the subject) and "your mother" or "your father". Personal control over the cause of depression and parent gender were varied across both versions of the vignette in a between-subjects design. Both versions were adapted from prior research (Wadley, 1994) and then were piloted among a separate group of subjects to ensure that the behaviors of the depressed parent in each were neutral with respect to gender (i.e., neither stereotypically masculine nor feminine). Specific depressive behaviors displayed by the parent varied across the two stimuli; different operational behaviors in each were selected to

represent affective, somatic, cognitive, and behavioral symptoms of depression. This was done to prevent stimulus-specific effects. The representative depressive behaviors in each vignette were intended to arouse the range of affective responses presumed to underlie behavioral intentions of helping and avoidance/ rejection.

The role-enactment methodology of the proposed study has inherent limitations. It can, however, be an effective tool for building and testing models of social behavior (Weiner, 1980). Judgments made in response to hypothetical situations are not assumed to be identical to responses in actual situations, but they do provide an approximation of actual behavioral responses. Furthermore, a number of prior laboratory studies using role-enactment methods have yielded findings that are con-sistent with those from field studies (see Sacco & Dunn, 1990, for examples and further discussion of this issue). The methodology chosen for the current study has the benefit of permitting experimental control of theoretically relevant variables that otherwise would be too costly and too difficult to manipulate. Evidence supporting the theoretical predictions made in this study can be corroborated by the use of alter- native methods in the future. A convergence of data from several methods then may provide a firm basis for drawing conclusions.

The primary goal of this research was to determine the nature of adults' responses toward depressed parents. These responses include attributions, affect, willingness to help, and desire for extended contact. No experimental study published to date has delineated the nature of these responses within the context of family.

Specific aims. The present study had two specific aims:

- 1. The first aim was to examine the effects of causal control, parent gender, and subject gender on subjects' responses.
- 2. The second aim was to investigate the roles of affective responses and causal attributions in mediating willingness to help and desire to avoid depressed parents. The roles suggested by Weiner's model of responses toward stigmatized individuals will be contrasted with those suggested by interpersonal process models of depression.

Hypotheses. Because existing data are sparse and inconclusive, no prediction was made concerning the direction of effects dictated by parent gender or subject gender.

Based on prior research, two hypotheses were generated:

- 1. In line with Weiner's model, information regarding control over the cause of depression was expected to exert a main effect on affective responses and on attributions, which serve primarily as manipulation checks. Specifically, participants who perceived the cause of depression to be within the parents' control were expected to respond to the parent with higher levels of anger/ frustration and lower levels of sympathy/ concern. The affective responses of participants given no information about the cause of depression were expected to resemble those of participants who believed that the cause of depression was within the parent's control but also were expected to be less extreme than those of participants for whom control over cause was made explicit.
- 2. Contrasting hypotheses were formulated in order to examine the affective mechanisms for willingness to help and a desire to avoid depressed parents. The Sacco and Dunn model suggests that anger and concern combine to produce willingness to help and a concomitant desire to avoid contact. High concern should not mitigate desire to

avoid, and high anger should not mitigate willingness to help, irrespective of causal control over the onset of depression. In contrast, Weiner's model would predict that anger and frustration produced by causal control should lead to unwillingness to help and a desire to avoid, while sympathy and concern produced by lack of causal control should lead to willingness to help and desire for contact.

METHOD

Participants

Three hundred five undergraduates (123 male and 182 female) enrolled in Introductory Psychology at the University of Alabama at Birmingham (UAB) were recruited to participate in the study. Participation in this study was one option by which students could partially fulfill class requirements. Participants' ages ranged from 17 to 52. One hundred seventy-nine were Caucasian, 114 were African American, and 12 indicated that they belonged to other ethnic groups, primarily Asian and Hispanic.

Materials

<u>Vignettes.</u> After successfully using similar vignettes in previous studies, two vignettes were adapted for the present project. Pilot data from an independent sample of 40 students verified that behaviors depicted in these vignettes were not gender-specific. Examples of the vignettes are included in Appendix A.

Questionnaire. Affect, attributions, desire for extended contact, and willingness to help were assessed with 11-point, Likert scale ratings. An example of the questionnaire is included in Appendix B.

Procedure

The experimenter briefly introduced participants to the study in groups. Written materials were then distributed; these consisted of a vignette, a questionnaire containing the dependent measures, and a questionnaire soliciting demographic background data.

These packets were arranged in blocks of 12, representing each combination of the two manipulated factors (parent gender and controllability of cause) and equal numbers of the two basic vignettes. Within blocks, participants were randomly assigned to condition in a strictly between-subjects design.

After participants listen to prefacing remarks, they read a vignette in which either "your mother" or "your father" was depicted expressing depressive behaviors during a parent-child interaction. Immediately afterward, participants completed a questionnaire in which they used Likert scales ranging from 0 to 10 to rate their immediate responses to that parent on dimensions of affect, attributions, desire for extended contact, and willingness to help. Finally, participants were debriefed and issued credit slips.

RESULTS

Preliminary analyses were conducted in order to identify participants with outlying scores. Criteria were predetermined, such that any participant whose responses to two or more of the 13 questionnaire items fell at or beyond three standard deviations from the cell mean was eliminated from the study. Of the original 305 participants, 3 (2 females, 1 male) met these criteria and thus were deleted from subsequent analyses.

Additional preliminary analyses were conducted to examine any differences in the dependent measures across the two basic versions of the vignette. No effect was produced on anger, sympathy, frustration, attributions, or desire for contact as a function of vignette. However, analyses revealed that participants who read the "supper" vignette ($\underline{n} = 151$) expressed higher concern than did those who read the "card game" vignette, $\underline{n} = 151$; supper $\underline{M} = 9.41$, $\underline{SD} = 1.08$; cards $\underline{M} = 8.97$, $\underline{SD} = 1.51$; $\underline{F}(1, 301) = 10.79$; $\underline{p} < .005$. They also expressed greater willingness to help the parent, $\underline{F}s(1, 301)$. They were more willing to make phone calls (supper: $\underline{M} = 8.26$, $\underline{SD} = 1.99$; cards: $\underline{M} = 7.75$, $\underline{SD} = 2.22$; $\underline{F} = 5.79$; $\underline{p} < .05$), to lend financial support (supper: $\underline{M} = 8.58$, $\underline{SD} = 1.77$; cards: $\underline{M} = 7.90$, $\underline{SD} = 2.17$; $\underline{F} = 9.65$; $\underline{p} < .005$), and to have the parent move in (supper: $\underline{M} = 5.72$, $\underline{SD} = 2.95$; cards: $\underline{M} = 4.93$, $\underline{SD} = 2.90$; $\underline{F} = 6.74$; $\underline{p} < .01$). It is likely that these findings were due to an implicit suggestion of greater debility in the supper vignette (i.e., lack of desire to cook or to eat suggests greater debility than lack of desire to play cards).

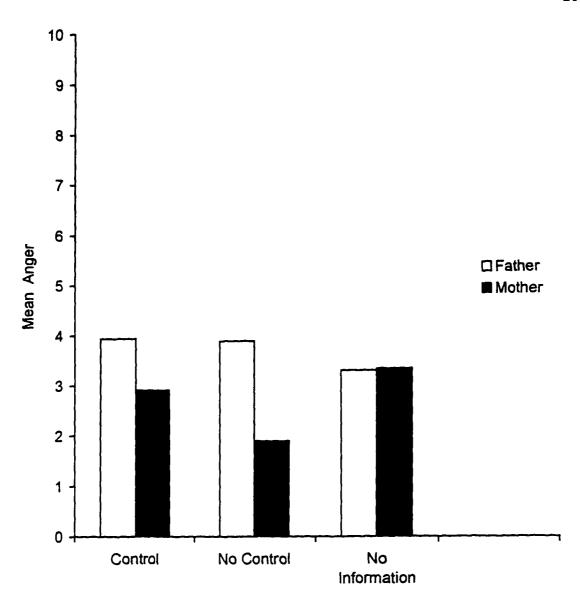
of the responses one might conceivably experience, all subsequent analyses were collapsed across the two versions of the vignette.

The dimensions of affect (four items), attributions (two items), desire for extended contact (two items), and willingness to help (five items) were measured within the 13-item questionnaire. A separate 3 x 2 x 2 (Controllability of Cause x Parent Gender x Subject Gender) between-subjects analysis of variance (ANOVA) was conducted for each dependent measure, using a general linear models procedure. A general alpha level of .05 was set as the criterion for detecting significant effects. Follow-up comparisons using Student's t test were conducted only when dictated by higher-order effects, controlling for multiple comparisons with the "least significant difference" option in the Statistical Analysis System (SAS).

Affective Responses

Anger. Significant variance in anger was accounted for by a main effect of parent gender, $\underline{F}(1, 301) = 8.75$, $\underline{p} < .01$, and the two-way interaction of parent gender and control over the cause of depression, $\underline{F}(2, 301) = 3.04$, $\underline{p} < .05$. The main effect was due to greater anger overall toward fathers ($\underline{M} = 3.73$, $\underline{SD} = 2.67$) than toward mothers ($\underline{M} = 2.80$, $\underline{SD} = 2.70$). The interaction of parent gender and causal control was analyzed with tests of simple effects. As shown in Figure 1, control over the cause of depression made no difference in anger aroused toward fathers but did make a difference in anger felt toward mothers. Significantly less anger was felt when the mother was believed to have no control over the onset of depression ($\underline{M} = 1.98$, $\underline{SD} = 2.31$) than when no information about her control was given ($\underline{M} = 3.33$, $\underline{SD} = 2.80$).

<u>Figure 1.</u> Mean anger as a function of parent gender and parental control over the cause of depression.



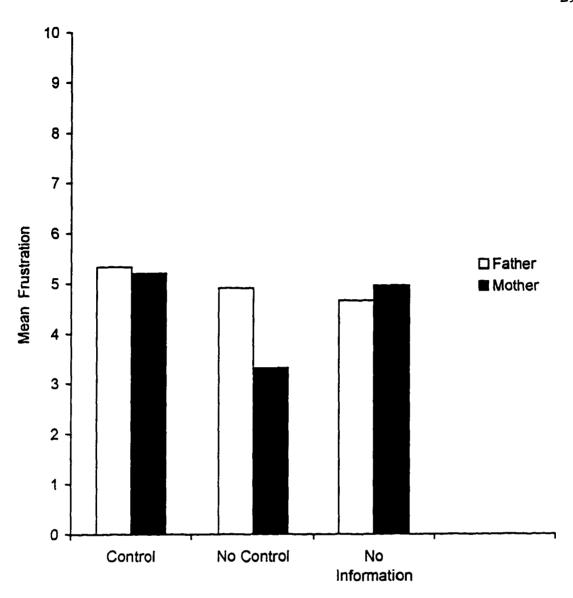
<u>Frustration.</u> Significant variance in frustration was due to a main effect of control, $\underline{F}(1, 301) = 4.59$, $\underline{p} < .01$, as well as the interaction of parent gender and control, $\underline{F}(2, 301) = 3.22$, $\underline{p} < .05$. Least frustration was experienced when the parent was depicted as having no control over the cause of depression ($\underline{M} = 4.17$, $\underline{SD} = 2.74$), and most was experienced when the parent did have control ($\underline{M} = 5.27$, $\underline{SD} = 2.71$), with frustration in the no information condition falling between the two ($\underline{M} = 4.82$, $\underline{SD} = 2.74$).

Parent gender interacted with control such that, toward mothers, frustration was least when she had no causal control over depression ($\underline{M} = 3.31$, $\underline{SD} = 2.57$) and most when she did have causal control ($\underline{M} = 5.21$, $\underline{SD} = 2.74$). Toward fathers, frustration did not vary as a function of control. The magnitude of frustration did not differ toward mothers versus fathers except when the parent was described as having no control over the onset of depression (see Figure 2). Under this condition only, significantly less frustration was experienced toward mothers ($\underline{M} = 3.31$, $\underline{SD} = 2.57$) than toward fathers ($\underline{M} = 4.92$, $\underline{SD} = 2.68$).

Sympathy. Main effects of subject gender, $\underline{F}(1, 301) = 4.96$, $\underline{p} < .05$, and parent gender, $\underline{F}(1, 301) = 6.74$, $\underline{p} < .01$, accounted for significant variance in sympathy. Female subjects felt greater sympathy ($\underline{M} = 7.73$, $\underline{SD} = 2.21$) than male subjects ($\underline{M} = 7.14$, $\underline{SD} = 2.5$), irrespective of the causal control manipulation. At the same time, both male and female subjects combined felt more sympathy toward mother ($\underline{M} = 7.90$, $\underline{SD} = 2.18$) than toward father ($\underline{M} = 7.10$, $\underline{SD} = 2.45$).

Concern. As with sympathy, a main effect of subject gender, $\underline{F}(1, 301) = 15.17$, $\underline{p} < .0001$, accounted for significant variance in concern (female subjects: $\underline{M} = 9.43$, $\underline{SD} = 15.17$

<u>Figure 2.</u> Mean frustration as a function of parent gender and parental control over the cause of depression.



1.08; males: $\underline{\mathbf{M}} = 8.84$, $\underline{\mathbf{SD}} = 1.57$). In addition, the interaction of parent gender and control over the cause of depression produced a significant effect on concern, $\underline{\mathbf{F}}(2, 301) = 3.52$, $\underline{\mathbf{p}} < .05$. Tests of simple effects revealed that concern did not differ toward mothers and fathers in the no control and no information conditions but did differ in the control over cause condition (see Figure 3). Mothers elicited significantly greater concern ($\underline{\mathbf{M}} = 9.54$, $\underline{\mathbf{SD}} = 0.92$) than fathers ($\underline{\mathbf{M}} = 8.84$, $\underline{\mathbf{SD}} = 1.77$) when each was depicted as having control over the cause contributing to depression.

Attributions

Control over cause. Attributions of control over the cause of depression served as a check of the causal control manipulation. As predicted, these attributions were significantly influenced by the control manipulation, which produced a main effect, $\underline{F}(2, 301) = 31.31$, $\underline{p} < .0001$. As depicted in Table 1, most control was attributed to parents in the control over cause conditions and least, in the no control conditions, with no information conditions falling between the two. Pairwise comparisons revealed that control over cause differed significantly from both no control and no information. These latter two conditions did not differ significantly from each other, although they did follow the expected pattern.

Responsibility. Attributions of responsibility for behavior also were influenced by a main effect of the control manipulation, $\underline{F}(2, 300) = 9.61$, $\underline{p} < .0001$. Most responsibility was attributed to parents in the control over cause conditions, less responsibility was seen in the no control conditions, and least responsibility was found in the no information conditions (see Table 1). Pairwise comparisons revealed that attributions of responsibility and attributions of control over cause, reported above,

Figure 3. Mean concern as a function of parent gender and parental control over the cause of depression.

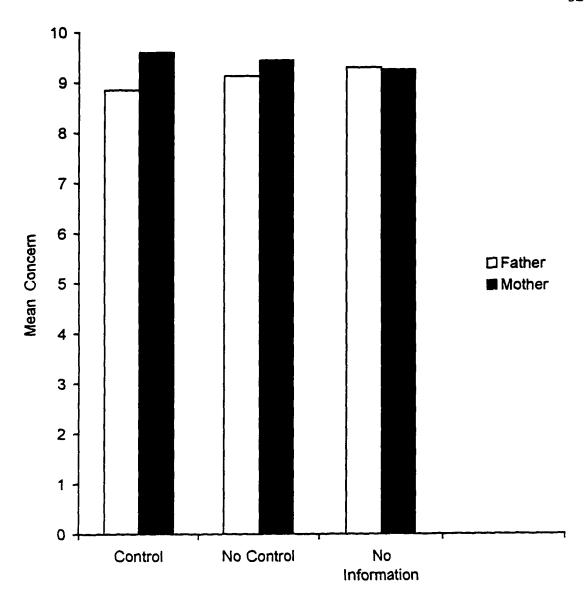


Table 1

Mean Attributions as a Function of Parental Control Over Cause of Depression

Parental control					
Type of attribution	Control	No control	No information		
Control attributions	6.77	4.19	4.53		
(<u>SD</u>)	(2.49)	(2.60)	(2.51)		
Responsibility attributions	7.01	5.73	5.44		
(SD)	(2.49)	(2.67)	(2.65)		

differed in a similar fashion: the control condition produced significantly greater attributions of responsibility than either the no control or the no information conditions. Attributions of responsibility did not differ significantly in the latter two conditions.

Desire for Extended Contact

Desire to spend three afternoons per week with the parent and desire to spend one's annual 2-week vacation with the parent did not vary as a function of control, subject gender, or parent gender. Mean desire to spend afternoons was 6.86, $\underline{SD} = 2.61$, and mean desire to spend one's vacation was 4.91, $\underline{SD} = 2.96$.

Willingness to Help

Five items of varying degrees of costliness to the subject were used to assess willingness to help. In no instance did control or lack of control over the cause of depression directly influence willingness to help. Instead, main effects of subject gender

and parent gender influenced willingness to help. As shown in Tables 2 and 3, respectively, female participants were more willing to help overall, and all participants were more willing to help mothers than fathers.

Table 2

Mean Willingness to Help as a Function of Subject Gender

-	Subject ge		
Type of help	Female	Male	<u>p</u> <
Drive	9.28	8.46	.0001
(SD)	(1.31)	(1.91)	
Financial support	8.35	8.07	n.s.
(SD)	(1.87)	(2.17)	
Job search	8.46	8.02	.10
(<u>SD</u>)	(1.83)	(1.98)	
Phone calls	8.40	7.43	1000.
(SD)	(1.95)	(2.23)	
Move in	5.54	5.01	n.s.
(SD)	(2.93)	(2.96)	

Item level analyses revealed that females were significantly more willing than males to drive parents to a doctor appointment and to make phone calls to local agencies in search of social activities for parents. Subject gender interacted with parent gender to

influence willingness to make phone calls (see Figure 4). Simple effects tests revealed that females were significantly more willing to help mothers ($\underline{M} = 8.81$, $\underline{SD} = 1.64$) than fathers ($\underline{M} = 7.97$, $\underline{SD} = 2.11$). Furthermore, males did not differ from females in their willingness to help fathers, but did differ in their willingness to help mothers, such that males were less willing to help her with phone calls than females (females: $\underline{M} = 8.81$, $\underline{SD} = 1.64$; males: $\underline{M} = 7.31$. $\underline{SD} = 2.11$).

Willingness to contribute financial support to the parent differed according to parent gender, with all participants being more willing to contribute to mothers than to fathers. Analyses of participants' willingness to help parents find part-time jobs and willingness to have parents move in did not produce significant overall models.

Correlations Among Affect and Attributions, Desire for Contact, and Willingness to Help

Because male and female subjects differed in levels of sympathy and concern as well as their willingness to help, correlational analyses using Pearson correlation coefficients were conducted separately for male and female subjects. Among females, significant correlations were found between their attributions of control over the causes of depression and both positive and negative emotions. Higher attributions of parental control were associated with higher anger (R = .27, R = .0005), less sympathy (R = .26, R = .0005), and greater frustration (R = .29, R = .0001). Surprisingly, among males, no significant correlation existed between attributions of control and emotional responses.

As previously stated, desire for contact was not directly influenced by the independent variables in this study; neither was desire for contact correlated with attributions. However, it was shown to be correlated with emotional responses. For female subjects, desire for contact was associated with sympathy (R = .26, p < .0005) and

Table 3

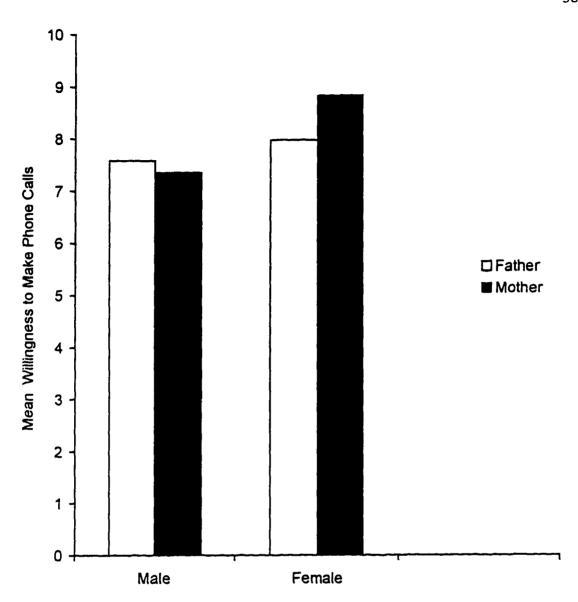
Mean Willingness to Help as a Function of Parent Gender

	Parent ger		
Type of help	Mother	Father	<u>p</u> <
Drive	9.16	8.74	.10
(SD)	(1.30)	(1.87)	
Financial support	8.74	7.76	.0001
(SD)	(1.68)	(2.16)	
Job search	8.52	8.05	.05
(SD)	(1.82)	(1.95)	
Phone calls	8.25	7.78	n.s.
(<u>SD</u>)	(1.94)	(2.26)	
Move in	5.70	4.96	n.s.
(SD)	(2.85)	(3.00)	

concern (\underline{R} = .28, \underline{p} < .0001) but not with anger or frustration. For male subjects, desire for contact was even more powerfully associated with sympathy (\underline{R} = .39, \underline{p} < .0001) and concern (\underline{R} = .43, \underline{p} < .0001). In addition, for males only, desire for contact was negatively associated with anger (\underline{R} = -.23, \underline{p} < .01).

Overall, willingness to help was not correlated with causal control or responsibility attributions for males. For females, however, attributions were correlated with

Figure 4. Mean willingness to make phone calls as a function of parent gender and subject gender.



willingness to help in two specific instances: higher attributions of responsibility were correlated with less willingness to make phone calls for the parents ($\underline{R} = -.19$, $\underline{p} < .01$), and higher attributions of control over cause of depression were correlated with less willingness to lend financial support ($\underline{R} = -.17$, $\underline{p} < .05$).

Willingness to help was significantly related to anger, sympathy, and concern among both male and female subjects. However, anger had a stronger negative association with males' willingness to help (\underline{R} = -.42, \underline{p} < .0001) than with females' (\underline{R} = -.16, \underline{p} < .05). Interestingly, concern also had a more powerful positive association with males' willingness to help (\underline{R} = .58, \underline{p} < .0001) than with females' (\underline{R} = .35, \underline{p} < .0001). Sympathy was associated with willingness to help to an equivalent degree among males (\underline{R} = .38, \underline{p} < .0001) and females (\underline{R} = .38, \underline{p} < .0001).

DISCUSSION

The study described within this paper was designed to answer questions about the nature of responses toward depressed parents. Who elicits what response from whom, and under what conditions? The results of this study suggest some complex answers to this question, some of them anticipated and others not. Among the predicted findings, this study supports the contention that perceptions of control over the cause of depression influence emotional responses toward depressed parents. Specifically, when parents were seen as having control over the cause of depression, adult children were likely to react with more anger and frustration. However, they were likely to respond with high levels of sympathy and concern irrespective of control over cause. In addition, participants' responses were consistently determined by the interaction of control over cause with parent gender, and this finding was not anticipated. Depressed mothers elicited less anger and more concern than depressed fathers, and the difference was particularly pronounced when parents were described as having no control over events contributing to the onset of depression.

Overall, participants reported much higher levels of concern and sympathy than of anger and frustration. Compared with prior research eliciting responses to unrelated depressed individuals, this result suggests the specific impact of the parental relationship on emotions. Interacting with a depressed parent evokes a different response set than interacting with any other depressed person: much greater concern is aroused.

Interestingly, however, in spite of the parental bond, desire for contact with depressed parents was only moderate. This finding mirrors the finding of Sacco and Dunn (1990) that high levels of concern do not serve to mitigate the desire to avoid depressed individuals.

Unlike desire for contact, willingness to help depressed parents was quite high overall. The one exception to this rule was willingness to have a parent move in. This exception probably occurred for two reasons. First, having a parent move in is much more costly than the other indices of helping included in the study. Secondly, having a parent move in necessarily incorporates extended contact. Thus, willingness to help by having a parent move in was likely dampened by the general desire to avoid prolonged contact with the depressed parent.

While affect and attributions varied as a function of control over cause of depression, desire for contact and willingness to help did not. No instance occurred in which any of the measures composing these latter constructs was influenced directly by the control manipulation. However, desire for contact and willingness to help were significantly correlated with affective responses. This finding suggests that any influence of the control manipulation on helping and desire for contact or avoidance was indirect, mediated by emotion. Furthermore, it suggests that emotions were aroused by other factors in addition to perceptions of parent control. For example, the depressive behaviors exhibited in all variations of the vignette probably aroused at least as much, if not more, emotion than that generated by causal control alone. Certainly this probability is consistent with prior research that has demonstrated differing emotional responses as a function of exposure to depressive versus nondepressive behaviors.

Perhaps the most robust results of this study are the gender effects. Female participants showed higher levels of sympathy and concern and greater willingness to help depressed parents. This result of greater willingness to help among females responding to study vignettes certainly is consistent with well-established higher prevalence of women among actual adult caregivers of older family members (Ford, Goode, Barrett, Harrell, & Haley, in press; Stone, Cafferata, & Sangl, 1987). For example, Stone and colleagues (1987) cite data from the 1982 National Long-Term Care Survey and Informal Caregiver Survey indicating that informal caregivers of noninstitutionalized disabled adults are primarily women (72%), with adult daughters forming the largest segment of this population. Sons tend to become caregivers only in the absence of an available female sibling (Horowitz, 1985). Using data on all living children (N = 13,172) of a sample of impaired elders (N = 4,371), Dwyer and Coward (1991) found that daughters were 3.22 times more likely than sons to provide assistance with activities of daily living and 2.56 times more likely to provide assistance with more peripheral caregiving activities. Reports given by care recipients themselves (Coward, Horne, & Dwyer, 1992) as to the help provided by sons and daughters revealed that 15% of fathers were helped by sons and 20.5% were helped by daughters, while 19.9% of mothers were helped by sons and 41.2% were helped by daughters.

It has often been hypothesized that greater prevalence of females among caregivers is a function predominantly of their presumed availability of time for performance of these tasks (Berardo, Shehan, & Leslie, 1987; Coverman, 1985; Ross, 1987). However, no evidence exists that women have more "free time" to devote to caregiving. Not only do women have competing demands on their time, such as

employed full-time spend an amount of time in caregiving activities that is virtually equivalent to the time spent by those who are not employed (Matthews & Rosner, 1988; Stoller, 1990). The present finding (among females who are only potential caregivers) of greater sympathy and concern as well as greater willingness to help both mothers and fathers suggests a gender difference that precedes the actual assumption of caregiving duties. This finding is more consistent with a socialization hypothesis (Finley, 1989), which purports that gender role attitudes are learned through socialization, and that the socialization process then influences such choices as the decision to provide caregiving (Ross, 1987).

An additional contribution of the present study is the surprising finding that female participants were more concerned and more willing to help, despite the fact that their attributions of parental control and responsibility did not differ from male participants' attributions. Thus, irrespective of their attributions about parents' responsibilities for the onset of depression, female participants displayed what appears to be a more empathic response.

These results have potentially important policy implications. Some scholars have expressed concern that as more women have competing demands such as full-time employment, they will be unwilling to take on caregiving responsibilities for the growing population of older adults. It may be, however, that strong and early influence of socialization processes will override the effects of escalating demands on women. The results of this study, conducted among a fairly young sample, suggest that caregiving is likely to remain a female phenomenon in the foreseeable future.

Parent gender also exerted a pervasive and unexpected influence on responses. Fathers elicited more anger than mothers, less sympathy, less concern when depicted as having control over the cause of depression, and more frustration when depicted as having no control over the cause of depression. Moreover, fathers elicited less willingness to help than mothers from all participants, whether male or female. Here again is an experimental result that mirrors data describing who the recipients of care actually are. In the 1982 survey cited above (Stone et al., 1987), 60% of the 1.6 million care recipients were female. In large part, this is a finding that has been attributed to population demographics: there are currently 68 men to every 100 women over age 65, and the gap increases with age (Dwyer & Coward, 1992). However, the present results suggest that mothers are more likely to be helped than fathers, independent of the fact that more mothers live to advanced ages. It is possible that attitudes of filial responsibility toward mothers are greater than those toward fathers as a function of adult children's obligation to reciprocate for the lifelong care that mothers traditionally have given their children. Moreover, the present study suggests that differing affective responses toward mothers and fathers may help account for some of the existing gender differences among care recipients. This finding calls into question the suggestion that children provide care simply because parents need care (Anderson, 1984; Leigh, 1982).

It is possible that willingness to help mothers and fathers is also influenced by unmeasured relationship factors, such as feelings of affection or closeness to one's parents. In an unpublished study by the author of this paper (Wadley, 1994), measures of closeness and conflict toward participants' own parents were included. Among a sample of 221 females, relationships with their own parents accounted for small but

statistically significant portions of the variance in willingness to help target mothers and fathers, as well as the variance in attributions of responsibility and control toward fathers only. Affective responses toward target parents were not correlated with relationship measures, however. This finding is related to the finding of Finley, Roberts, and Banahan (1988), who conducted telephone interviews among 667 adults with a living parent aged 70 years or older. Using a measure of filial obligation, they found that among females, but not males, affection was related to filial obligation toward both mothers and fathers. For males, affection did not necessarily engender feelings of obligation.

As previously discussed, the present study contains the limitations inherent in role enactment methodology. Responses to hypothetical situations may differ from responses that occur in real-life situations. However, real-life situations seldom allow for isolation and scrutiny of pertinent variables. The methodology of this study does allow such an advantage, while at the same time providing an acceptable approximation of the responses that might actually occur. An additional limitation of this study is the lack of comparison conditions in which parents are not depressed. The decision not to include these comparisons was based on the abundance of existing evidence that interacting with depressed versus nondepressed individuals yields powerful and consistent effects. The scope of the present study did not allow for inclusion of the additional conditions that would very likely have demonstrated these same effects. The outcome of comparing responses exclusively toward depressive behaviors is that the magnitude of differences produced by other variables is likely to have been smaller. Thus, obtained results may be less striking, though nonetheless significant.

The study reported within this paper appears to be among the first to examine reactions toward depressed family members within an experimental paradigm. It also provides the first known examination of the influence of gender and parental control over the cause of depression on adults' emotional and behavioral responses toward their depressed parents. As expected, parental control over the cause of depression was demonstrated to influence participants' emotional responses. The evidence from this study also suggests that additional factors play a significant part in both the emotional responses and the behavioral responses of adult children toward their depressed parents.

One of these factors is gender: the gender of both parent and child can be used to predict behavioral outcomes such as helping. The present study pro- vides clues about factors underlying gender differences in caregiving and care receipt that extend beyond simply availability and demography.

Other factors that determine responses toward depressed parents remain untapped.

The differences found in this study between vignettes suggest that the degree of debility associated with depression may be one factor associated with concern and subsequent willingness to help. Future studies might examine this relationship.

A final implication of this study is the apparent resilience of the wish to avoid prolonged interaction with depressed individuals. Even when the depressed individual is one's parent, it appears that people are motivated to avoid the conflictual emotions aroused by extended contact with a depressed person. None of the factors examined in this study mitigated this tendency. It is possible that the array of typical depressive behaviors is sufficiently aversive that, despite lack of control over the cause of depression, despite the generation of high levels of sympathy and concern, and despite the

power of the parental bond, a self-preserving tendency to withdraw from the toxic effects of depression remains.

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APPENDIX A: EXAMPLE VIGNETTES

Supper vignette instructions: Please read the following vignette and imagine that the situation described below is happening to you.

Earlier this week, you mentioned to your (PARENT GENDER MANIPULATION: father/mother), who lives alone, that you would like to drop by for supper this evening. When you arrive, you notice that the grass is overgrown and the sink is filled with dishes. Your (father/mother) is sitting at a window in the living room, looking outside. (He/She) acknowledges that you have arrived, but does not get up.

You ask your (father/mother) if you can help with supper, and (he/she) replies that (he/she) thought perhaps you could run out and pick up some take-out chicken. You suggest that your (father/mother) come along and eat out with you instead, but (he/she) declines, saying that (he/she) is not good company and would rather stay home. You try to persuade (him/her) to change (his/her) mind, but you don't succeed. (He/She) complains that going out is too much of an effort. (He/She) adds that (he/she) is really not very hungry anyway. (He/She) says (he/she) hasn't had much of an appetite lately and would just as soon skip supper altogether.

You can see that you won't be able to change (his/her) mind. (He/She) remains in the chair and continues to stare out the window, remarking that (he/she) simply has nothing to look forward to. (He/She) has been depressed for several months now (CONTROL OVER CAUSE MANIPULATION: ever since he/she chose to retire. Although you and everyone else had advised him/her against it, he/she insisted on taking early retirement after working for 30 years and deriving much satisfaction from his/her job.// ever since he/she was forced to retire. He/she was laid off when his/her

company was shut down unexpectedly, after working for 30 years and deriving much satisfaction from his/her job.// no further information given).

Card game vignette instructions: Please read the following vignette and imagine that the situation described below is happening to you.

Earlier this week, you mentioned to your (PARENT GENDER MANIPULATION: father/mother), who lives alone, that you would like to drop by to play cards this evening. When you arrive, you notice that the grass is overgrown and the sink is filled with dishes. Your (father/mother) is sitting on the couch watching T.V. (He/She) acknowledges that you have arrived, but does not get up.

You ask your (father/mother) if you can help out by setting up the card table, and (he/she) replies that perhaps the two of you could play another time. (He/She) says that (he/she) would find it difficult to concentrate on a card game tonight. You try to persuade (him/her) to change (his/her) mind, but you don't succeed. (He/She) complains that (he/she) always loses at cards anyway. (He/She) adds that (he/she) is really rather tired. (He/She) says (he/she) hasn't been sleeping very well lately and would just as soon try to get to bed early.

You can see that you won't be able to change (his/her) mind. (He/She) remains on the couch and continues to watch T.V., remarking that (he/she) simply has nothing to look forward to. (He/She) has been depressed for several months now (CONTROL OVER CAUSE MANIPULATION: ever since he/she chose to retire. Although you and everyone else had advised him/her against it, he/she insisted on taking early retirement after working for 30 years and deriving much satisfaction from his/her job.// ever since he/she was forced to retire. He/she was laid off when his/her company was shut down

unexpectedly, after working for 30 years and deriving much satisfaction from his/her job.// no further information given).

APPENDIX B: EXAMPLE QUESTIONNAIRE

Please read the following questions and circle the number that best describes your reactions to your (father/mother) in this situation.

(AFFECT)

- 1. How angry do you feel toward your (father/mother)?, rated from 0, not at all angry, to 10, extremely angry.
- 2. How sympathetic do you feel toward your (father/mother)?, rated from 0, not at all sympathetic, to 10, extremely sympathetic.
- 3. How concerned are you about your (father/mother)?, rated from 0, not at all concerned, to 10, extremely concerned.
- 4. How frustrated are you with your (father/mother)?, rated from 0, not at all frustrated, to 10, extremely frustrated.

(ATTRIBUTIONS)

- 5. How much do you think your (father/mother) was able to control the cause of (his/her) depression?, rated from 0, not at all able to control, to 10, extremely able to control.
- 6. How responsible is your (father/mother) for (his/her) behavior?, rated from 0, not at all responsible, to 10, extremely responsible.

(DESIRE FOR EXTENDED CONTACT)

- 7. How much would you like to spend three afternoons each week with your (father/ mother)?, rated from 0, not at all, to 10, extremely.
- 8. How much would you like to spend your annual two-week vacation with your (father/ mother)?, rated from 0, not at all, to 10, extremely.

(WILLINGNESS TO HELP)

- 9. How willing are you to drive your (father/mother) to (his/her) next doctor's appointment?, rated from 0, not at all willing, to 10, extremely willing.
- 10. How willing are you to spend time calling local agencies to find out what social activities they might offer for your (father/mother)?, rated from 0, not at all willing, to 10, extremely willing.
- 11. How willing are you to contribute financial support to your (father/mother)?, rated from 0, not at all willing, to 10, extremely willing.
- 12. How willing are you to help your (father/mother) find a part-time job?, rated from 0, not at all willing, to 10, extremely willing.
- 13. How willing are you to have your (father/mother) move in with you?, rated from 0, not at all willing, to 10, extremely willing.

GRADUATE SCHOOL UNIVERSITY OF ALABAMA AT BIRMINGHAM DISSERTATION APPROVAL FORM

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