RESPONSIBILITY JUDGMENTS ABOUT STIGMAS: DOES DEPRESSION MATTER?

by

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Abstract

A responsibility inference process and emotion mediation model (Weiner, 1995) were tested in self perception and person perception. In addition to the validity of the responsibility inference process and model, I examined whether there were systematic differences in the self and person perceptions of depressed and non-depressed respondents. Two hundred and seventeen undergraduate university students from the University of Northern British Columbia completed questionnaire packages which included (i) the Beck Depression Inventory (BDI) (Beck, 1967), (ii) the Happiness Measure Scale (Fordyce, 1988), and (iii) two Reasons for Misfortune questionnaires. Scores from the BDI were used to separate respondents into depressed and non-depressed groups. The Reasons for Misfortune questionnaires assessed attributions about controllable and uncontrollable causes of misfortunes that happen to self and to others. The data supported the responsibility inference process and, in general, the emotion mediational model postulated by Weiner (1995). There were no systematic differences attributable to depression level. However, there were systematic self-other differences in responsibility, emotion, and action tendency judgements. These results were interpreted as evidence of an illusion of control bias (Langer, 1975).

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Responsibility Judgements About Stigmas: Does Depression Matter?

Attribution theory has contributed a great deal to understanding the linkages between cognitive appraisals, emotions, and actions. Weiner's (1995) attributional approach to social motivation incorporates two related concepts: the responsibility inference process and the responsibility judgement model (Weiner 1986; 1995). The responsibility inference process (Weiner, 1995) provides an explanation for people's responses to social events that have positive or negative consequences. Specifically, the responsibility inference process addresses how causal attributions affect judgements about personal responsibility for events. According to Weiner (1995), the responsibility inference process operates when (i) an individual is believed to have caused an event, (ii) the cause is believed to be controllable by that person, and (iii) there are no mitigating circumstances. Thus, people are held responsible for an event if they are perceived to have caused the event, when the cause is believed to be controllable by them, and when there were no known extenuating circumstances for the cause. On the other hand, the responsibility inference process does not operate (i.e., responsibility judgements are not made) if any of the three conditions are not met (Weiner, 1995).

The responsibility judgement model (Weiner, 1986; 1995) basically proposes that thoughts determine feelings and feelings, in turn, serve as guides to behavior (see Appendix A). That is, emotions are considered to be motivators of behavior. According to Weiner (1993; 1995), perceiving others to be not responsible for their negative outcomes tends to elicit pity and prosocial

behavior (Weiner, 1986; 1993). However, perceiving others to be responsible for their problems, tends to elicit anger and negative behavior reactions, or little prosocial behavior (cf. Graham & Weiner, 1993; Juvonen & Weiner, 1993). There is a substantial body of empirical research that exists that supports a link between the responsibility inference process and an emotion mediational model of social behavior.

Review of Research

Weiner's (1974, 1979, 1986) attributional theory of social motivation has been examined for its appropriateness along many dimensions. The role of perceived causal controllability in determining affective and behavioral consequences of negative events/outcomes is perhaps the most extensively examined (Deaux, 1976a, 1976b; Ickes & Kidd, 1976; Meyer & Mulherin, 1980; Reisenzein, 1986; Schmidt & Weiner, 1988; Weiner, 1974, 1979, 1980a, 1980b). For example, Weiner, Graham, & Chandler (1982) examined the relationship between the three causal attributional dimensions (locus, stability, and controllability) and feelings of anger, pity, and guilt. In these studies, university students were asked to describe situations in which they experienced anger, pity, or guilt and then to provide the cause of those situations. Pity was related to uncontrollable causes for negative events whereas anger and guilt (self-directed anger) were related to controllable causes for negative events (Weiner et al., 1982). These results, and the results of a growing number of studies, are consistent with the causal pathways identified in Weiner's (1986) theory.

Responsibility judgments for stigmas

One interesting area of investigation is affective and behavioral responses to the "onset controllability" of stigmas. Perceived controllability, pity and anger, and helping responses were examined using 10 stigmas (Weiner, Perry, & Magnusson, 1988). The controllability of the onset of the stigmas was manipulated and the ratings of responsibility were examined using the following stigmas: AIDS, Alzheimer's Disease, blindness, cancer, child abuser, drug addiction, heart disease, obesity, paraplegia, and Vietnam War syndrome. The uncontrollable conditions elicited more pity, less anger, and were more likely to result in social support than the controllable situations. Without controllability information, low responsibility ratings were given for physically based, or uncontrollable, stigmas such as Alzheimer's Disease, blindness, cancer, paraplegia, Vietnam War Syndrome and heart disease. In contrast, high responsibility ratings were given to more behaviorally based, or seemingly controllable stigmas such as AIDS, child abuser, obesity, and drug addiction (Weiner et al., 1988).

In a similar study conducted by Schwarzer & Weiner (1991), emotional reactions toward disease-related stigmas and the probability of social support were examined. Again, the controllability of the onset of the stigmas was manipulated. Pity was found to be a strong predictor for social support given a life-threatening stigma (cancer, AIDS) that was perceived to have an uncontrollable onset. For the behavioral stigmas (obesity, anorexia), anger was found to predict the likelihood of social support. A stigma that was perceived to

have a controllable onset elicited higher levels of anger and less social support (Schwarzer & Weiner, 1991).

AIDS: Responsibility judgments

Perhaps the most controversial stigma in recent years is AIDS. In a study conducted by Graham, Weiner, Giuliano, & Williams (1993), five known causes of AIDS were presented to subjects in an effort to determine how sympathy and anger were related to the perceived controllability of contracting AIDS. The five causes given were: blood transfusion, normal sexual behavior, frequent casual sex, homosexual behavior, and drug use. Responsibility ratings were found to be highest for drug use, followed by homosexual behavior and promiscuous sex. The lowest rating for responsibility was found for AIDS contracted through a blood transfusion. The affect data showed that sympathy and anger are inversely related. Blood transfusions (uncontrollable) elicited the highest ratings for sympathy whereas drug use (controllable) elicited the highest ratings for anger (Graham et al., 1993). These results support previous conclusions that affective reactions to stigmas are influenced by the perceived controllability of causes (e.g., Weiner et al., 1988).

Political ideology and responsibility judgments

Other researchers have examined how political ideology affects causal attributions and thus responsibility judgments. Zucker and Weiner (1993) found that conservatism was related to attributions of personal causality, controllability, anger, and blame for poverty, and conservatives felt less pity and were less likely to help victims of poverty. In addition, conservatives were more

likely to attribute homosexuality (Mallery, 1990; Whitley, 1990) and obesity (Crandall, 1992; Crandall & Biernat, 1990) to factors controllable by the individuals. It appears that political ideology--a cognitive framework--influences attributions made regarding the causes of negative outcomes/events and thus the degree of personal responsibility for those outcomes/events.

Hostile attributional style

How attributional styles affect behavior has been examined by Graham, Hudley, & Williams (1992). They found that "aggressive" youths (determined by peers', teachers' and self ratings) tended to perceive that harm to themselves by others was done intentionally, and they became more angry and were more likely to retaliate aggressively in situations of interpersonal harm than were youths who were not generally deemed aggressive. In an effort to determine if they could change the hostile attributions, Hudley & Graham (1993) conducted a study on aggressive youths participating in a cognitive/behavioral-based attribution intervention program. They found that after the intervention program, aggressive youths showed a less hostile intentionality bias and engaged in less retaliatory behavior. These results supported the implementation of cognitive change programs for reducing aggressive behavior in adolescents. Unfortunately, "anger was relatively uninfluenced by participation in the experimental intervention" (Hudley and Graham, 1993, p. 135).

The research discussed thus far supports the thought-affect-action causal pathways outlined by Weiner's (1986) attributional theory of social motivation. Comparisons have been made between different stigmas, conservative and

liberal political ideologies, and attributional styles of aggressive and non-aggressive youth. A consistent finding has been that the perceived controllability of the cause of an outcome/event influences responsibility judgments which in turn determine subsequent emotions and actions.

Predictions From the Responsibility Judgement Model

Person perception

The *person perception* implications of these different attributions in Weiner's (1986, 1995) theory are as follows: people who perceive the cause of a victim's misfortune to be personally controllable by the victim should hold the victim responsible and indicate more anger and more negative behaviors (e.g., avoidance/neglect) toward the victim (see Appendix A). Alternatively, people who perceive a victim's misfortune to be due to factors which are not controllable by the victim should *not* hold the victim responsible and should indicate less anger and less negative behaviors (or even positive behaviors) toward the victim (see Appendix A).

Self perception

The *self perception* implications of different controllability attributions can be predicted from Weiner's theory (1986,1995), as follows: people who perceive the cause of their own negative outcomes to be personally controllable should hold themselves responsible, become angry or irritated with themselves and should initiate a personal behavioral change (see Appendix B). On the other hand, those who perceive the cause of their negative outcome to be uncontrollable by both themselves and anyone else should *not* make

responsibility judgments, and should become sad or filled with self-pity which in turn should lead to a state of passivity (see Appendix B). There is also the possibility that a person may view the cause of their problem to be externally controllable by another person (see Appendix B), in which case they should indicate anger and a desire to retaliate against the other person (e.g., Graham et al., 1992).

Implications for Depressed People

Neither the responsibility inference process, nor the motivational model outlined by Weiner (1986, 1995) have been tested specifically in depressed samples. However, a review of relevant depression literature revealed a number of leads that make possible several predictions.

The responsibility inference process

First, despite a prevailing belief that depressed people have distorted cognitions, there is growing evidence to the contrary (e.g., Alloy & Abramson, 1982, 1979; Dobson & Franche, 1989; Haaga & Beck, 1995). Central to this research is the finding that depressed people tend to be less susceptible to illusions of control (e.g., Alloy & Abramson, 1982; Layne, 1983), and that an illusion of control has been shown to decrease immediate depressive mood reactions to negative events (Alloy & Clements, 1992). The "depressive realism" findings suggest that depressed people are more likely to view the controllability of negative life events as about the same for self and others (i.e., to be consistent in their attributions irrespective of the attributional target), whereas non-depressed subjects are more likely to view the controllability of

negative events happening to self to be lower than the controllability of negative events happening to others, i.e., to show a self-serving bias (e.g., Golin, Terrell, Weitz, & Drost, 1979). Thus, both in person perception and in self-perception domains, depressed and non-depressed people should show distinctive attributional patterns, as follows:

- *Pattern A. self-other attributions about the causes of negative events/outcomes:*

depressed: high consistency (low control for self and others)
non-depressed: low consistency (low control for self; high control for others)

Alternatively, several sources have suggested that depressed and non-depressed people are likely to differ in their self attributions, but not their attributions about others (e.g., Beck, 1976; Sweeney, Shaeffer, & Golin, 1982). That is, a "depressive attributional style" is thought to be specific to self outcomes because the outcomes and causal explanations have implications for self-esteem, whereas others' outcomes and one's causal understanding of those should have less impact on self-esteem (cf. Abramson, Seligman, & Teasdale, 1978). By this reasoning, an 'illusion of control' bias would be operating for non-depressed but not for depressed people which would lead to the following attribution predictions:

- *Pattern B. self-other attributions about the causes of negative events/outcomes*:

depressed: lower control for self than for others
non-depressed: higher control for self than for others

The responsibility judgement model

In person perception, if the results of the present study indicated pattern "A" above, non-depressed people would have been more likely than depressed people to judge victims' personal responsibility for negative events/outcomes to be higher and become more angry and neglectful toward victims of negative events. If the results indicated pattern "B" above, depressed and non-depressed individuals would not have differed in their responsibility, affect, or action judgments about victims.

For self perception, if the results indicated pattern "A" above, depressed and non-depressed people would not have differed in their responsibility, affect, or action judgments. If the results indicated pattern "B" above, non-depressed people would have been more likely than depressed people to hold themselves responsible for negative outcomes, and become more angry at themselves and engaged in behavioral change.

Self-Other Consistency in Responsibility Judgements

I was uncertain as to whether people would take greater or lesser responsibility for themselves than they assigned to others for the same negative outcome. If they took greater responsibility for themselves this would have indicated a stronger relative illusion of control over one's own outcomes (Langer, 1975). Lesser responsibility for self would have indicated a self-serving bias was operating (Brown & Rogers, 1991; Krebs, Denton, & Higgins, 1988; Miller & Ross, 1975). An illusion of control bias (Langer, 1975) refers to the people's tendency to attribute more control over positive events for self than

they attribute to others' success. Although this bias usually refers to the tendency for people to take credit for success and deny responsibility for failure (Krebs, Denton, & Higgins, 1988; Miller & Ross, 1975), it has been shown that if people attribute the cause of their failure as something that is controllable by them, they are sometimes willing to accept responsibility for the negative event (failure), especially if they believe that they can change future results (cf. Weiner et al., 1972). On the other hand, a self serving bias (Brown & Rogers, 1991; Krebs, Denton, & Higgins, 1988; Miller & Ross, 1975), if operating, would appear as a tendency for people to attribute the negative outcome to situational causes for themselves. This bias is partially due to an actor-observer bias effect (Jones & Nisbett, 1971) which predicts that people will attribute the negative event for self more to external (or situational) causes and attribute the problems of others to their internal traits or dispositions.

Thesis Research

I had two aims in the present study. First, I wanted to test the responsibility inference process outlined by Weiner (1995) by manipulating the perceived controllability of hypothetical misfortunes. In addition, both depressed and non-depressed subjects were exposed to the misfortunes, which supposedly happened to themselves (self perception) as well as to someone other than themselves (person perception). I was interested not only in the validity of the responsibility inference process (Weiner, 1995) and whether it applied to depressed people, but also in whether there were systematic differences in the self and person perceptions of depressed and non-depressed people. Second, I

wanted to test the temporal relations of the emotion mediational model outlined by Weiner (1995), for each misfortune, in self and person perception domains, and in depressed and non-depressed samples.

Method

Participants

The measures described below were given to 217 undergraduate students (127 females, 89 males; mean age = 23.2 years), drawn from introductory university courses at the University of Northern British Columbia. The mean Beck Depression Inventory (described in the materials section below) scores for the 71 individuals in the depressed group and 70 individuals in the non-depressed group were 18.29 (*SD* = 6.56) and 2.83 (*SD* = 1.57), respectively.

Materials

Subjects were asked to complete the Beck Depression Inventory (Beck, 1967) (see Appendix C) as well as a Happiness Measure (Fordyce, 1988) (see Appendix E) in an effort to assess their overall state of depression. I originally planned to use a combined score of the two scales as an index for classifying subjects into depression groups. However, I chose not to use the Happiness Measure (Fordyce, 1988). Although the correlation between the two questionnaires was significant (r = -.66 , p = .000), the literature pertaining to depressive attributional styles has not included this measurement tool. In an effort to make my results comparable with the literature, I chose to use the more commonly utilized measure, the Beck Depression Inventory (Beck, 1967).

Therefore, details of the Happiness Measure are not provided in the materials portion of this paper but appear in Appendix E.

Subjects also completed two Reasons for Misfortune questionnaires which were designed to assess attributions about controllable and uncontrollable causes of misfortunes that happened to self and others. The Reasons for Misfortune questionnaires measured four empirically-established attributional dimensions, namely locus, personal control, external control, and stability (Higgins, 1992; McAuley, Duncan, & Russell, 1992; Weiner, 1986). The locus of causality refers to whether the cause is within, or external to, the victim (self or other). Stability concerns whether the cause is something which is constant or changeable over time. Finally, the two control dimensions, personal and external control, refer to whether or not the cause is something that is controllable by the victim (personal control), or controllable by others (external control).

McAuley et al. (1991) and Higgins (1992) reported positive correlations between locus and personal control, and negative correlations between personal control and stability as well as locus and external control. Thus, if the cause of an event is perceived to be internal to the individual, it is also usually perceived to be personally controllable by them; when perceived to be personally controllable, it is also usually perceived as being unstable. In addition, if a cause is perceived to be internal to an individual, it is also usually perceived to be uncontrollable by external factors. McAuley et al. (1991) and Higgins (1992) reported negative correlations between personal control and

external control. Thus, if a cause is perceived to be personally controllable, it is also usually viewed as uncontrollable by external factors. However, Higgins (1992), also reported positive correlations between personal control and external control for two (of six) misfortunes, which would suggest some situational specificity for the correlations between personal control and external control subscales. That is, for some of the misfortunes, when a cause was viewed as personally uncontrollable, it was also perceived to be uncontrollable by others.

In addition to these four causal dimensions, the questionnaires assessed responsibility judgments, emotions, and actions pertaining to each of the misfortunes (see Appendix D).

There were 16 questionnaire packages in total. The orders were counterbalanced such that eight of the packages had the Reasons for Misfortunes questionnaires first (four with the self version first, and four with the person version first) followed by the depression scales (four with the BDI first, and four with the Happiness Measure first). The remaining eight packages began with the depression scales and ended with the Reasons for Misfortunes questionnaires.

The Beck Depression Inventory (BDI)

The BDI (Beck, 1967) consists of 21 questions which assess the intensity of depression by examining clinically determined attitudes and symptoms of depression (Beck, Steer, & Garbin, 1988). Beck et al. (1988) propose that the "mean BDI scores for the minimal, mild, moderate, and severe classifications

[of depression] are 10.9 (SD = 8.1), 18.7 (SD = 10.2), 25.4 (SD = 9.6), and 30.0 (SD = 10.4), respectively." (Beck et al., 1988, p. 79). Based on a review of the depressive attributional style literature (Alloy & Abramson, 1979, 1982; Alloy & Clements, 1992; Dobson & Franche, 1989; Golin et al., 1979; Haaga & Beck, 1995; Layne, 1983; , in the present study, the following cut-off scores were used to determine depression status: depressed subjects needed to score between 12 and 63, whereas non-depressed subjects scores needed to be in the 0 to 5 range.

Reasons for Misfortune Questionnaires

These questionnaires each consisted of four negative life outcomes (see Appendix D). On each questionnaire, two of the outcomes had controllable causes and two had uncontrollable causes. To estimate the degree of self-other consistency in attributions and judgments, self- and person-perception versions of the questionnaire (within subjects) had the same type of cause (controllable or uncontrollable) for the outcomes. In addition, the controllability of the causes were counterbalanced such that half of the questionnaires gave a controllable cause for a specific misfortune and half gave an uncontrollable cause.

Three response categories were considered: (i) *cognitions:* what the individual thought about the cause and about responsibility of the outcome/event; (ii) *emotions:* how the individual felt about the victim (self or other), given the cause of the outcome; and (iii) *action tendencies:* what

action(s) the individual would respond with (if any), given the cause of the outcome.

Design and Procedure

Subjects were tested in classroom groups of 10 to 30 people. The study was described as an investigation of people's thoughts about negative and positive life outcomes/events. Respondents were asked to read the instructions for each questionnaire silently and completely before starting to answer the questions, and then to proceed at their own pace. There was no time limit, but most subjects completed all the of questionnaires within 30 minutes.

Dependent variables

For each negative outcome on the Reasons for Misfortune Questionnaire, individuals made 15 judgments, all reported on 9 point rating scales. One question assessed perceived responsibility and was anchored such that a high score reflected a higher rating of responsibility. Two questions assessed each of 4 dimensions of perceived causality (locus, personal controllability, external controllability, stability), anchored such that high scores represented more internal, personally controllable, externally controllable, and stable causes.

The next 3 questions dealt with individuals' affective reactions to the causes of the outcomes. Subjects were asked how angry, sorry, and sad they felt about the victim (self or other) given that the negative outcome occurred as a result of the cause described. These scales were anchored such that high scores reflected more angry, sad, and sorry feelings.

Finally, respondents were presented with three behavioral questions. They were asked to indicate what they would do (if anything) if the negative outcome was a result of the described cause. These questions were anchored such that high scores reflected more help, punishment/avoidance, and behavioral change.

Results

Preliminary analyses of the data showed no effects of stimulus order or age. Order and age are therefore ignored in subsequent analyses. Analyses of gender effects indicated interactions on some of the variables, but there were no systematic differences due to gender. Since the purpose of this thesis was to determine whether there are systematic differences for self-other judgements as well as between non-depressed and depressed groups, gender will not be discussed further.

It should be noted that the two measures of each of the causal dimensions were highly correlated in self and person perception domains for all four misfortunes (see Tables 1 - 4). Thus, scores on these measures were combined into an average score for each of the causal dimensions (locus, stability, personal control, and external control).

Relationships among the causal dimensions

For each misfortune, there were significant correlations between locus and personal control, and between personal control and stability, in self and person perception domains (see Table 5). Thus, when a cause of a misfortune was perceived to be internal to the target, it was also perceived to be personally

controllable; when perceived to be personally controllable, it was also perceived to be unstable. In addition, with the exception of heart disease, for each misfortune, there were significant correlations between locus and external control (see Table 5). Thus, when a cause of a misfortune was perceived to be internal to the target, it was also perceived to be uncontrollable by external factors/forces. These patterns of significant correlations among the causal dimension scales are consistent with the results of both McAuley et al. (1991) and Higgins (1992).

For two of the misfortunes (AIDS and Paraplegia), there were significant negative correlations between personal control and external control (see Table 5) such that, a cause perceived to be personally controllable was also viewed as uncontrollable by external factors/forces. The negative relationship between personal control and external control dimensions is consistent with the findings of McAuley et al. (1991) and Higgins (1992), and the misfortune specificity replicates findings of Higgins (1992). Also consistent with Higgins (1992), a significant positive relationship was found between personal control and external control as well as a negative relationship between stability and external control for only one of the misfortunes (heart disease) in person perception (see Table 5). In other words, if the cause of heart disease was perceived as personally uncontrollable, it was also perceived to be uncontrollable by external factors (thus, uncontrollable by anyone); in addition, if viewed as stable, then it was also perceived to be uncontrollable by external factors/forces.

To summarize, in general, theoretically expected correlations among the causal dimensions for each of the misfortunes were confirmed.

Analysis of variables

To answer the question of whether there were differences attributable to depression, target, and/or the causal controllability of the misfortune, variables from each response category (responsibility judgements, causal dimension ratings, emotions, and action tendency judgements) were analysed separately, for each misfortune, in a 2 x 2 x 2 (depression level x causal condition x target) analysis of variance with repeated measures on the last factor.

The criteria for determining effect size (Cohen, 1992; Kirk, 1996), state that, for an F-statistic, small, medium, and large effects have values of .01, .059, and .138, respectively. For a t-test statistic, the values for small, medium, and large effects are .10, .24, and .37, respectively. Based on these criteria, the effect sizes calculated for the results in this study were, for the most part, large, and only a few were medium. There were no small effects.

Cognitions

Responsibility. Analysis of the responsibility judgements about the cause of a misfortune revealed main effects of causal condition for all four of the misfortunes: skin cancer, $F(1,134) = 244.98$, $p = .000$; AIDS, $F(1,137) = 681.77$, $p = .000$; heart disease, $F(1,136) = 458.93$, $p = .000$; and paraplegia, $F(1,137) = 345.19$, $p = .000$. Responsibility judgements were higher when the cause given was controllable than when it was uncontrollable (see Table 6).

In addition, for three of the misfortunes there were main effects of target: skin cancer, $F(1,134) = 10.25$, $p = .002$; AIDS, $F(1,137) = 4.48$, $p = .036$; and heart disease, $F(1,136) = 6.94$, $p = .01$). For these misfortunes, respondents held themselves more responsible than others (see Table 9). There were no depression level effects on responsibility judgements for any of the misfortunes.

For paraplegia, there was an interaction between target and causal condition, $F(1,137) = 7.91$, $p = .006$. Post-hoc analysis of the interaction effect indicated that when the cause of paraplegia was controllable, respondents held themselves more responsible ($M = 7.60$, $SD = 1.97$) than others ($M = 6.93$, $SD = 2.37$), $t(57) = 2.81$, $p = .007$. There was no effect of target when the cause was uncontrollable (see Figure 1).

Locus. Analysis of the locus of control ratings revealed main effects of causal condition for all four of the misfortunes: skin cancer, $F(1,138) = 77.47$, $p = .000$; AIDS, $F(1,137) = 318.26$, $p = .000$; heart disease, $F(1,137) = 214.75$, $p = .000$; and paraplegia, $F(1,138) = 365.69$, $p = .000$. Respondents made more internal attributions when the cause was controllable than when it was uncontrollable (see Table 6).

There were also main effects of target for skin cancer, $F(1,136) = 9.34$, $p = .000$, and heart disease, $F(1,137) = 20.04$, $p = .000$. For these misfortunes, respondents made more internal judgements about the cause for self than for others (see Table 9). There were no depression level effects on locus judgements for any of the misfortunes.

Analysis of the locus judgements for skin cancer showed an interaction between target, causal condition, and depression level, $F(1,136) = 4.19$, $p = 04$. Post-hoc analysis of the interaction effect revealed that depressed respondents, given a controllable cause, and non-depressed respondents, given an uncontrollable cause, made more internal judgements about the cause for self (Ms = 6.79 and 4.66, SDs = 1.42 and 1.63, respectively) than for others (Ms = 6.04 and 4.03, SDs = 1.73 and 1.34, respectively), $t(38) = 2.49$, $p = .017$ and $t(28) = 2.40$, $p = .02$, respectively. There were no target effects for the remaining two groups (see Figure 2).

Stability. Analysis of judgements about the stability of a cause showed main effects of causal condition for three of the misfortunes: skin cancer, $F(1,138) = 78.39$, $p = .000$; AIDS, $F(1,137) = 17.51$, $p = .000$; and heart disease, $F(1,137) = 66.44$, $p = .000$. For these misfortunes, respondents viewed an uncontrollable cause as more stable than a controllable one (see Table 6).

There was also a main effect of depression level for heart disease, $F(1,137) = 4.45$, $p = .036$, such that non-depressed respondents ($M = 6.22$, $SD = 2.21$) viewed the cause as more stable than did depressed respondents ($M = 5.43$, $SD = 2.23$). There were no main effects of target for the misfortunes.

For skin cancer, the analysis revealed a target x causal condition x depression level interaction, $F(1,136) = 6.31$, $p = .013$. Post-hoc analysis of the interaction effect showed that when the cause of skin cancer was uncontrollable, depressed respondents viewed the cause as more stable for themselves ($M = 7.73$, $SD = 1.91$) than for others ($M = 6.55$, $SD = 1.90$), $t(29) =$

3.01, p = .005. However, non-depressed respondents did not (see Figure 3). In addition, when the cause was uncontrollable, depressed respondents viewed the cause as more stable for themselves than did non-depressed respondents (Ms = 7.73 and 6.38, SDs = 1.90 and 1.73, respectively), t(57) = -2.85, p = .006. This pattern did not occur for judgements about others, or when the cause was controllable (see Figure 3).

There were no effects of causal condition, target, or depression level for stability judgements for paraplegia.

Personal Control. Analysis of the personal control ratings indicated main effects of causal condition for all four of the misfortunes: skin cancer, F(1,138) = 194.25, p = .000; AIDS, F(1,135) = 453.02, p = .000; heart disease, F(1,137) = 129.78, p = .000; and paraplegia, F(1,138) = 284.73, p = .000. For each misfortune, respondents viewed a controllable cause as more personally controllable than an uncontrollable cause (see Table 6).

The only misfortune with a main effect of target was skin cancer, F(1,138) = 5.75, p = .018. For this misfortune, respondents viewed themselves as having more personal control over the cause than others (see Table 9).

Finally, for AIDS, there was also a main effect of depression level, F(1,135) = 5.73, p = .018, such that non-depressed respondents (M = 5.89, SD = 3.12) viewed the cause as being more personally controllable than did depressed respondents (M = 5.20, SD = 3.09).

External Control. Analysis of the external control judgements for the causes of the misfortunes indicated main effects of causal condition for AIDS, F(1,137)

= 46.64, p = .000, and paraplegia, $F(1,136) = 64.78$, p = .000. For these two misfortunes, respondents viewed the controllable causes as less controllable by external factors than the uncontrollable causes (see Table 6).

There were main effects of target for AIDS, $F(1,137) = 7.22$, p = .008, and heart disease, $F(1,138) = 8.92$, p = .003. That is, for these misfortunes, respondents viewed the cause as less externally controllable for self than for others (see Table 9).

In addition, there was also a main effect of depression level for paraplegia, $F(1,136) = 4.78$, p = .03, such that non-depressed respondents (M = 5.86, SD = 2.24) viewed the cause as more externally controllable than depressed (M = 5.12, SD = 2.05).

There were no effects of causal condition, target, or depression level for external control ratings for skin cancer.

Summary

To summarize, for all of the misfortunes, when the cause of a misfortune was controllable, responsibility ratings were higher, the cause was perceived as more internal and more personally controllable than when the cause of the misfortune was uncontrollable. Additionally, for three of the misfortunes, when the cause was uncontrollable, it was perceived to be more stable than when it was controllable. Finally, for half of the misfortunes, when the cause was controllable, it was viewed as less controllable by external factors than when it was uncontrollable.

Self-other differences for cognition judgements showed some situational specificity. For three of the misfortunes, respondents held themselves more responsible than others. For half of the misfortunes, respondents viewed the causes as more internal and less controllable by external forces for self than for others. There were no self-other differences for judgements about the stability of the cause.

Finally, there were no systematic differences due to depression level for cognition judgements.

Emotion Judgements

Anger. Analysis of the anger judgements showed main effects of causal condition for all four of the misfortunes: skin cancer, $F(1,137) = 278.22$, $p = .000$; AIDS, $F(1,137) = 324.12$, $p = .000$; heart disease, $F(1,134) = 327.15$, $p = .000$; and paraplegia, $F(1,136) = 333.55$, $p = .000$. When the cause of the misfortune was controllable, respondents reported stronger feelings of anger than when it was uncontrollable (see Table 7).

In addition, for all of the misfortunes, there were main effects of target: skin cancer, $F(1,135) = 113.73$, $p = .000$; AIDS, $F(1,135) = 93.43$, $p = .000$; heart disease, $F(1,134) = 52.42$, $p = .000$; and paraplegia, $F(1,136) = 142.48$, $p = .000$. Respondents reported stronger feelings of anger toward themselves than toward others (see Table 10).

Analysis of the anger judgements also showed main effects of depression level for skin cancer, $F(1,135) = 6.11$, $p = .01$, and heart disease, $F(1,132) = 11.70$, $p = .001$. For these misfortunes, depressed respondents (Ms = 4.71 and

4.54, SDs = 2.74 and 2.99, respectively) reported stronger feelings of anger than did non-depressed respondents (Ms = 4.04 and 3.47, SDs = 2.55 and 2.83, respectively).

There was a target x causal condition interaction for heart disease, $F(1,132) = 11.92$, $p = .001$, and for paraplegia, $F(1,136) = 60.06$, $p = .000$. Post-hoc analyses of the interactions showed that the self-other mean differences were higher in the controllable condition (mean differences = 2.46 and 3.95, respectively) than in the uncontrollable condition (mean differences = .87 and .84, respectively). That is, respondents were more angry at themselves than others when the cause was controllable in comparison to anger toward self (relative to others) when the cause was uncontrollable (see Figures 4 and 5).

Finally, there was a target x causal condition x depression level interaction for skin cancer, $F(1,135) = 3.91$, $p = .05$, and for AIDS, $F(1,135) = 8.83$, $p = .004$. Post-hoc analysis of the interaction for skin cancer revealed that when the cause was controllable, depressed respondents reported more anger toward themselves than non-depressed (Ms = 8.45 and 7.61, SDs = .96 and 1.91, respectively) as well as toward others, (Ms = 5.17 and 3.76, SDs = 2.52 and 2.68, respectively), $t(79) = -2.49$, $p = .015$ and $t(79) = -2.42$, $p = .018$, respectively. When the cause was uncontrollable, there was no interaction between target and depression level (see Figure 6).

For AIDS, the post-hoc analysis showed that when the cause was controllable, depressed respondents felt more anger toward others than non-depressed (Ms = 6.41 and 4.49, SDs = 2.43 and 3.52, respectively) $t(80) = -$

2.89, p = .005. There was no effect of depression for anger judgements toward self, or when the cause was uncontrollable (see Figure 7).

Sorry. Analysis of the pity judgements revealed main effects of causal condition for three of the misfortunes: AIDS, F(1,136) = 20.61, p = .000; heart disease, F(1,137) = 10.25, p = .002; and paraplegia, F(1,137) = 15.00, p = .000. Respondents felt more sympathy when the cause for a misfortune was uncontrollable than when it was controllable (see Table 7).

For all four of the misfortunes there were main effects of target: skin cancer, F(1,138) = 16.82, p = .000; AIDS, F(1,136) = 10.13, p = .002; heart disease, F(1,137) = 16.84, p = .000; and paraplegia, F(1,137) = 16.27, p = .000. Respondents felt more sorry for others' plight than for their own (see Table 10).

In addition, there were main effects of depression level for skin cancer, F(1,136) = 4.81, p = .03, and heart disease, F(1,135) = 4.30, p = .04. For these misfortunes, depressed respondents (Ms = 6.62 and 6.43, SDs = 2.06 and 2.23, respectively) reported stronger feelings of pity than did the non-depressed respondents (Ms = 5.96 and 5.69, SDs = 2.09 and 2.16, respectively).

There were also target x causal condition interactions for all four misfortunes: skin cancer, F(1,136) = 5.45, p = .02; AIDS, F(1,136) = 3.91, p = .05; heart disease, F(1,135) = 8.76, p = .004; and paraplegia, F(1,137) = 4.82, p = .03. Post-hoc analysis for these misfortunes indicated that when the cause of the misfortune was uncontrollable, respondents felt more sorry for others (Ms = 7.54, 8.36, 7.46, and 8.23, SDs = 2.06, 1.26, 2.27, and 1.58, respectively) than for themselves (Ms = 5.83, 7.00, 5.66, and 6.72, SDs = 2.82, 2.53, 2.62, and

2.51, respectively), $t(58) = -5.02$, $p = .000$; $t(59) = -4.57$, $p = .000$, $t(79) = -6.02$, $p = .000$, and $t(80) = -5.16$, $p = .000$, respectively. There were no effects of target when the cause was controllable (see Figures 8 - 11).

Sad. Analysis of the sadness judgements for the misfortunes indicated that only the misfortune of AIDS had a main effect of causal condition, $F(1,136) = 9.87$, $p = .002$. For AIDS, respondents generally felt more sad when the cause was uncontrollable than when it was controllable (see Table 7).

There were main effects of target for three of the misfortunes: skin cancer, $F(1,136) = 4.81$, $p = .03$; heart disease, $F(1,136) = 15.29$, $p = .000$; and paraplegia, $F(1,136) = 5.42$, $p = .02$. For these misfortunes, respondents felt more sad about others' plight than their own (see Table 10).

Finally, there were main effects of depression level for skin cancer, $F(1,134) = 7.99$, $p = .005$, and heart disease, $F(1,136) = 5.09$, $p = .026$. For these two misfortunes, depressed respondents (Ms = 7.06 and 6.90, SDs = 1.82 and 2.13, respectively) generally felt more sad than did non-depressed respondents (Ms = 6.25 and 6.07, SDs = 2.11 and 2.22, respectively).

For paraplegia, there was a target x casual condition interaction, $F(1,136) = 4.27$, $p = .045$. Post-hoc analysis of this interaction revealed that when the cause of paraplegia was uncontrollable, respondents generally felt more sad about others' ($M = 7.99$, $SD = 1.83$) plight than their own ($M = 7.10$, $SD = 2.30$), $t(80) = -3.55$, $p = .001$. There was no effect of target when the cause was controllable (see Figure 12).

For skin cancer, there was an interaction between causal condition and depression level, $F(1,134) = 7.18$, $p = .008$. Post-hoc analysis of this interaction indicated that when the cause of skin cancer was uncontrollable, depressed subjects ($M = 7.85$, $SD = 1.08$) felt more sad than non-depressed subjects ($M = 6.03$, $SD = 2.31$), $t(57) = -3.90$, $p = .000$ There was no effect of depression level when the cause was controllable (see Figure 13).

Summary

In sum, when the cause of a misfortune was controllable, respondents reported stronger feelings of anger and, generally, felt less sympathetic than when the cause was uncontrollable. There were no systematic differences in feelings of sadness due to the controllability of a cause.

Self-other differences for emotion judgments were consistent. Respondents reported stronger feelings of anger, less sympathy, and, generally, less sadness for themselves than for others.

Finally, for half of the misfortunes (skin cancer and heart disease), depressed respondents reported stronger feelings of anger, sympathy, and sadness than non-depressed respondents.

Action Judgements

Help. Analysis of helping judgements for the misfortunes revealed that there was a main effect of causal condition only for heart disease, $F(1,137) = 6.18$, $p = .014$. For heart disease, respondents were more likely to help when the cause was uncontrollable than when it was controllable (see Table 8).

For three of the misfortunes there were main effects of target: skin cancer, $F(1,138) = 30.44$, $p = .000$; AIDS, $F(1,138) = 12.21$, $p = .001$; and heart disease, $F(1,137) = 14.74$, $p = .000$. For these misfortunes, respondents were more likely to do something to help themselves than to help others (see Table 11). There were no main effects of depression level for the misfortunes.

For heart disease, there was also a target x causal condition interaction ($F(1,137) = 7.33$, $p = .008$). Post-hoc analysis of this interaction indicated that when the cause of heart disease was controllable, respondents would help themselves ($M = 8.63$, $SD = 1.23$) more than others ($M = 7.54$, $SD = 2.02$), $t(58) = 3.50$, $p = .001$. There was no effect of target when the cause was uncontrollable (see Figure 14).

Finally, for paraplegia there was a target x depression level interaction, $F(1,138) = 7.33$, $p = .008$. When examined in post-hoc analysis, the interaction indicated that non-depressed respondents were more likely to help themselves ($M = 8.81$, $SD = .69$) than others ($M = 8.16$, $SD = 2.02$), $t(69) = 4.17$, $p = .000$. There was no effect of target for the depressed group (see Figure 15).

Avoid/Punish. Analysis of the behavior judgements, to either avoid others or to punish oneself, revealed main effects of causal condition for all four misfortunes: skin cancer, $F(1,137) = 13.73$, $p = .000$; AIDS, $F(1,137) = 20.02$, $p = .000$; heart disease, $F(1,137) = 50.02$, $p = .000$; and paraplegia, $F(1,138) = 29.44$, $p = .000$. Respondents indicated that they would be more likely to engage in these behaviors when the cause of a misfortune was controllable than when it was uncontrollable (see Table 8).

The analysis also revealed main effects of target for three misfortunes: skin cancer, $F(1,135) = 6.29$, $p = .01$; heart disease, $F(1,135) = 10.24$, $p = .002$; and paraplegia, $F(1,136) = 18.32$, $p = .000$. For these misfortunes, respondents indicated that they were more likely to punish themselves than to avoid others (see Table 11).

For all of the misfortunes, there were also main effects of depression level: skin cancer, $F(1,135) = 14.69$, $p = .000$; AIDS, $F(1,131) = 17.23$, $p = .000$; heart disease, $F(1,135) = 11.17$, $p = 001$; and paraplegia, $F(1,136) = 13.43$, $p = .000$. Depressed respondents (Ms = 2.74, 3.27, 2.85, and 2.71, SDs = 1.62, 2.17, 2.14, and 1.96, respectively) were more likely to engage in these behaviors than non-depressed respondents (Ms = 1.85, 2.14, 2.03, and 1.85, SDs = 1.25, 1.38, 1.50, and 1.34, respectively).

There were interactions between target and causal condition for three misfortunes: AIDS, $F(1,135) = 7.54$, $p = .007$; heart disease, $F(1.135) = 10.61$, $p = .001$; and paraplegia, $F(1,136) = 20.57$, $p = .000$. A post-hoc analysis of the interactions revealed that when the cause given was controllable, respondents were more likely to punish themselves (Ms = 3.81, 4.29, and 3.95, SDs = 3.01, 2.88, and 2.81, respectively) than to avoid others (Ms = 2.74, 2.86, and 2.31, SDs = 2.34, 2.48, and 1.79, respectively), $t(80) = 2.62$, $p = .01$; $t(58) = 3.38$, $p = .001$; and $t(58) = 4.71$, $p = .000$, respectively. There were no effects of target when the causes were uncontrollable (see Figures 16 - 18).

Higher order interactions of causal condition x depression level were revealed in the analysis for heart disease, $F(1,135) = 4.72$, $p = .03$, and

paraplegia, $F(1,136) = 5.50$, $p = .02$. Post-hoc analysis for these interactions indicated that when the cause was controllable, depressed respondents (Ms = 4.30 and 3.88, SDs = 2.33 and 2.08, respectively) judged that they would be more likely to engage in these behaviors than non-depressed respondents (Ms = 2.83 and 2.34, SDs = 1.67 and 1.45, respectively), $t(57) = -2.79$, $p = .007$, and $t(57) = -3.29$, $p = .002$, respectively. There were no effects of depression level when the cause was uncontrollable (see Figures 19 and 20).

In addition, a target x depression level interaction for paraplegia, $F(1,136) = 7.96$, $p = .006$, when examined in post-hoc analysis, indicated that depressed subjects are more likely to punish themselves ($M = 3.29$, $SD = 2.81$) than to avoid others ($M = 2.14$, $SD = 1.91$), $t(69) = 3.44$, $p = .001$. There was no effect of target for the non-depressed group (see Figure 21).

Finally, skin cancer was the only misfortune with an interaction between target, causal condition, and depression, $F(1,135) = 7.89$, $p = .006$. Post-hoc analysis of this interaction revealed that depressed respondents would punish themselves ($M = 4.40$, $SD = 3.10$) more than they would avoid others ($M = 1.88$, $SD = 1.46$) when the cause was controllable, $t(39) = 4.58$, $p = .000$. Furthermore, when the cause was uncontrollable, depressed respondents indicated that they would punish themselves more ($M = 2.27$, $SD = 2.02$) than non-depressed respondents ($M = 1.21$, $SD = .56$), as well as avoid others more than non-depressed respondents would (Ms = 2.13 and 1.36, SDs = 1.61, .68, respectively), $t(57) = -2.73$, $p = .01$ and $t(56) = -2.36$, $p = .02$, respectively. However, when the cause given was controllable, there was only a depression

level effect for the self judgements, such that depressed respondents indicated that they would punish themselves more than non-depressed respondents would (Ms = 4.40 vs. 2.10, SDs = 3.10 and 1.48, respectively), t(79) = -4.29, p = .000 (see Figure 22).

Change. Analysis of the behavior change judgements revealed main effects of causal condition for all four misfortunes: skin cancer, F(1,138) = 65.44, p = .000; AIDS, F(1,137) = 71.11, p = .000; heart disease, F(1,137) = 22.48, p = .000; and paraplegia, F(1,137) = 24.55, p = .000. Change in behavior was more likely when the cause of the misfortune was controllable than when it was uncontrollable (see Table 8).

In addition, there were main effects of target for all of the misfortunes: skin cancer, F(1,138) =10.76, p = .001; AIDS, F(1,135) = 11.01, p = .000; heart disease, F(1,137) = 5.81, p = .017; and paraplegia, F(1,137) = 12.32, p = .001. Respondents were more likely to change their own behavior than advocate that others change theirs (see Table 11). There were no main effects of depression level for any of the misfortunes.

For AIDS, there was an interaction between target, causal condition and depression level, F(1,135) = 6.74, p = .011. Post-hoc analysis of this interaction effect revealed that non-depressed respondents, given a controllable cause of AIDS, and depressed respondents, given an uncontrollable cause, were more likely to change their own behavior (Ms = 8.37 and 6.00, SDs = 1.71 and 3.11, respectively) than advocate that others change theirs (Ms = 7.56 and 4.03, SDs

= 2.16 and 2.81, respectively), $t(40) = 2.50$, $p = .017$ and $t(29) = 3.11$, $p = .004$, respectively (see Figure 23).

Summary

To summarize, when the cause of a misfortune was controllable, respondents reported that they would punish themselves, avoid others, and expect a behavioral change more than when the cause was uncontrollable. On the other hand, controllability affected helping behavior judgements only for heart disease.

There were systematic self-other differences for action judgements. For the majority of the misfortunes, respondents reported that they would help and punish themselves more than others. Furthermore, for all of the misfortunes, respondents indicated that they would change their own behavior more than they would advocate that others change theirs.

Finally, there were no effects of depression level for helping or behavior change judgements. However, overall, depressed respondents indicated that they would punish themselves as well as avoid others more than non-depressed respondents indicated they would.

Model Testing

I examined the temporal relations between the variables to determine whether the data sets in self and person perception domains for depressed and non-depressed respondents were consistent with the motivational model outlined by Weiner (1995). I also tested several alternative models.

Structural equation modeling (SEM) using the multi-sample procedure of the LISREL 8.14 statistical package (Joreskog & Sorbom, 1995) was used to address this question. LISREL 8.14 calculates the parameter estimates as well as a goodness-of-fit chi-square statistic to determine whether the data are consistent with the model being tested. To make a judgement about the fit of a model, I considered the chi-square statistic which should not be significant if the model fits the data, and the Normed Fit Index (NFI) developed by Bentler & Bonett (1980). This fit statistic ranges from 0 (no fit) to 1 (perfect fit), with values greater than .90 representing an acceptable fit. The benefit of using a multi-sample approach is that it generates a goodness of fit chi-square that simultaneously tests the model in more than one group. Thus, I was able to test whether a particular model was the same in both depressed and non-depressed groups.

Four models were considered for the SEM tests. Model 0 is a complete model with links among all of the variables (see Appendix F). Although it is completely saturated and cannot be tested using chi-square procedures, this model is useful in comparing the path coefficients to the other models which are hierarchically nested versions of the saturated model. Model 1 is an emotion mediational model (see Appendix G). As already indicated, this model proposes that thoughts determine feelings which, in turn, serve as guides for behavior. Model 2 is an independent effects model (see Appendix H). It proposes that people might experience emotions independent of cognitions and that the cognitions and emotions each can directly influence actions, but as

separate processes. Finally, Model 3, a cognition mediational model, illustrates yet another possible temporal sequence (see Appendix I). Perhaps emotions influence cognitive appraisals, and it is the appraisals that serve to direct behavior.

Person Perception

I examined the temporal relations between responsibility, pity (sorry), and helping behavior judgements (see Tables 12 - 15).

Tables 16 through 19 show, for each misfortune, the parameter estimates of each model, expressed as standardized path coefficients, their associated z-score, and, where applicable, the chi-square and Bentler-Bonnet NFI generated to evaluate the fit of the model. The multi-sample procedure revealed differences between status groups (depressed and non-depressed) for all four misfortunes. Therefore, the results are reported separately for non-depressed and depressed respondents.

Skin Cancer

Of all the models tested, Model 1 is the only model that can be said to fit the data (see Table 16). For the non-depressed group, Model 1 generated a non-significant chi-square and a relatively high NFI score ($\chi^2(1, \underline{N} = 70) = .11$, $\underline{p} = .74$, NFI = .99). Similarly, for depressed respondents, Model 1 yielded a $\chi^2(1, \underline{N} = 70) = .76$, $\underline{p} = .38$, NFI = .96. Although both Models 2 and 3 yielded non-significant chi-squares for at least one of the status groups, the models also yielded unacceptable NFI scores for both status groups, and thus provided a poor fit to the data.

In sum, for the skin cancer data, the emotion mediational model was the only one among those tested that accounted for the observed correlations in both the non-depressed and depressed groups.

AIDS

It is evident from Table 17 that, again, Model 1 is the only model that can be said to fit the data for AIDS. For the non-depressed group, Model 1 generated a $\chi^2(1, \underline{N} = 70) = .15$, $\underline{p} = .70$, NFI = 1.0 (a perfect fit). Similarly, for depressed respondents, Model 1 yielded a $\chi^2(1, \underline{N} = 70) = .85$, $\underline{p} = .36$, NFI = .97. Both Models 2 and 3 yielded significant chi-squares and unacceptable NFI scores for both status groups indicating a very poor fit to the data.

In sum, for these data as well as those for Skin Cancer, the emotion mediational model was the only one among those tested that accounted for the observed correlations in both the non-depressed and depressed groups.

Heart Disease

Table 18 shows again that Model 1 is the only model that fit the data. For the non-depressed group, Model 1 generated a $\chi^2(1, \underline{N} = 70) = 1.61$, $\underline{p} = .20$, NFI = .94. Similarly, for depressed respondents, Model 1 yielded a $\chi^2(1, \underline{N} = 70) = .06$, $\underline{p} = .81$, NFI = 1.0 (a perfect fit). Both Models 2 and 3 yielded significant chi-squares and unacceptable NFI scores for both status groups indicating a very poor fit to the data.

In sum, for all three misfortunes discussed thus far, the emotion mediational model was the best model among those tested to account for the relations

among the variables in both non-depressed and depressed people's reactions to the misfortunes of others.

Paraplegia

For reactions to others' paraplegia, both Model 1 and Model 3 provided a good fit to the data for the non-depressed group (see Table 19). In that group, Model 1 generated a $\chi^2(1, \underline{N} = 70) = 2.07$, $\underline{p} = .15$, NFI = .91, and Model 3 yielded a $\chi^2(1, \underline{N} = 70) = .72$, $\underline{p} = .40$, NFI = .97.

For the depressed group, Model 1 did fit better than Model 3 ($\chi^2(1, \underline{N} = 70) = .88$, $\underline{p} = .35$, NFI = .98 and $\chi^2(1, \underline{N} = 70) = 16.74$, $\underline{p} = .00$, NFI = .55, respectively). Model 2, on the other hand, did not provide an adequate fit to the data for either of the groups.

In sum, the picture for Paraplegia is not as clear. For depressed respondents, the emotion mediational model best accounted for the observed correlations. On the other hand, both Models 1 and 3 yielded significant chi-squares and acceptable NFI's for the non-depressed group's data. However, the NFI for the emotion mediational model (.91) and the NFI for the cognition mediational model (.97) suggest the latter model fits the non-depressed group's data slightly better.

Self Perception

Next, I examined the temporal relations between the variables in self perception. I was interested in the relations between responsibility, anger, and behavior change judgements (see Tables 20 - 23).

Skin Cancer

Table 24 shows that of all the models tested, Model 1 is the only model that can be said to fit the data. For the non-depressed group, Model 1 generated a non-significant chi-square and a relatively high NFI score ($\chi^2(1, \underline{N} = 70) = 1.36$, $\underline{p} = .24$, NFI = .99). Similarly, for depressed respondents, Model 1 yielded a $\chi^2(1, \underline{N} = 70) = .41$, $\underline{p} = .52$, NFI = 1.0 (a perfect fit). Although the NFI scores for Model three were acceptable and the chi-squares approached non-significance, the fit was not as strong as that of Model 1 in each of the two status groups. Finally, Model 2 was a completely unacceptable model for the data.

In sum, for the skin cancer data, the emotion mediational model is the only model among those tested which accounted for the observed correlations in both non-depressed and depressed respondents.

AIDS

Table 25 shows that Model 1 is the only model that can be said to fit the data. For the non-depressed group, Model 1 generated a $\chi^2(1, \underline{N} = 70) = .30$, $\underline{p} = .59$, NFI = 1.0 (a perfect fit). Similarly, for depressed respondents, Model 1 yielded a $\chi^2(1, \underline{N} = 70) = .12$, $\underline{p} = .73$, NFI = 1.0 (another perfect fit). Models 2 and 3 yielded significant chi-squares for both status groups and the small NFI's for Model 2 make it a clearly unacceptable model to account for the data. Although the NFI's for Model 3 are greater than .90, in combination with the significant chi-squares, it was necessary to reject Model 3 as one that accounts for the observed correlations.

In sum, for AIDS as well as for Skin Cancer, the emotion mediational model remains the only one among those tested that accounted for the observed correlations in both non-depressed and depressed people.

Heart Disease

For reactions to heart disease for self, Model 1 and Model 3 both provided a good fit for the data for the non-depressed group (see Table 26). For that group, Model 1 generated a $\chi^2(1, \underline{N} = 70) = 3.67$, $\underline{p} = .06$, NFI = .97 and Model 3 yielded a $\chi^2(1, \underline{N} = 70) = .09$, $\underline{p} = .76$, NFI = 1.0. The significant chi-square and unacceptable NFI for Model 2 make it an unacceptable model to account for the data for non-depressed respondents' data.

For the depressed group, Model 3 yielded a $\chi^2(1, \underline{N} = 70) = .16$, $\underline{p} = .69$, NFI = 1.0. Models 1 and 2 yielded significant chi-squares for the depressed respondents' data, and the NFI for Model 2 was unacceptable. Although the NFI for Model 1 was acceptable (.90), the significant chi-square makes it necessary to reject it as one that accounts for the observed correlations.

In sum, for Heart Disease, the cognition mediational model provides the best fit for the non-depressed respondent's data and is the only model, among those tested, which accounted for the observed correlations in the depressed groups' data.

Paraplegia

It is evident from Table 27 that Model 1 fits the data for the depressed group, but not as well as Model 3. For the depressed group, Model 1 generated a $\chi^2(1, \underline{N} = 70) = 2.47$, $\underline{p} = .12$, NFI = .97, whereas Model 3 yielded a $\chi^2(1, \underline{N} =$

70) = .36, p = .55, NFI = 1.0. For the non-depressed group, Model 1 provided the best fit to the data (χ^2(1, N = 70) = .97, p = .32, NFI = .99). Model 2 did not provide an adequate fit for either of the groups.

In sum, for Paraplegia, for non-depressed data set, the emotion mediational model was the best model, among those tested, at accounting for the observed correlations. On the other hand, the cognition mediational model was a slightly better model in explaining the relationships in the data for the depressed respondents.

Summary

In person perception, the emotion mediational model was the best among those tested at accounting for depressed and non-depressed respondents' reactions to others' skin cancer, AIDS, and heart disease. For paraplegia, the emotion mediational model provided the best fit for the data for the depressed group, but in the non-depressed group, both the cognition mediational model and the emotion mediational model provided a good fit to the data.

In self perception, the emotion mediational model was the best among those tested at accounting for depressed and non-depressed respondent's reactions to having skin cancer and AIDS. For paraplegia, of the models tested, the emotion mediational model provided the best fit for the data for the non-depressed group. However, the cognition mediational model provided the best fit to the data for the depressed group. For heart disease, the cognition mediational model provided the best fit to the data for the non-depressed group

and was the only model, among those tested, which accounted for the observed correlations for the data for the depressed group.

Discussion

There were two goals addressed in this thesis. The first was to test the responsibility inference process (Weiner, 1995) in self and person perception domains, as well as in depressed and non-depressed groups. The results obtained in this study supported the predictions outlined by the responsibility inference process.

The second goal was to test the temporal relations outlined in the emotion mediational model of social motivation model (Weiner, 1995), for self and person perceptions, in each of the misfortunes, as well as for depressed and non-depressed samples. In person perception, the results obtained in the model testing portion of this study provided strong support for the emotion mediational model (Weiner 1986; 1995) for both depressed and non-depressed samples. However, in self perception, the results did not provide consistent support for the emotion mediational model.

The Responsibility Inference Process

The responsibility inference process (Weiner, 1986; 1995) suggests that when (i) there is personal causality, (ii) the cause is perceived as controllable, and (iii) there are no mitigating circumstances, people tend to hold the victim of a negative event/outcome responsible for their plight. By manipulating the controllability of the causes of the stigmas used in this study I was able to test this assumption. Consistent with Weiner's (1995) predictions, when the cause

given for a misfortune was controllable, respondents held the victim (self and other) as responsible, judged the cause as internal to, and controllable by, the victim, and, generally, less controllable by external factors. Conversely, when the cause given was uncontrollable, respondents judged the victim (self or other) to be less responsible, judged the cause as less internal to, and less controllable by, the victim, and, generally, more controllable by external factors.

Weiner (1995) also outlined a link between the responsibility inference process and affective and behavioral responses; that is, higher judgements of responsibility lead to stronger feelings of anger, little sympathy, and negative behavior reactions, or little help, for the victim, whereas low responsibility judgements lead to little anger, high sympathy, low negative behavior reactions, and higher helping behavior. These predictions were supported in this study. When the cause of a stigma was controllable, in addition to responsibility judgements being higher, respondents reported stronger feelings of anger, less sympathy, and indicated that they would punish themselves and avoid others. Conversely, when the cause of a stigma was uncontrollable, in addition to low responsibility judgements, respondents reported less anger, more sympathy, and were less inclined to engage in negative behaviors toward the victim (self or other).

Self-Other differences

The self-other differences observed in this study indicate that an illusion of control bias may be operating (Langer, 1975). Respondents not only held themselves more responsible than others; they also indicated that they would

change their behavior more often than they expected others to change theirs. In addition, regardless of the controllability of the cause of a misfortune, respondents indicated that they would do something to help themselves in relation to these misfortunes, more than to help others. The self-other differences in affective responses to the misfortunes may help explain this phenomenon. Respondents reported strong feelings of anger toward themselves relative to others, irrespective of the controllability of the cause. Self-directed anger (guilt) is a strong, motivating emotion which, by its very nature, compels an individual to alleviate the stress brought on by feeling angry (Cialdini, Kendrick, & Bauman, 1982; Weiner 1992). By helping oneself, or by changing one's behavior, it is more probable that these feelings will be alleviated.

Conversely, feelings of pity, or sympathy, have been linked to uncontrollable causes of a negative event (Graham et al., 1993; Weiner et al., 1982; Weiner et al., 1988). It seems that when people perceive the cause of a negative event as uncontrollable, they feel more sorry for themselves and generally, do not tend to engage in behaviors which assist in changing their situation. That is, pity follows the perception of low personal control over a negative event, whereas anger results when the cause is judged to be personally controllable. The results of this study support the suggestion that pity is a less motivating emotion than anger, due to perceptions of controllability. When the cause of a misfortune was controllable, respondents felt little sympathy for the victim (self and other). However, when the cause was uncontrollable, respondents

reported higher feelings of pity for others than for themselves. Thus, consistent with the illusion of control bias (Langer, 1975), it would appear that respondents viewed themselves as less deserving of sympathy for their plight, which may have resulted in higher action tendencies for self than for other. Overall, it seems that respondents perceived themselves as more in control of, and more capable of action toward their own problems than were others.

Depression

There were no systematic differences between depressed and non-depressed groups for cognition judgements. Thus, it appears that the responsibility inference process operates irrespective of mild depressive states. There were depression-level differences for affective responses to skin cancer and heart disease, which suggests that there may be some situational specificity for the effects of depression on emotions. For skin cancer and heart disease, depressed respondents reported stronger feelings of anger, sympathy, and sadness, relative to non-depressed respondents, irrespective of the controllability of the cause of the misfortune. However, depression level did not influence affective reactions to AIDS or paraplegia.

There was a difference between depressed and non-depressed respondents for the negative behavior reactions of either punishing oneself or avoiding others. Again, irrespective of the controllability of a cause, depressed respondents indicated that they were more likely to engage in these behaviors than non-depressed.

Based on previous research, I earlier made two predictions regarding the differences between depressed and non-depressed samples reactions to the causes of negative outcomes. Pattern A, from the depressive realism literature, suggested that depressed respondents would show high consistency (i.e., low control for self and others) whereas non-depressed respondents would show low consistency (i.e., low control for self and high control for others) in their judgements about the causes of misfortunes. Pattern B, from the learned helplessness literature, indicated that depressed respondents would attribute lower control for self than for others whereas non-depressed respondents would attribute higher control for self than for others for the cause of a misfortune. Based on the results of this study, neither of these patterns of prediction were supported.

The Responsibility Judgement Model

As stated previously, the results of the model testing lend support to the emotion mediational model outlined by Weiner (1995) in person perception. In person perception, there were no systematic differences between the depression groups which would suggest that the motivational model applies as well to mildly depressed populations as to non-depressed populations. For self perception, support was provided for both the emotion mediational model and the cognition mediational model. There were no systematic differences between the depression groups which suggests that the fit of the models was not influenced by depression level.

Person perception

The emotion mediational model fit the data sets for depressed and non-depressed samples for most of the misfortunes. However, for paraplegia, the non-depressed data set was slightly better explained by the cognition mediational model. Given that in this study, there were no differences for cognition or sympathy judgements attributable to depression status for the misfortune of paraplegia, it is puzzling that the emotion mediational model provided the best fit for the depressed sample, and not for the non-depressed.

Self perception

In the self perception domain, the emotion mediational model provided the best explanation for depressed and non-depressed respondent's reactions to having skin cancer and AIDS whereas the cognition mediational model best explains reactions to heart disease. However, for paraplegia, the results provided mixed support for these models.

The emotion mediational model provided the best fit for the non-depressed group data sets for the misfortunes of skin cancer, AIDS, and paraplegia. For heart disease, the non-depressed data set was best explained by the cognition mediational model.

For the depressed data sets, the emotion mediational model provided the best fit for the data sets for skin cancer and AIDS. For paraplegia, although the emotion mediational model and the cognition mediational model provided fits for the depressed data, the cognition mediational model provided a slightly better fit for the data. Finally, for heart disease, the cognition mediational model was

the only model among those tested which accounted for the data set for the depressed group.

The results from the analysis of the responsibility inference process portion of this study did not support the differences in the model testing between depression groups. For heart disease and paraplegia there were no responsibility or behavior change differences attributable to depression level in the analysis of variance, nor were there differences attributable to depression level for anger judgements for paraplegia. Furthermore, although there were differences in anger judgements attributable to depression level for heart disease, this difference was such that depressed respondents reported more anger than non-depressed respondents. The difference in anger does not explain why the cognition mediational model provided a better fit than the emotion mediational model.

This may be a consequence of having used a university population sample rather than a clinical population, or, it may be that when the information presented to depressed people is not ambiguous, the depressive attributional biases previously supported, did not operate.

Conclusions

In sum, the results of this study support the predictions of the responsibility inferences process and the linkages between cognitions, emotions and action tendencies in the motivational model outlined by Weiner (1995) in person perception. However, the emotion mediational model (Weiner, 1995) was not as strongly supported in self perception. The observed self-other differences

suggest that an illusion of control bias is operating in people's judgements about stigmas. That is, people viewed themselves as having more control over not only the cause of their misfortune, but also in taking action as a result of having the misfortune. Finally, the lack of difference between depressed and non-depressed samples does not support either the predictions made by the depressive realism, or the learned helplessness (depressive attributional style) literature.

Limitations of the Study

If this study were to be conducted in the future, a completely between subjects design rather than a mixed design should be used. Using a completely between subjects design, in addition to examining whether there are differences attributable to groups, target, and/or causal controllability, would make examining differences between the misfortunes themselves more simple.

Additionally, random assignment of the questionnaires, misfortunes, and causal conditions of the stigmas rather than controlling for order effects by a counterbalancing method would reduce the number of questionnaires that would need to be administered. Consequently, the required cell sizes for analysis of order effects would be reduced and less time would need to be spent collecting data.

With regard to the Reasons For Misfortune Questionnaires, the emotion judgement of sadness could be eliminated. As mentioned earlier, anger and sympathy are motivating emotions and seem to predict action judgements well

whereas feelings of sadness are related to helping behavior judgements but are not consistently related to other action judgements.

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Table 1
Intercorrelations Between Scales for Self and Person Perception for Skin Cancer

	Cognition					Emotion Judgements			Action Judgements		
Scales	1	2	3	4	5	6	7	8	9	10	11
					Self-perception (n = 214)						
1. Responsibility	1.00	.66	-.49	.77	-.10	.77	-.05	-.06	-.08	.32	.46
2. Locus		1.00	-.30	.56	-.23	.57	.06	.06	-.05	.21	.28
3. Stability			1.00	-.58	.04	-.51	.04	.04	-.06	-.14	-.40
4. Personal control				1.00	-.05	.73	-.07	-.06	-.05	.34	.46
5. External control					1.00	-.06	-.08	-.11	-.16	-.02	.00
6. Anger						1.00	.10	.11	-.05	.41	.51
7. Sorry							1.00	.72	.16	.12	.00
8. Sad								1.00	.21	.08	.04
9. Help									1.00	-.24	.22
10. Avoid										1.00	.18
11. Change											1.00
					Person-perception (n = 214)						
1. Responsibility	1.00	.63	-.51	.79	-.13	.48	-.31	-.26	-.19	.11	.48
2. Locus		1.00	-.35	.60	-.18	.29	-.16	-.15	-.01	.04	.33
3. Stability			1.00	-.60	.11	-.24	.12	.17	.17	-.05	-.32
4. Personal control				1.00	-.12	.46	-.26	-.23	-.13	.07	.45
5. External control					1.00	.04	-.01	.05	-.03	.11	-.02
6. Anger						1.00	-.25	.01	.00	.20	.40
7. Sorry							1.00	.66	.32	-.10	-.13
8. Sad								1.00	.52	-.18	-.10
9. Help									1.00	-.24	-.06
10. Avoid										1.00	-.04
11. Change											1.00

Table 2
Intercorrelations Between Scales for Self and Person Perception for AIDS

	Cognition					Emotion Judgements			Action Judgements		
Scales	1	2	3	4	5	6	7	8	9	10	11
					Self-perception (n = 214)						
1. Responsibility	1.00	.81	-.31	.87	-.49	.85	-.13	-.14	-.06	.42	.50
2. Locus		1.00	-.25	.79	-.54	.76	-.10	-.14	-.12	.37	.43
3. Stability			1.00	-.35	.13	-.30	.08	.08	-.16	-.11	-.29
4. Personal control				1.00	-.47	.82	-.16	-.13	.01	.37	.50
5. External control					1.00	-.43	.05	.10	.09	-.19	-.24
6. Anger						1.00	-.09	-.05	-.04	.48	.57
7. Sorry							1.00	.74	.17	.04	.02
8. Sad								1.00	.27	-.03	.11
9. Help									1.00	-.23	.28
10. Avoid										1.00	.23
11. Change											1.00
					Person-perception (n = 214)						
1. Responsibility	1.00	.79	-.24	.79	-.42	.61	-.38	-.30	-.24	.19	.51
2. Locus		1.00	-.21	.79	-.45	.53	-.34	-.29	-.22	.12	.50
3. Stability			1.00	-.35	.07	-.09	.14	.06	.19	-.05	-.21
4. Personal control				1.00	-.37	.51	-.32	-.22	-.19	.12	.53
5. External control					1.00	-.33	.15	.14	-.02	-.01	-.29
6. Anger						1.00	-.29	-.10	-.07	.12	.42
7. Sorry							1.00	.69	.37	-.16	-.15
8. Sad								1.00	.41	-.22	-.10
9. Help									1.00	-.45	.05
10. Avoid										1.00	.01
11. Change											1.00

Table 3
Intercorrelations Between Scales for Self and Person Perception for Heart Disease

	Cognition					Emotion Judgements			Action Judgements		
Scales	1	2	3	4	5	6	7	8	9	10	11
					Self-perception (n = 214)						
1. Responsibility	1.00	.76	-.56	.78	.08	.83	-.16	-.11	.03	.51	.46
2. Locus		1.00	-.42	.71	-.09	.67	-.07	-.05	.10	.41	.42
3. Stability			1.00	-.55	-.08	-.52	.07	.08	.05	-.31	-.30
4. Personal control				1.00	.12	.66	-.14	-.10	.10	-40	.49
5. External control					1.00	.07	-.06	-.03	-.02	.17	.02
6. Anger						1.00	.02	.07	.02	.62	.44
7. Sorry							1.00	.78	.17	.16	.04
8. Sad								1.00	.24	.13	.01
9. Help									1.00	-.11	.19
10. Avoid										1.00	.28
11. Change											1.00
					Person-perception (n = 214)						
1. Responsibility	1.00	.81	-.60	.78	.20	.72	-.43	-.27	-.19	.21	.38
2. Locus		1.00	-.51	.69	.03	.61	-.37	-.24	-.13	.18	.34
3. Stability			1.00	-.62	-.22	-.47	.21	.07	.09	-.18	-.26
4. Personal control				1.00	.28	.55	-.37	-.20	-.16	.19	.45
5. External control					1.00	.18	-.15	-.16	-.11	.33	.11
6. Anger						1.00	-.30	-.14	-.07	.20	.36
7. Sorry							1.00	.74	.31	-.13	-.15
8. Sad								1.00	.42	-.05	-.04
9. Help									1.00	-.28	.18
10. Avoid										1.00	-.01
11. Change											1.00

Table 4
Intercorrelations Between Scales for Self and Person Perception for Paraplegia

	Cognition					Emotion Judgements			Action Judgements		
Scales	1	2	3	4	5	6	7	8	9	10	11
					Self-perception (n = 214)						
1. Responsibility	1.00	.82	-.14	.86	-.51	.85	-.27	-.17	.00	.47	.40
2. Locus		1.00	-.05	.78	-.61	.80	-.15	-.07	.00	.46	.42
3. Stability			1.00	-.22	-.06	-.12	-.05	.00	.00	-.10	.08
4. Personal control				1.00	-.52	.81	-.25	-.13	.04	.43	.44
5. External control					1.00	-.54	.11	.06	-.02	-.18	-.26
6. Anger						1.00	-.17	-.07	-.06	.57	.45
7. Sorry							1.00	.72	.15	-.07	-.02
8. Sad								1.00	.25	-.04	.10
9. Help									1.00	-.27	.08
10. Avoid										1.00	.35
11. Change											1.00
					Person-perception (n = 214)						
1. Responsibility	1.00	.83	-.11	.83	-.50	.53	-.43	-.27	-.21	.17	.37
2. Locus		1.00	-.11	.82	-.55	.52	-.37	-.19	-.17	.21	.44
3. Stability			1.00	-.17	.01	.06	.08	.03	.20	-.09	.06
4. Personal control				1.00	-.48	.57	-.42	-.23	-.25	.19	.43
5. External control					1.00	-.20	.23	.17	.16	-.16	-.27
6. Anger						1.00	-.21	-.11	-.12	.20	.33
7. Sorry							1.00	.66	.34	-.10	-.14
8. Sad								1.00	.33	-.16	-.12
9. Help									1.00	-.32	-.06
10. Avoid										1.00	.17
11. Change											1.00

Table 5
Intercorrelations (Pearson's r) Among Causal Dimensions for Skin Cancer, AIDS, Heart Disease, and Paraplegia by Target.

	Skin Cancer		AIDS		Heart Disease		Paraplegia	
	Self	Person	Self	Person	Self	Person	Self	Person
Locus - Personal Control	.56**	.60**	.79**	.79**	.71**	.69**	.78**	.82**
Personal Control - Stability	-.58**	-.60**	-.35**	-.35**	-.55**	-.62**	-.22**	-.17*
Locus - External Control	-.23**	-.18*	-.54**	-.45**	-.09	.03	-.61**	-.55**
Personal Control - External Control	-.05	-.13	-.47**	-.37**	.12	.28**	-.52**	-.48**
Stability - External Control	.04	.11	.13	.07	-.08	-.22**	-.06	.01

* $p \leq .01$ ** $p \leq .001$

Table 6
Means and Standard Deviations for Cognition Judgements by Causal Condition for all Four Misfortunes

	Skin Cancer		AIDS		Heart Disease		Paraplegia	
Measure	Control	Uncontrol	Control	Uncontrol	Control	Uncontrol	Control	Uncontrol
Responsibility								
M	6.89***	2.03	7.85***	1.62	8.43***	2.32	7.44***	1.68
SD	1.70	1.94	1.52	1.34	0.90	1.84	1.82	1.37
Locus								
M	6.59***	4.31	7.09***	2.69	7.88***	4.28	6.68***	2.10
SD	1.38	1.91	1.42	1.77	1.08	1.69	1.40	1.51
Stability								
M	4.21***	7.13	4.90***	6.67	4.25***	7.04	4.76	5.44
SD	1.93	1.53	2.66	2.29	2.14	1.69	2.18	2.30
Personal Control								
M	7.38***	3.04	7.85***	2.34	7.87***	3.68	7.64***	2.43
SD	1.52	1.98	1.42	1.66	1.38	2.30	1.44	1.63
External Control								
M	3.08	3.66	4.04***	6.80	3.72	3.14	4.06***	6.67
SD	1.59	2.19	2.21	2.27	1.97	1.59	1.85	1.84

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

Table 7
Means and Standard Deviations for Emotion Judgements by Causal Condition for all Four Misfortunes

	Skin Cancer		AIDS		Heart Disease		Paraplegia	
Measure	Control	Uncontrol	Control	Uncontrol	Control	Uncontrol	Control	Uncontrol
Anger								
M	6.15***	1.89	7.07***	1.92	6.84***	1.81	6.29***	1.64
SD	1.64	1.37	1.62	1.55	1.91	1.32	1.79	1.12
Sorry								
M	5.98	6.66	6.28***	7.48	5.30**	6.66	6.18***	7.61
SD	2.02	2.04	2.11	1.94	2.39	2.01	2.17	1.57
Sad								
M	6.59	6.90	6.92**	7.73	6.10	6.78	6.94	7.68
SD	1.95	2.00	2.09	1.88	2.28	2.13	1.96	1.72

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

Table 8
Means and Standard Deviations for Action Judgements by Causal Condition for all Four Misfortunes

	Skin Cancer		AIDS		Heart Disease		Paraplegia	
Measure	Control	Uncontrol	Control	Uncontrol	Control	Uncontrol	Control	Uncontrol
Help								
M	8.05	8.36	8.14	8.51	8.17*	8.47	8.21	8.56
SD	1.31	1.02	1.24	0.92	1.16	0.93	1.14	0.81
Avoid/Punish								
M	2.61***	1.71	3.39***	1.88	3.34***	1.58	3.10***	1.55
SD	1.57	1.13	1.95	1.41	2.02	1.06	1.81	1.09
Change								
M	7.62***	4.92	8.02***	4.89	8.00***	5.89	6.79***	4.46
SD	1.70	2.53	1.58	2.80	1.34	2.77	1.84	2.66

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

Table 9
Means and Standard Deviations for Cognition Judgements by Target for all Four Misfortunes

	Skin Cancer		AIDS		Heart Disease		Paraplegia	
Measure	Self	Other	Self	Other	Self	Other	Self	Other
Responsibility								
M	5.19**	4.60	5.49*	5.11	5.05**	4.69	4.14	4.00
SD	3.27	3.03	3.61	3.52	3.40	3.41	3.40	3.28
Locus								
M	5.86***	5.41	5.32	5.18	6.02***	5.49	4.03	4.04
SD	2.11	2.07	2.84	2.85	2.45	2.40	2.83	2.86
Stability								
M	5.34	5.46	5.59	5.73	5.81	5.81	5.26	5.26
SD	2.58	2.32	2.85	2.89	2.49	2.32	2.45	2.51
Personal Control								
M	5.86*	5.51	5.70	5.40	5.57	5.32	4.68	4.51
SD	2.84	2.87	3.32	3.24	2.92	2.89	3.06	3.08
External Control								
M	3.30	3.42	4.94**	5.42	3.24**	3.78	5.35	5.65
SD	2.14	2.08	2.90	2.75	1.92	2.02	2.54	2.31

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

Table 10
Means and Standard Deviations for Emotion Judgements by Target for all Four Misfortunes

	Skin Cancer		AIDS		Heart Disease		Paraplegia	
Measure	Self	Other	Self	Other	Self	Other	Self	Other
Anger								
M	5.69***	3.11	6.12***	3.70	4.74***	3.22	4.74***	2.56
SD	3.32	2.69	3.47	3.26	3.52	2.96	3.45	2.50
Sorry								
M	5.79***	6.77	6.46**	7.11	5.50***	6.63	6.47***	7.51
SD	2.78	2.45	2.78	2.46	2.74	2.64	2.57	2.06
Sad								
M	6.32*	6.99	7.09	7.24	6.04***	6.96	7.04*	7.62
SD	2.68	2.31	2.49	2.43	2.66	2.51	2.31	1.96

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

Table 11
Means and Standard Deviations for Action Judgements by Target for all Four Misfortunes

	Skin Cancer		AIDS		Heart Disease		Paraplegia	
Measure	Self	Other	Self	Other	Self	Other	Self	Other
Help								
M	8.57***	7.73	8.58***	7.92	8.62***	8.05	8.51	8.26
SD	1.35	1.75	1.54	1.69	1.21	1.61	1.43	1.28
Avoid/Punish								
M	2.61**	1.98	2.94	2.45	2.73**	2.14	2.61***	1.94
SD	2.38	1.70	2.77	2.16	2.50	2.09	2.42	1.71
Change								
M	6.69***	5.94	7.01***	6.27	7.16*	6.66	5.86***	5.04
SD	2.79	2.91	2.93	2.94	2.69	2.63	3.02	2.95

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

Table 12
Means, Standard Deviations, and Correlations Among Responsibility, Emotion, and Action Tendency in Person Perception by Group for Skin Cancer

	Group	
Measure	Non-Depressed	Depressed
Responsibility		
M	4.81	4.40
SD	3.03	3.04
Pity		
M	6.54	7.00
SD	2.53	2.36
Help		
M	7.80	7.65
SD	1.63	1.86
Responsibility X Pity	-.20	-.42***
Responsibility X Help	-.10	-.21
Pity X Help	.30*	.28*

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

Table 13
Means, Standard Deviations, and Correlations Among Responsibility, Emotion, and Action Tendency in Person Perception by Group for AIDS

	Group	
Measure	Non-Depressed	Depressed
Responsibility		
M	5.29	4.94
SD	3.56	3.51
Pity		
M	6.90	7.33
SD	2.53	2.39
Help		
M	8.01	7.83
SD	1.69	1.70
Responsibility X Pity	-.45***	-.40***
Responsibility X Help	-.17	-.26*
Pity X Help	.46***	.42***

* $p \leq .01$ ** $p \leq .001$

Table 14
Means, Standard Deviations, and Correlations Among Responsibility, Emotion, and Action Tendency in Person Perception by Group for Heart Disease

	Group	
Measure	Non-Depressed	Depressed
Responsibility		
M	4.59	4.77
SD	3.41	3.44
Pity		
M	6.42	6.83
SD	2.68	2.60
Help		
M	8.04	8.06
SD	1.63	1.60
Responsibility X Pity	-.45***	-.35**
Responsibility X Help	-.30**	-.12
Pity X Help	.39***	.41***

* $p \leq .01$ ** $p \leq .001$

Table 15
Means, Standard Deviations, and Correlations Among Responsibility, Emotion, and Action Tendency in Person Perception by Group for Paraplegia

	Group	
Measure	Non-Depressed	Depressed
Responsibility		
M	3.84	4.15
SD	3.36	3.21
Pity		
M	7.40	7.63
SD	2.11	2.02
Help		
M	8.16	8.35
SD	1.37	1.18
Responsibility X Pity	-.48***	-.49***
Responsibility X Help	-.25*	-.14
Pity X Help	.21	.47***

* $p \leq .01$ ** $p \leq .001$

Table 16

Person Perception: Parameter Estimates and Goodness of Fit of Four Structural Models by Status Group for Skin Cancer

	Status Group									
	Non-Depressed					Depressed				
Parameter	Path	z	χ^2	p	NFI	Path	z	χ^2	p	NFI
Model 0 (saturated model)										
B_1: Path from responsibility to pity	- .16	- 1.65				-.32	-3.76			
B_2: Path from pity to help	.19	2.47				.18	1.83			
B_3: Path from responsibility to help	- .02	- 0.33				.07	-0.87			
Model 1 (emotion mediational model)			0.11	.74	.99			.76	.38	.96
B_1: Path from responsibility to pity	- .16	-1.65				-.32	-3.76			
B_2: Path from pity to help	.19	2.58				.22	2.40			
Model 2 (independent effects)			2.70	.10	.71			13.04	.00	.33
B_1: Path from responsibility to help	- .02	-0.34				-.07	-0.95			
B_2: Path from pity to help	.19	2.52				.18	2.01			
Model 3 (cognition mediational model)			5.93	.02	.36			3.33	.07	.83
B_1: Path from pity to responsibility	- .23	-1.65				-.53	-3.76			
B_2: Path from responsibility to help	- .05	-0.80				-.13	-1.74			

Note: A z score greater than 1.96 indicates a significant path. For all chi-square tests, df = 1, N = 70. NFI = Bentler-Bonett Normed Fit Index.

Table 17

Person Perception: Parameter Estimates and Goodness of Fit of Four Structural Models by Status Group for AIDS

	Status Group									
	Non-Depressed					Depressed				
Parameter	Path	z	χ^2	p	NFI	Path	z	χ^2	p	NFI
Model 0 (saturated model)										
B_1: Path from responsibility to pity	-.32	-4.16				-.27	-3.64			
B_2: Path from pity to help	.32	3.97				.27	3.18			
B_3: Path from responsibility to help	.02	0.38				-.05	-0.92			
Model 1 (emotion mediational model)			.15	.70	1.0			.85	.36	.97
B_1: Path from responsibility to pity	-.32	-4.16				-.27	-3.64			
B_2: Path from pity to help	.31	4.25				.30	3.86			
Model 2 (independent effects)			15.68	.00	.51			12.28	.00	.54
B_1: Path from responsibility to help	.02	0.43				-.05	-1.0			
B_2: Path from pity to help	.32	4.44				.27	3.48			
Model 3 (cognition mediational model)			14.35	.00	.55			9.58	.00	.64
B_1: Path from pity to responsibility	-.63	-4.16				-.59	-3.64			
B_2: Path from responsibility to help	-.08	-1.42				-.13	-2.25			

Note: A z score greater than 1.96 indicates a significant path. For all chi-square tests, df = 1, N = 70. NFI = Bentler-Bonett Normed Fit Index.

Table 18

Person Perception: Parameter Estimates and Goodness of Fit of Four Structural Models by Status Group for Heart Disease

	Status Group									
	Non-Depressed					Depressed				
Parameter	Path	z	χ^2	p	NFI	Path	z	χ^2	p	NFI
Model 0 (saturated model)										
B_1: Path from responsibility to pity	-.36	-4.18				-.26	-3.07			
B_2: Path from pity to help	.19	2.57				.26	3.52			
B_3: Path from responsibility to help	-.08	-1.27				.01	0.24			
Model 1 (emotion mediational model)			1.61	.20	.94			.059	.81	1.0
B_1: Path from responsibility to pity	-.36	-4.18				-.26	-3.07			
B_2: Path from pity to help	.24	3.48				.25	3.67			
Model 2 (independent effects)			15.8	.00	.45			8.96	.00	.58
B_1: Path from responsibility to help	-.08	-1.42				.01	0.26			
B_2: Path from pity to help	.19	2.88				.26	3.76			
Model 3 (cognition mediational model)			6.40	.01	.78			11.58	.00	.46
B_1: Path from pity to responsibility	-.58	-4.18				-.46	-3.07			
B_2: Path from responsibility to help	-.14	-2.60				-.05	-0.97			

Note: A z score greater than 1.96 indicates a significant path. For all chi-square tests, df = 1, N = 70. NFI = Bentler-Bonett Normed Fit Index.

Table 19

Person Perception: Parameter Estimates and Goodness of Fit of Four Structural Models by Status Group for Paraplegia

	Status Group									
	Non-Depressed					Depressed				
Parameter	Path	z	χ^2	p	NFI	Path	z	χ^2	p	NFI
Model 0 (saturated model)										
B_1: Path from responsibility to pity	-.31	-4.67				-.31	-4.60			
B_2: Path from pity to help	.07	0.85				.31	4.32			
B_3: Path from responsibility to help	-.08	-1.44				.04	0.94			
Model 1 (emotion mediational model)			2.07	.15	.91			.88	.35	.98
B_1: Path from responsibility to pity	-.31	-4.67				-.31	-4.60			
B_2: Path from pity to help	.14	1.76				.27	4.40			
Model 2 (independent effects)			19.2	.00	.21			18.72	.00	.49
B_1: Path from responsibility to help	-.08	-1.65				.04	1.07			
B_2: Path from pity to help	.07	0.97				.31	4.95			
Model 3 (cognition mediational model)			.72	.40	.97			16.74	.00	.55
B_1: Path from pity to responsibility	-.78	-4.67				-.77	-4.60			
B_2: Path from responsibility to help	-.10	-2.12				-.05	-1.19			

Note: A z score greater than 1.96 indicates a significant path. For all chi-square tests, df = 1, N = 70. NFI = Bentler-Bonett Normed Fit Index.

Table 20
Means, Standard Deviations, and Correlations Among Responsibility, Emotion, and Action Tendency in Self Perception by Group for Skin Cancer

	Group	
Measure	Non-Depressed	Depressed
Responsibility		
M	5.53	4.86
SD	3.18	3.34
Anger		
M	5.31	6.06
SD	3.31	3.32
Change		
M	6.56	6.83
SD	2.88	2.70
Responsibility X Anger	.81**	.81**
Responsibility X Change	.48**	.42**
Anger X Change	.51**	.48**

* $p \leq .01$ ** $p \leq .001$

Table 21
Means, Standard Deviations, and Correlations Among Responsibility, Emotion, and Action Tendency in Self Perception by Group for AIDS

	Group	
Measure	Non-Depressed	Depressed
Responsibility		
M	5.51	5.47
SD	3.59	3.66
Anger		
M	6.10	6.14
SD	3.44	3.54
Change		
M	6.84	7.19
SD	3.07	2.79
Responsibility X Anger	.87**	.87**
Responsibility X Change	.57**	.37**
Anger X Change	.63**	.45**

* $p \leq .01$ ** $p \leq .001$

Table 22
Means, Standard Deviations, and Correlations Among Responsibility, Emotion, and Action Tendency in Self Perception by Group for Heart Disease

	Group	
Measure	Non-Depressed	Depressed
Responsibility		
M	4.93	5.17
SD	3.37	3.45
Anger		
M	4.16	5.31
SD	3.37	3.59
Change		
M	7.09	7.23
SD	2.74	2.65
Responsibility X Anger	.87**	.80**
Responsibility X Change	.47**	.49**
Anger X Change	.42**	.37*

* $p \leq .01$ ** $p \leq .001$

Table 23
Means, Standard Deviations, and Correlations Among Responsibility, Emotion, and Action Tendency in Self Perception by Group for Paraplegia

	Group	
Measure	Non-Depressed	Depressed
Responsibility		
M	4.11	4.16
SD	3.51	3.32
Anger		
M	4.59	4.89
SD	3.45	3.47
Change		
M	5.46	6.27
SD	3.09	2.91
Responsibility X Anger	.87**	.82**
Responsibility X Change	.38**	.40**
Anger X Change	.50**	.37*

* $p \leq .01$ ** $p \leq .001$

Table 24

Self Perception: Parameter Estimates and Goodness of Fit of Four Structural Models by Status Group for Skin Cancer

Parameter	Status Group									
	Non-Depressed					Depressed				
	Path	z	χ^2	p	NFI	Path	z	χ^2	p	NFI
Model 0 (saturated model)										
B_1: Path from responsibility to anger	.84	11.31				.80	11.32			
B_2: Path from anger to change	.30	1.97				.31	2.12			
B_3: Path from responsibility to change	.18	1.16				.09	0.64			
Model 1 (emotion mediational model)			1.36	.24	.99			.41	.52	1.0
B_1: Path from responsibility to anger	.84	11.31				.80	11.32			
B_2: Path from anger to change	.44	4.89				.39	4.47			
Model 2 (independent effects)			73	.00	.23			73.07	.00	.20
B_1: Path from responsibility to change	.18	1.97				.09	1.08			
B_2: Path from anger to change	.30	3.35				.31	3.61			
Model 3 (cognition mediational model)			3.84	.05	.96			4.43	.04	.95
B_1: Path from anger to responsibility	.78	11.31				.81	11.32			
B_2: Path from responsibility to change	.44	4.55				.34	3.87			

Note: A z score greater than 1.96 indicates a significant path. For all chi-square tests, df = 1, N = 70. NFI = Bentler-Bonett Normed Fit Index.

Table 25

Self Perception: Parameter Estimates and Goodness of Fit of Four Structural Models by Status Group for AIDS

Parameter	Status Group									
	Non-Depressed					Depressed				
	Path	z	χ^2	p	NFI	Path	z	χ^2	p	NFI
Model 0 (saturated model)										
B_1: Path from responsibility to anger	.83	14.55				.84	14.61			
B_2: Path from anger to change	.48	2.83				.41	2.35			
B_3: Path from responsibility to change	.09	0.54				-.06	-0.34			
Model 1 (emotion mediational model)			.30	.59	1.0			.12	.73	1.0
B_1: Path from responsibility to anger	.83	14.55				.84	14.61			
B_2: Path from anger to change	.56	6.67				.36	4.16			
Model 2 (independent effects)			97.59	.00	.26			98.03	.00	.14
B_1: Path from responsibility to change	.09	1.10				-.06	-0.70			
B_2: Path from anger to change	.48	5.73				.41	4.77			
Model 3 (cognition mediational model)			7.67	.01	.94			5.37	.02	.95
B_1: Path from anger to responsibility	.91	14.55				.90	14.61			
B_2: Path from responsibility to change	.49	5.76				.29	3.33			

Note: A z score greater than 1.96 indicates a significant path. For all chi-square tests, df = 1, N = 70. NFI = Bentler-Bonett Normed Fit Index.

Table 26

Self Perception: Parameter Estimates and Goodness of Fit of Four Structural Models by Status Group for Heart Disease

Parameter	Status Group									
	Non-Depressed					Depressed				
	Path	z	χ^2	p	NFI	Path	z	χ^2	p	NFI
Model 0 (saturated model)										
B_1: Path from responsibility to anger	.87	14.27				.83	11.0			
B_2: Path from anger to change	.05	0.30				-.05	-0.39			
B_3: Path from responsibility to change	.34	1.93				.42	3.09			
Model 1 (emotion mediational model)			3.67	.06	.97			9.05	.00	.90
B_1: Path from responsibility to anger	.87	14.27				.83	11.0			
B_2: Path from anger to change	.34	3.84				.27	3.24			
Model 2 (independent effects)			95.55	.00	.15			70.52	.00	.21
B_1: Path from responsibility to change	.34	3.85				.42	5.15			
B_2: Path from anger to change	.05	0.61				-.05	-0.65			
Model 3 (cognition mediational model)			.09	.76	1.0			.16	.69	1.0
B_1: Path from anger to responsibility	.87	14.27				.77	11.0			
B_2: Path from responsibility to change	.38	4.38				.38	4.62			

Note: A z score greater than 1.96 indicates a significant path. For all chi-square tests, df = 1, N = 70. NFI = Bentler-Bonett Normed Fit Index.

Table 27

Self Perception: Parameter Estimates and Goodness of Fit of Four Structural Models by Status Group for Paraplegia

Parameter	Status Group									
	Non-Depressed					Depressed				
	Path	z	χ^2	p	NFI	Path	z	χ^2	p	NFI
Model 0 (saturated model)										
B_1: Path from responsibility to anger	.85	14.22				.86	11.8			
B_2: Path from anger to change	.60	3.23				.10	0.60			
B_3: Path from responsibility to change	-.18	-0.98				.27	1.58			
Model 1 (emotion mediational model)			.97	.32	.99			2.47	.12	.97
B_1: Path from responsibility to anger	.85	14.22				.86	11.8			
B_2: Path from anger to change	.44	4.72				.31	3.24			
Model 2 (independent effects)			95.17	.00	.18			76.86	.00	.14
B_1: Path from responsibility to change	-.18	-1.96				.27	2.75			
B_2: Path from anger to change	.60	6.44				.10	1.04			
Model 3 (cognition mediational model)			9.86	.00	.91			.36	.55	1.0
B_1: Path from anger to responsibility	.88	14.22				.78	11.8			
B_2: Path from responsibility to change	.33	3.37				.35	3.59			

Note: A z score greater than 1.96 indicates a significant path. For all chi-square tests, df = 1, N = 70. NFI = Bentler-Bonett Normed Fit Index.

Figure 1. Paraplegia: T x C interaction for responsibility judgements.

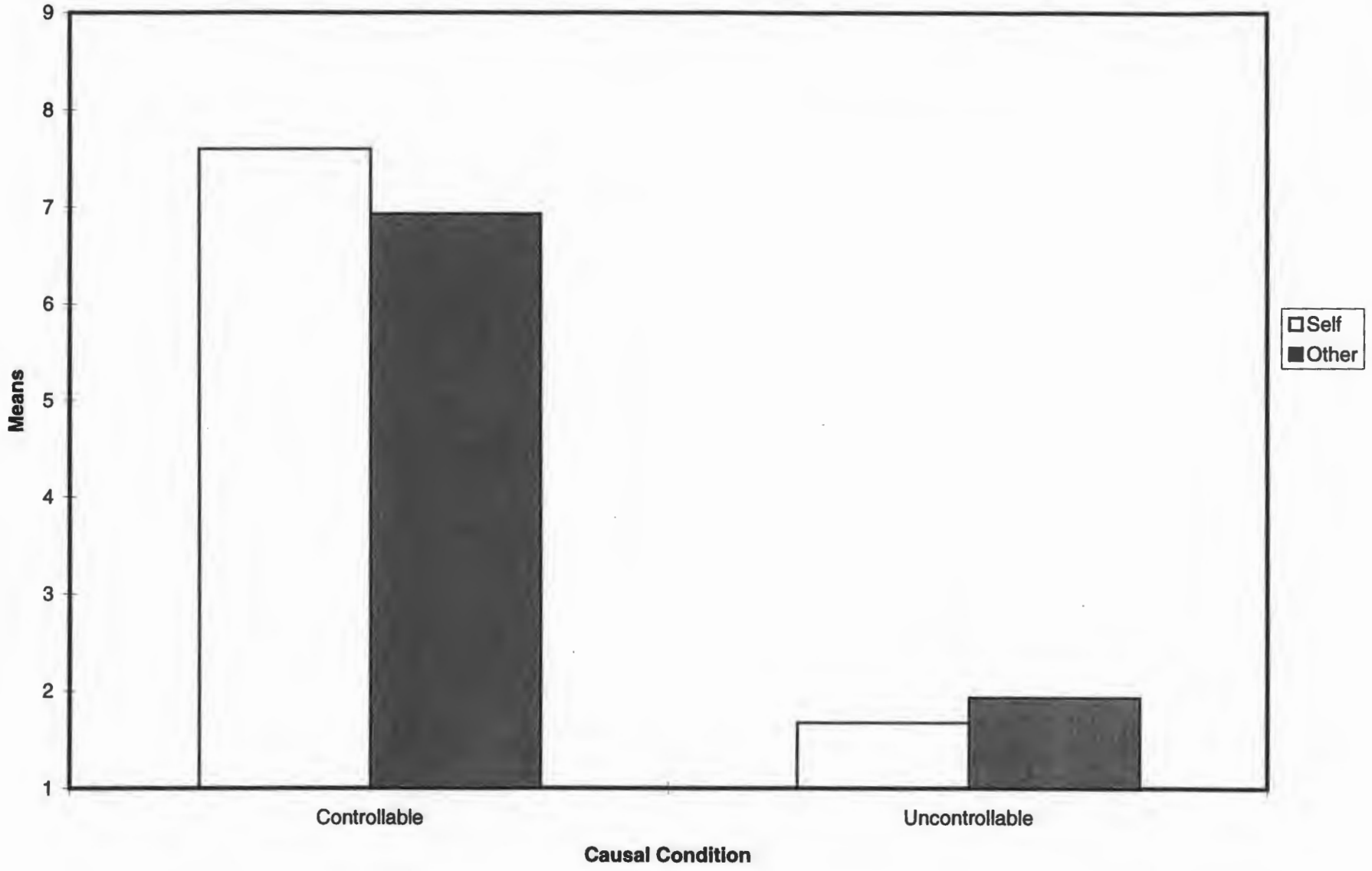


Figure 2. Skin Cancer: T x C x D interaction for locus of control judgements.

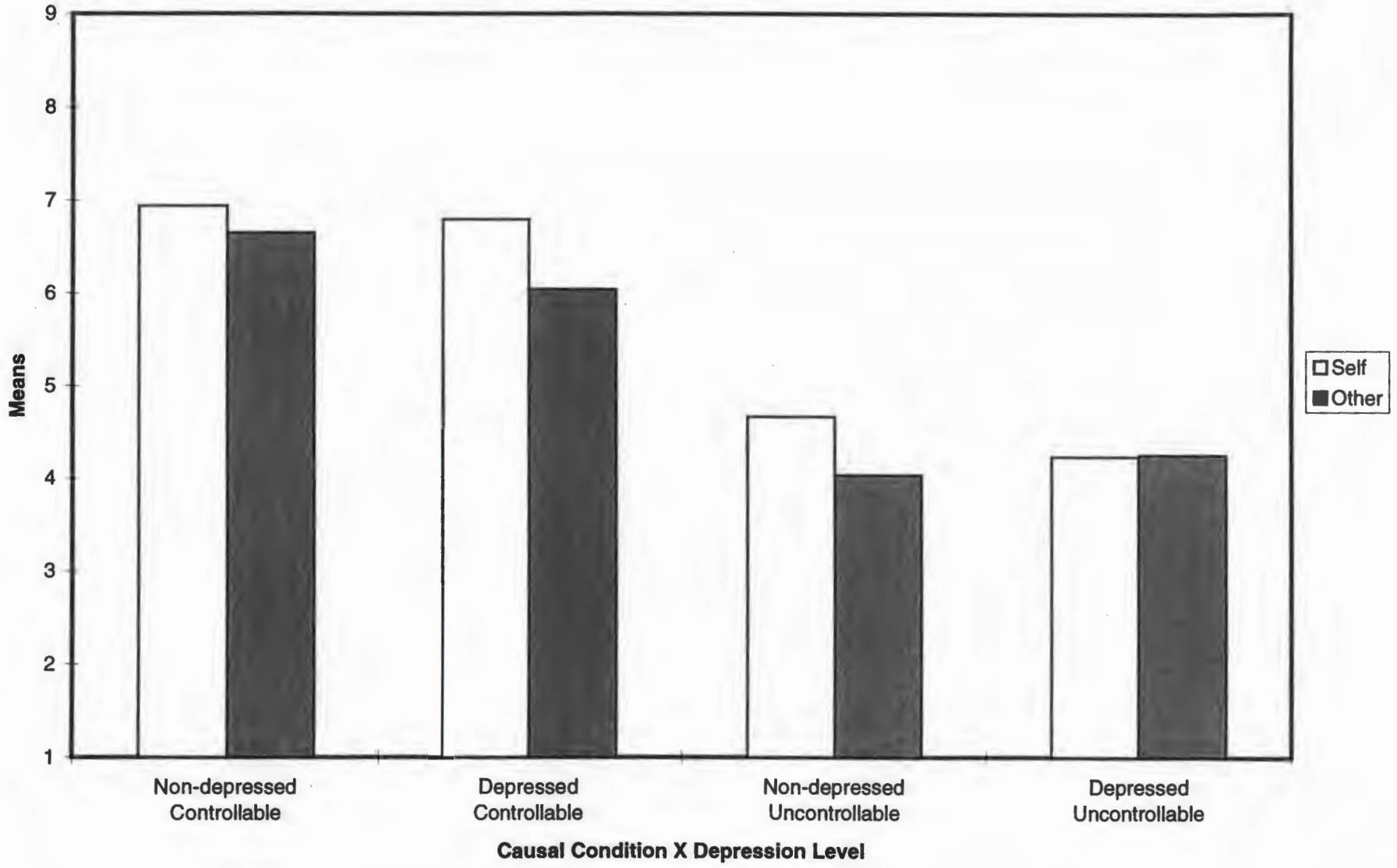


Figure 3. Skin Cancer: T x C x D interaction for stability judgements.

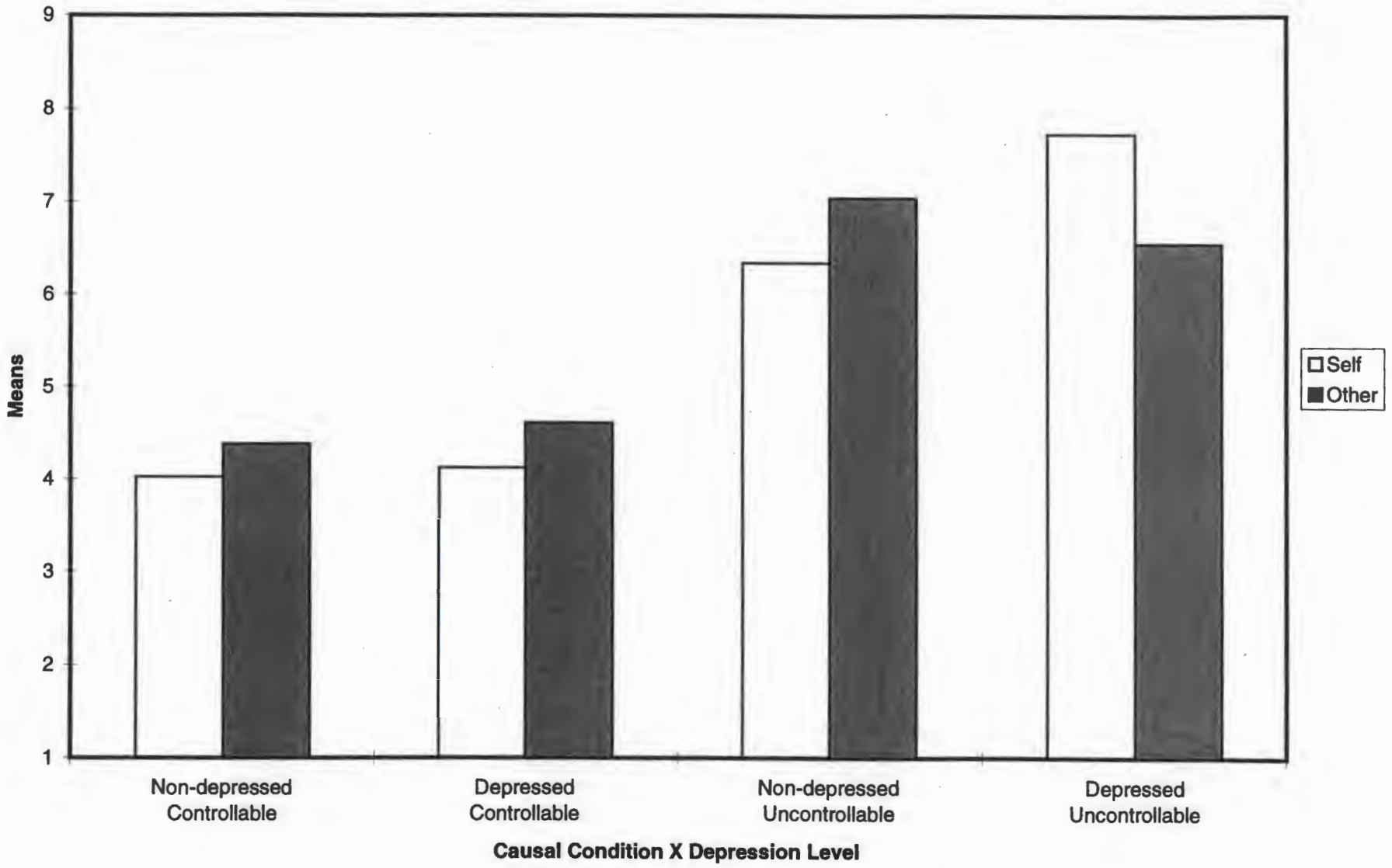


Figure 4. Heart Disease: T x C interaction for feelings of anger.

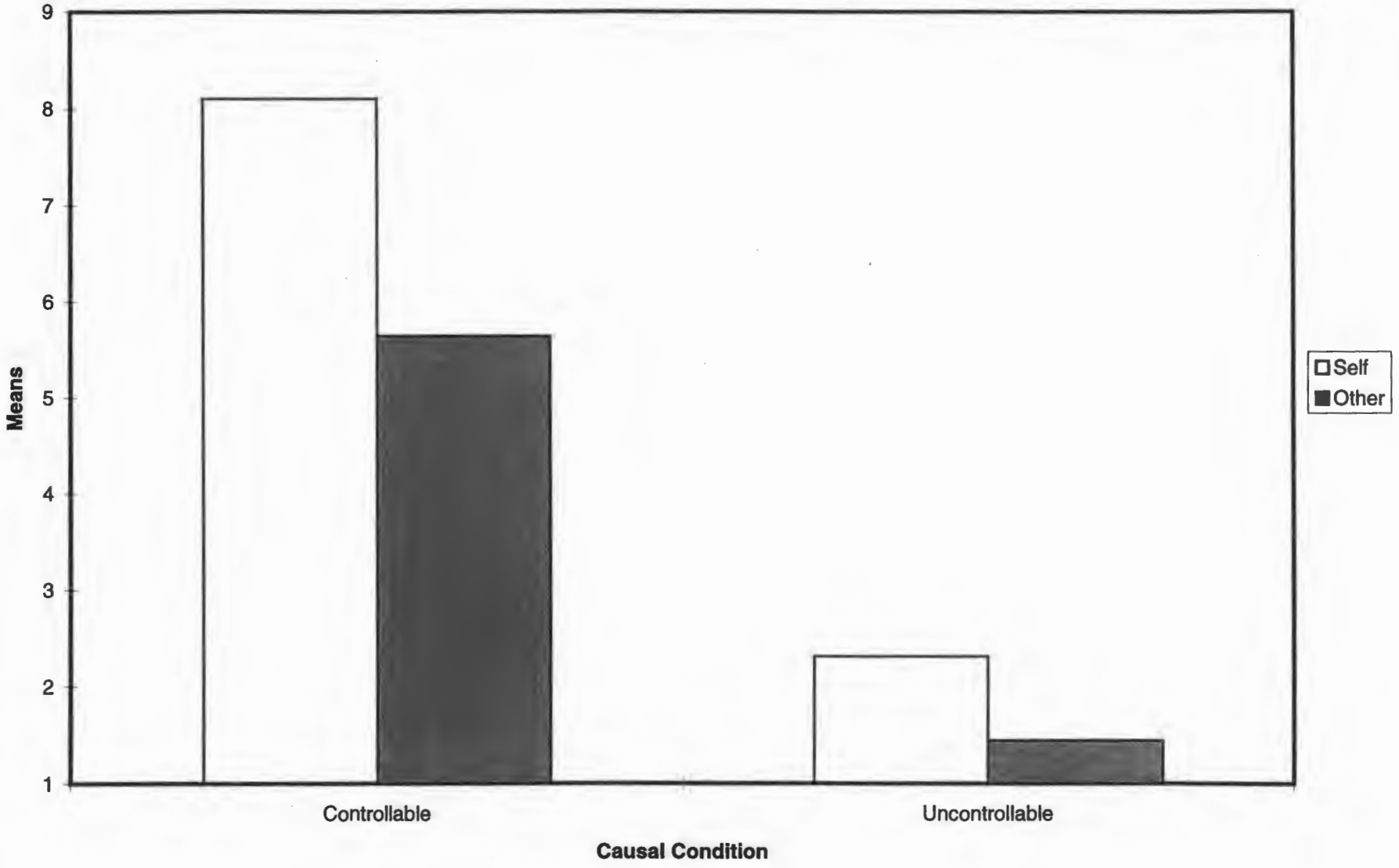


Figure 5. Paraplegia: T x C interaction for feelings of anger.

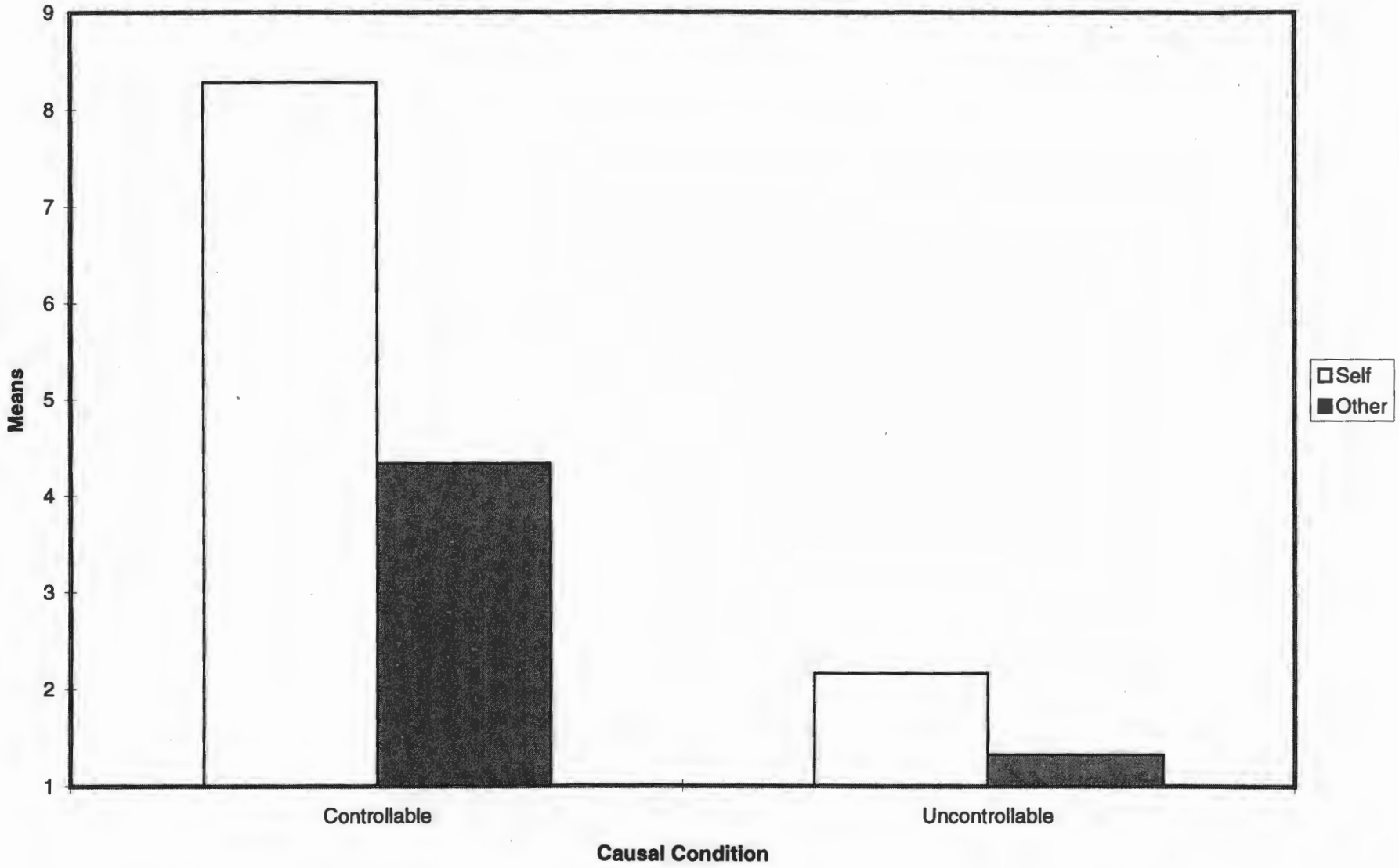


Figure 6. Skin Cancer: T x C x D interaction for feelings of anger.

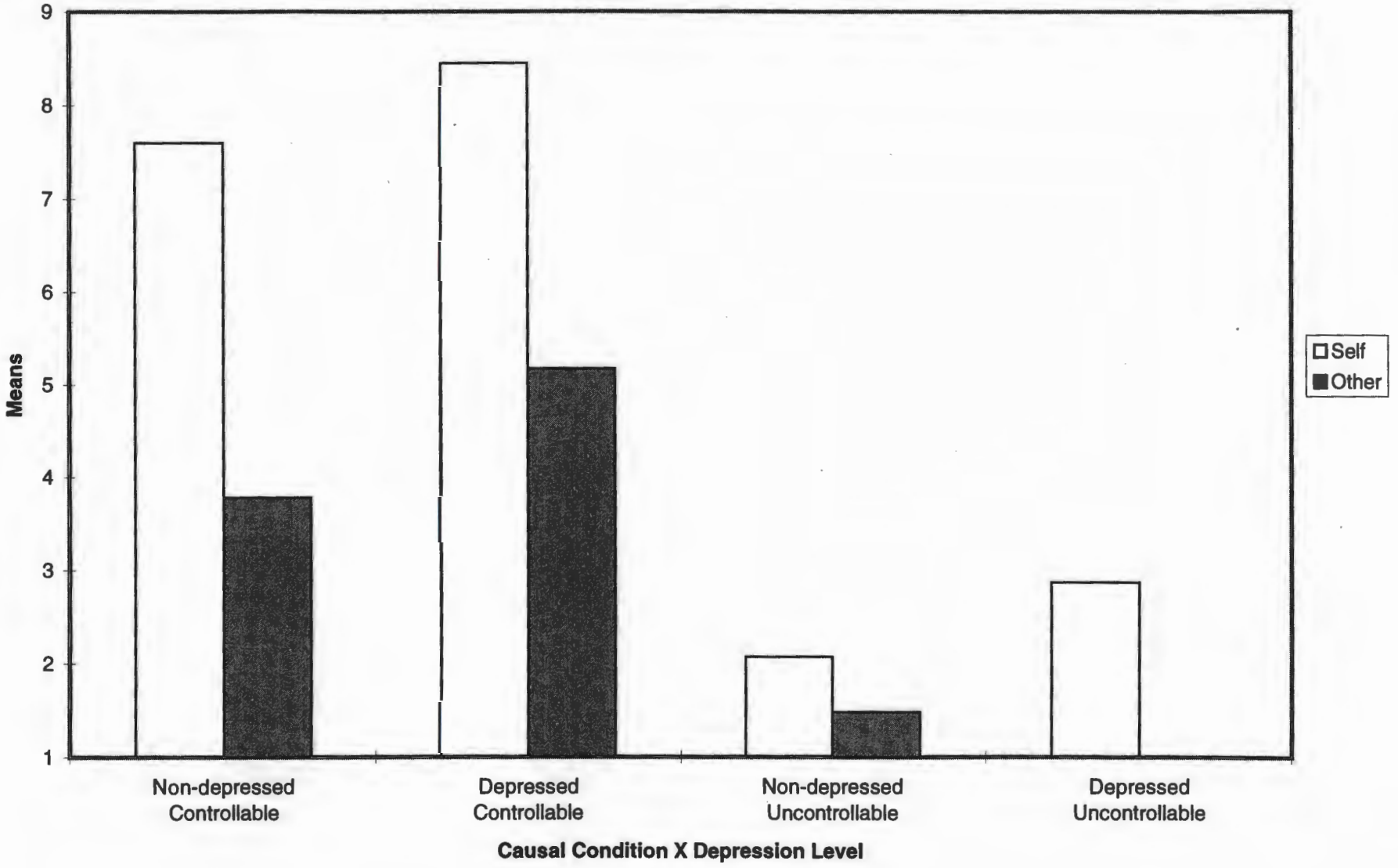


Figure 7. AIDS: T x C x D interaction for feelings of anger.

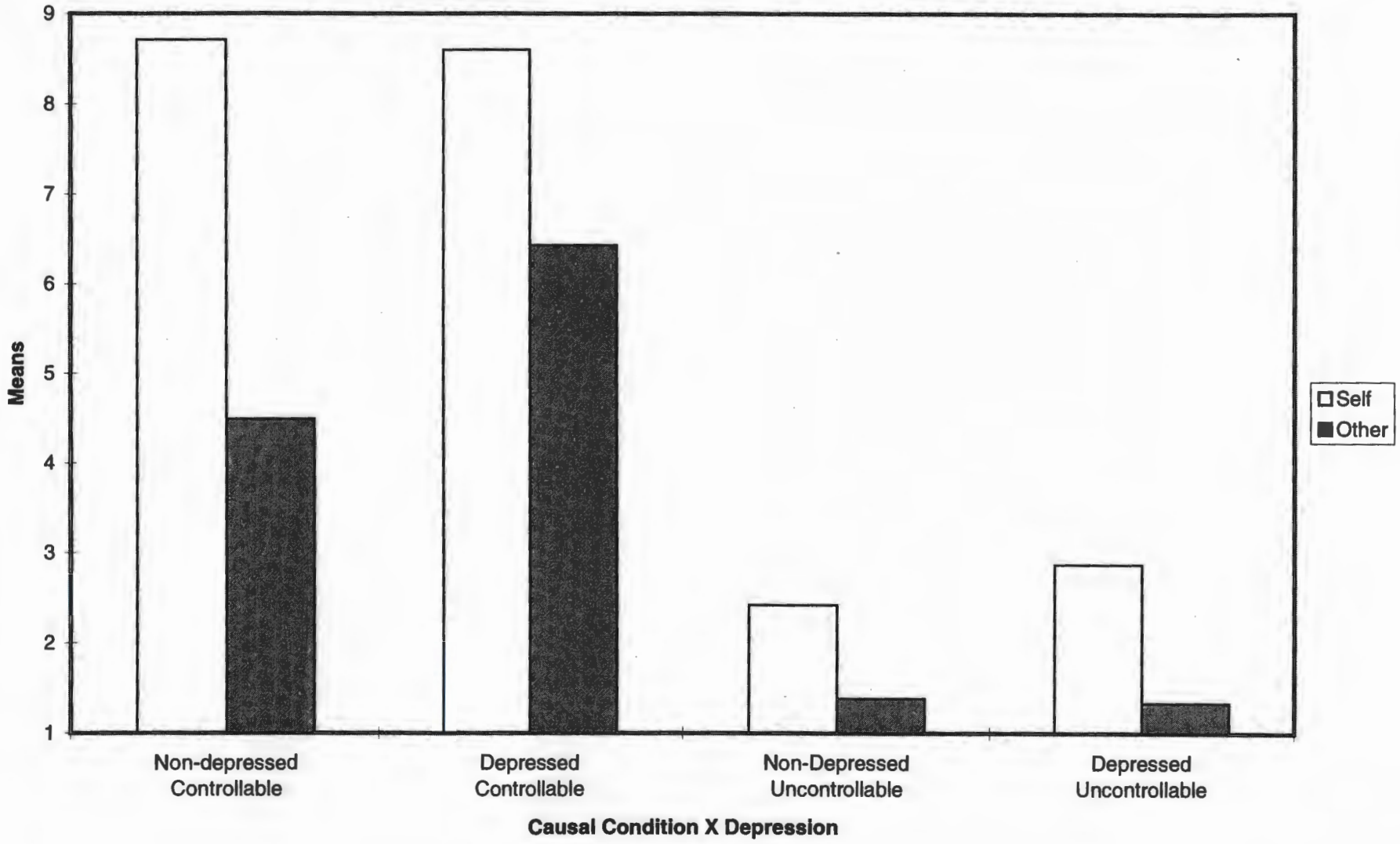


Figure 8. Skin Cancer: T x C interaction for sympathy feelings.

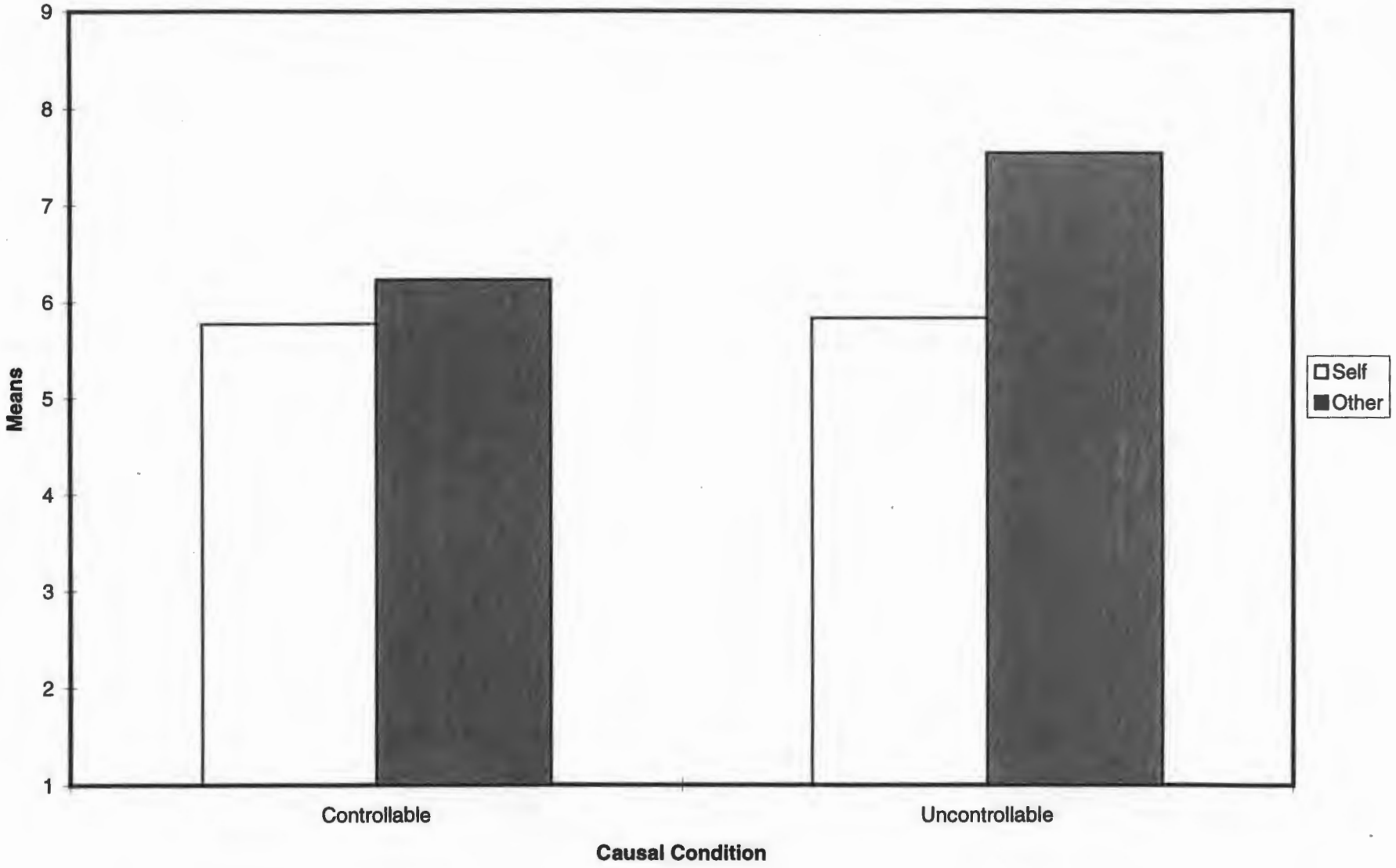


Figure 9. AIDS: T x C interaction for sympathy feelings.

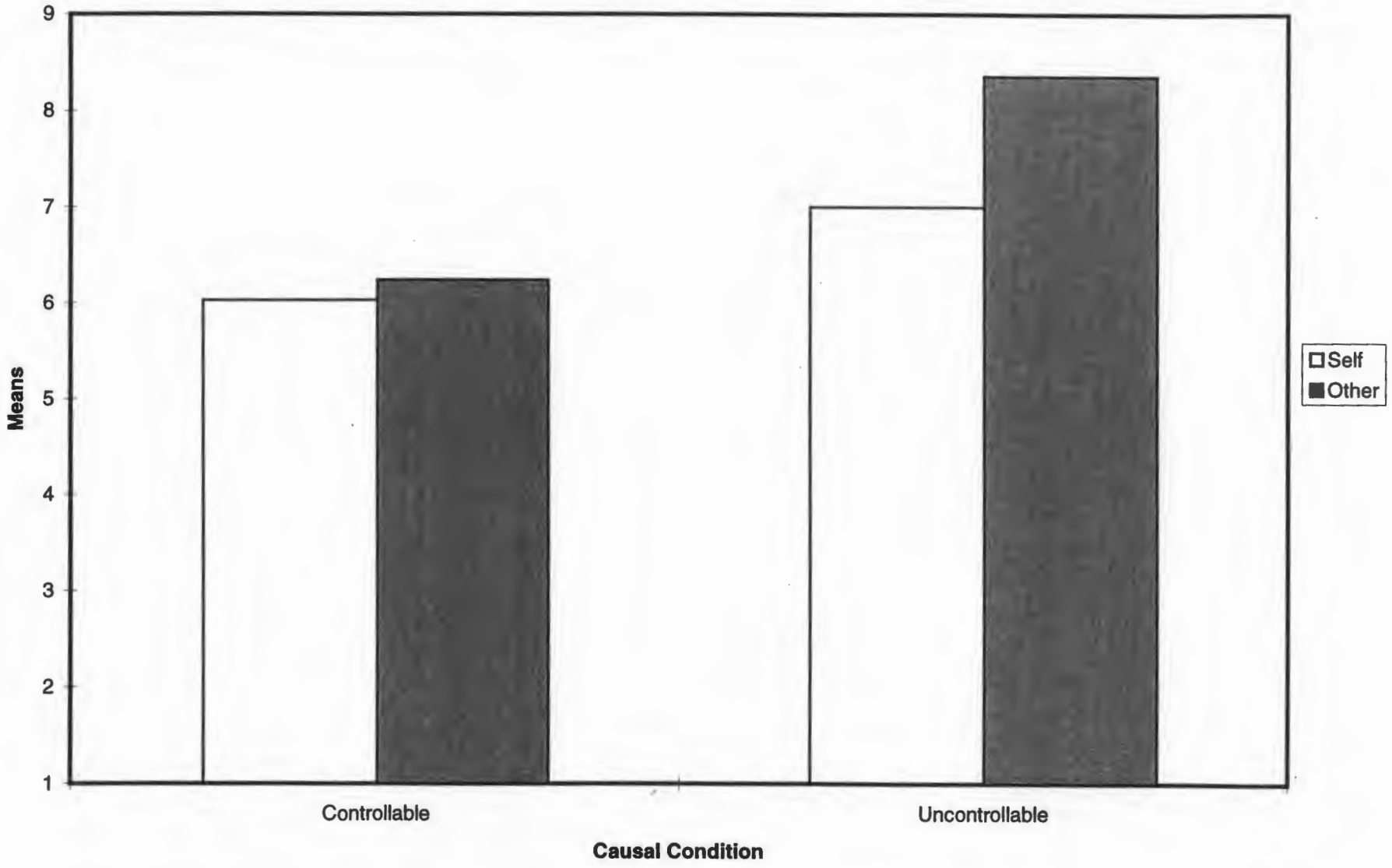


Figure 10. Heart Disease: T x C interaction for sympathy feelings.

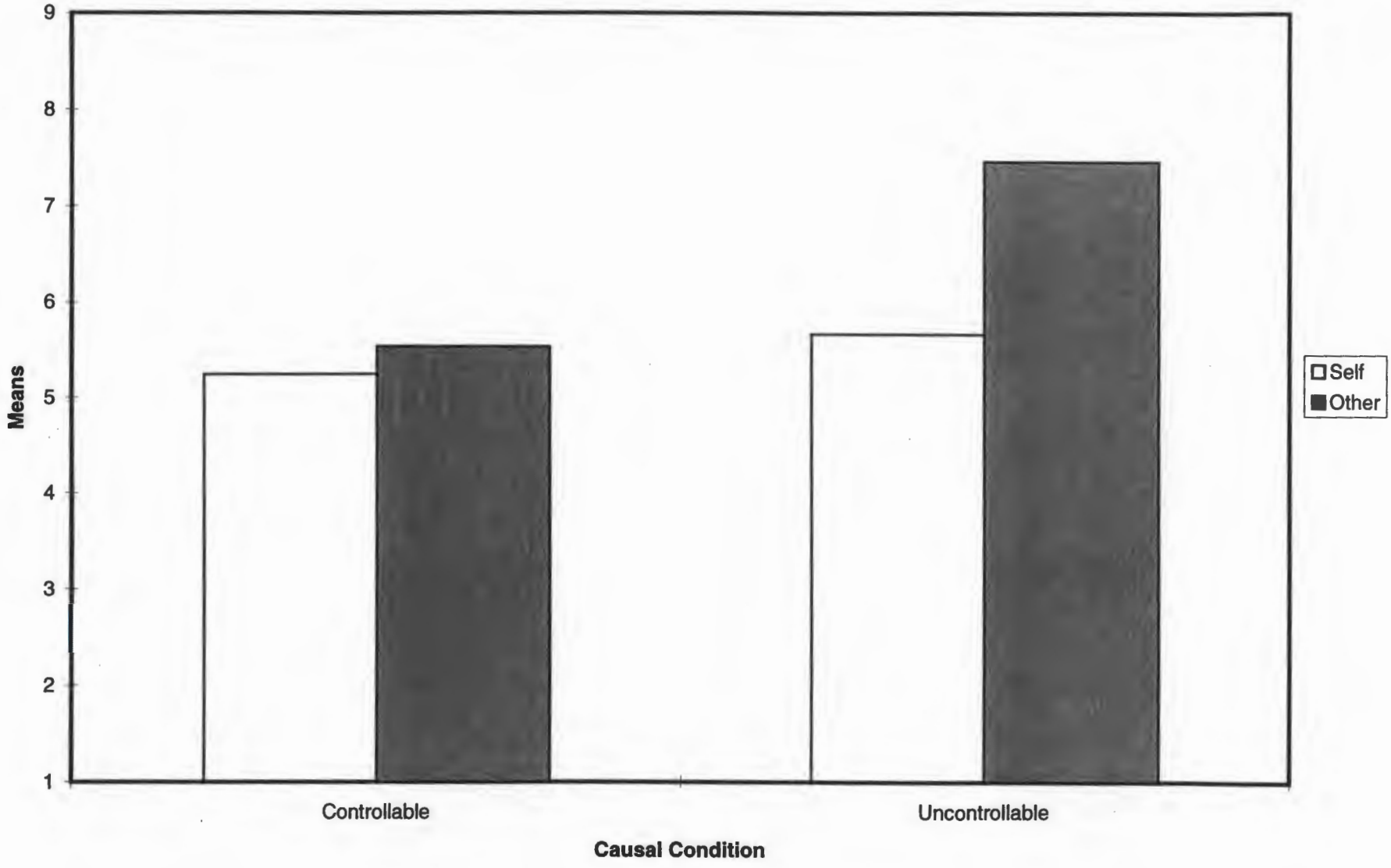


Figure 11. Paraplegia: T x C interaction for feelings of sympathy.

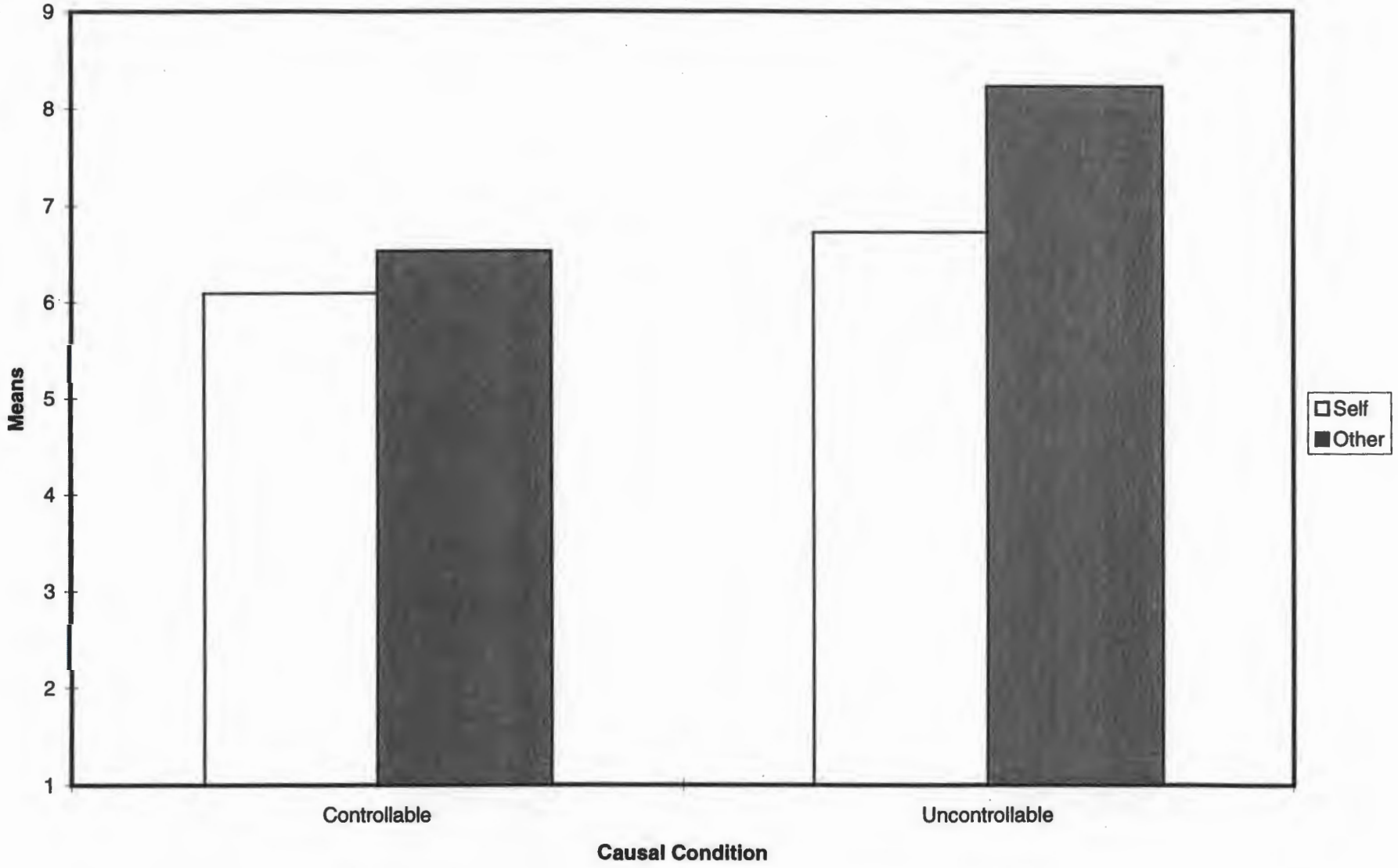


Figure 12. Paraplegia: T x C interaction for feelings of sadness.

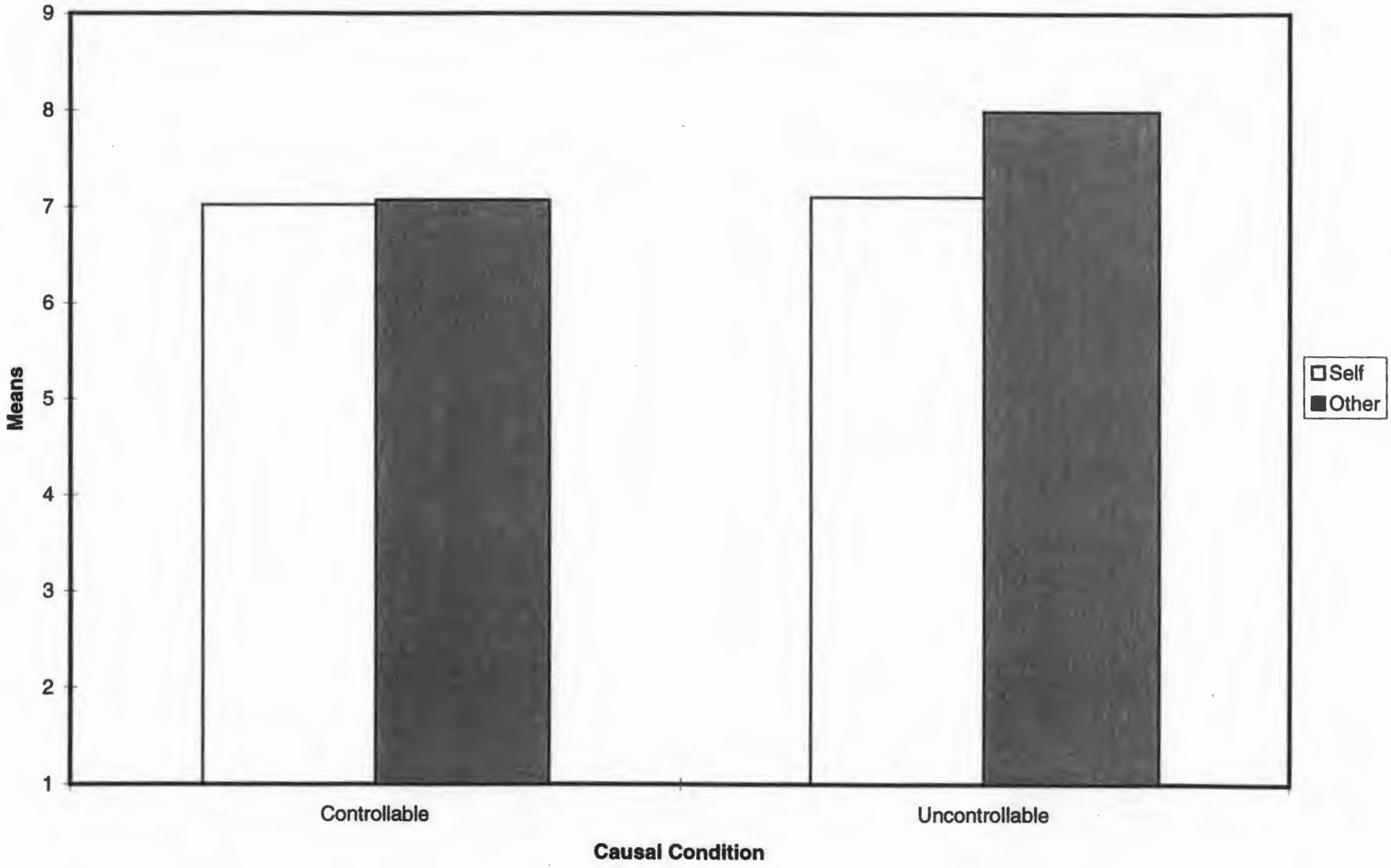


Figure 13. Skin Cancer: C x D interaction for feelings of sadness.

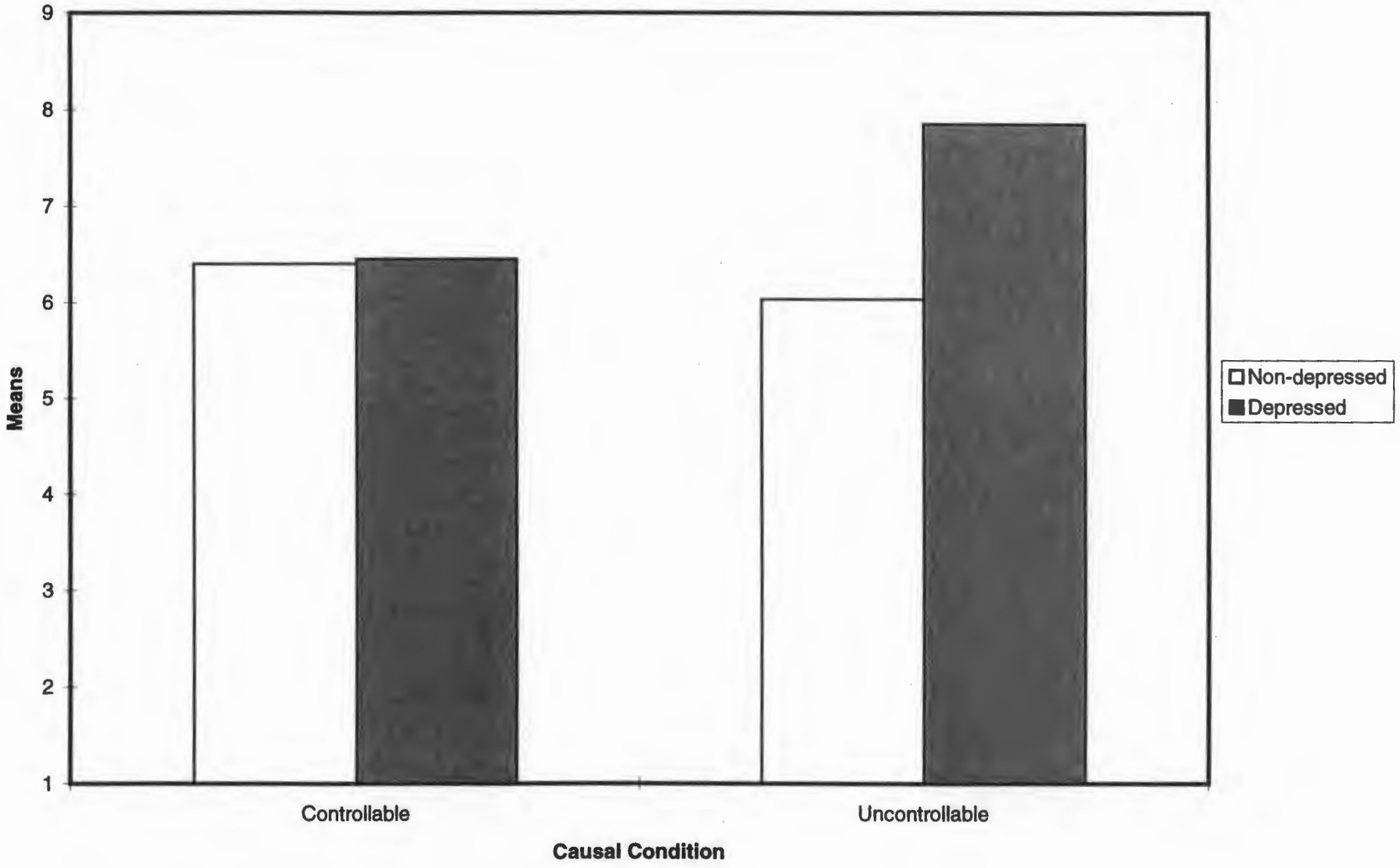


Figure 14. Heart Disease: T x C interaction for helping behavior.

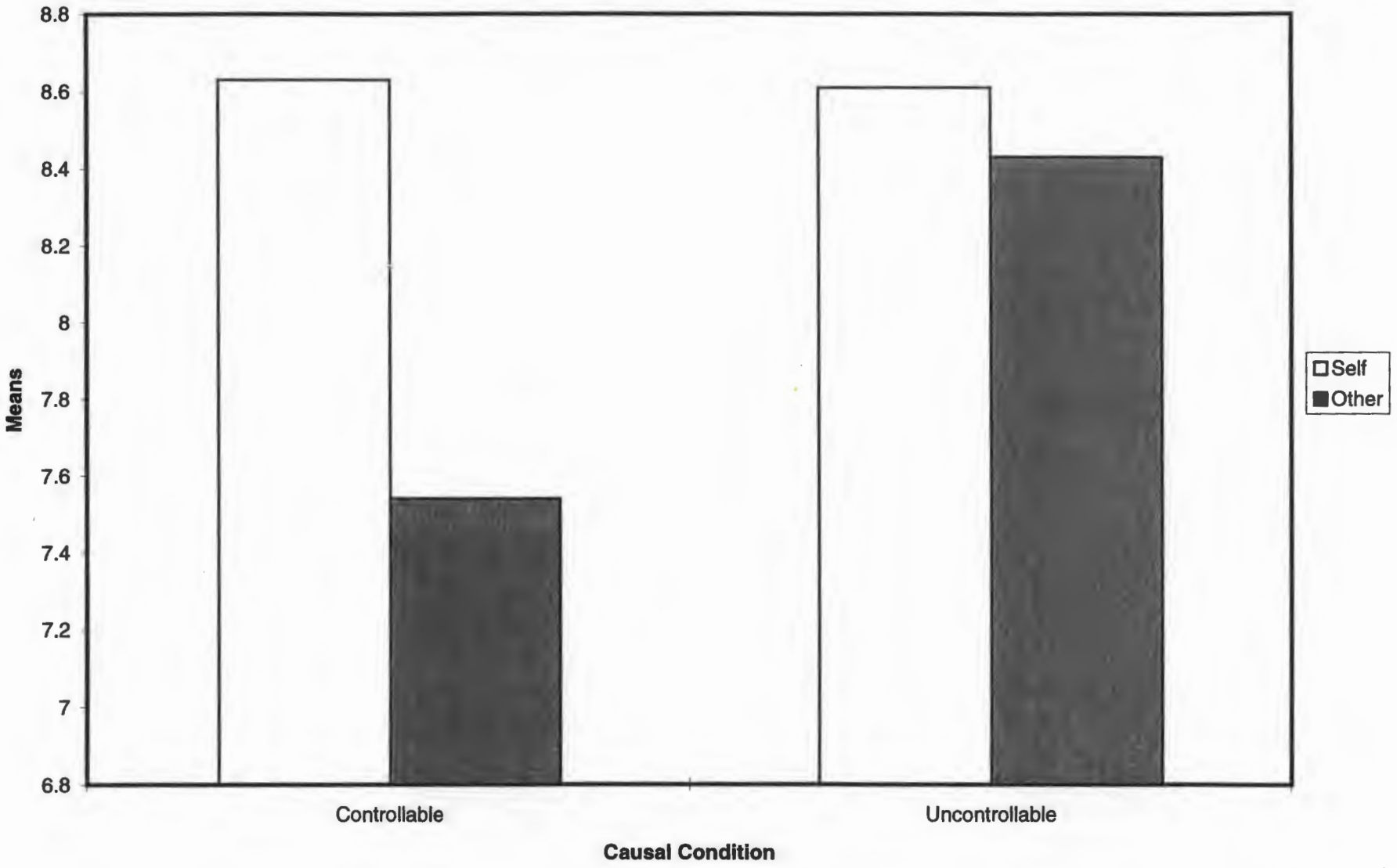


Figure 15. Paraplegia: T x D interaction for helping behavior.

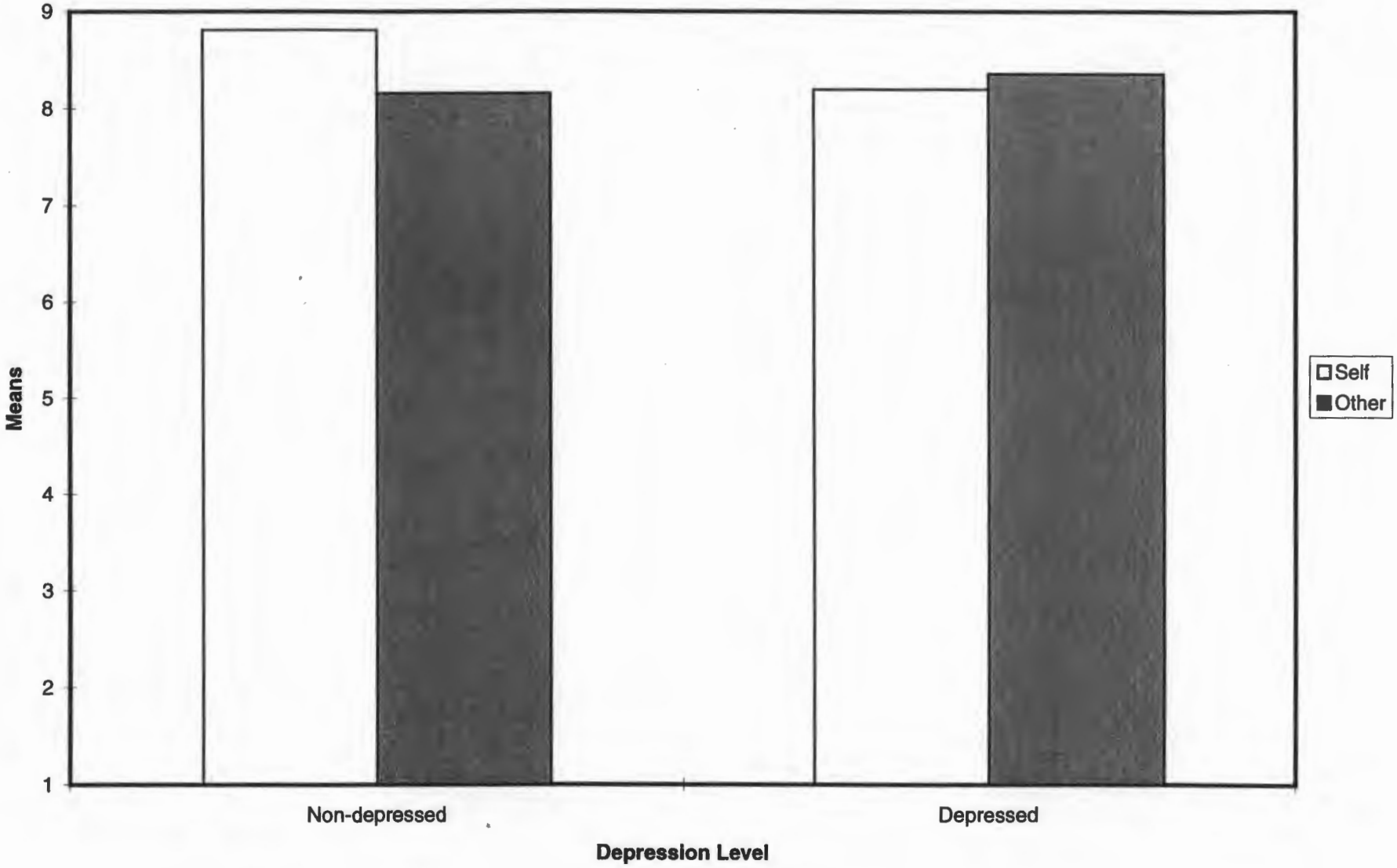


Figure 16. AIDS: T x C interaction for punishing oneself or avoiding others.

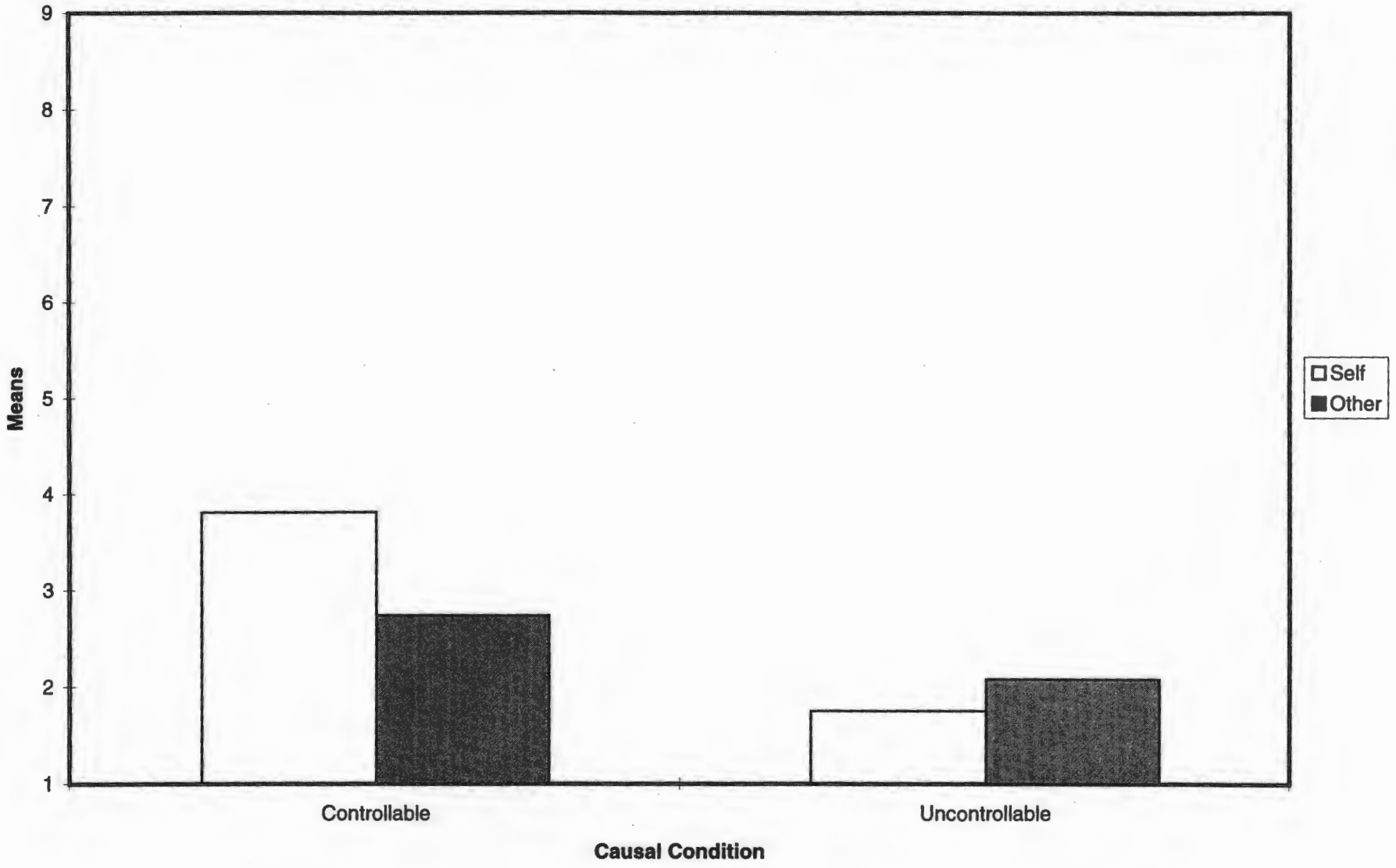


Figure 17. Heart Disease: T x C interaction for punishing oneself or avoiding others.

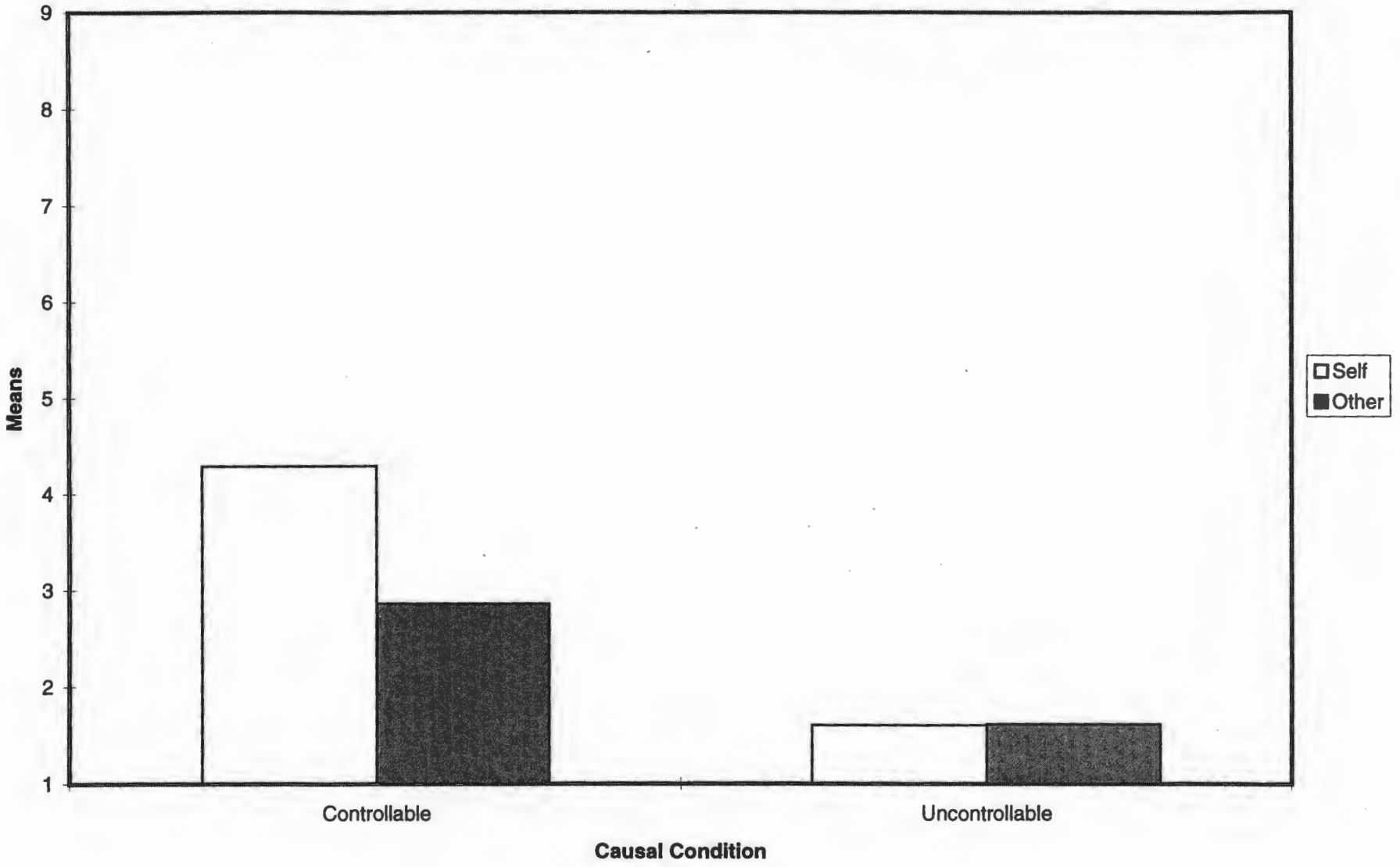


Figure 18. Paraplegia: T x C interaction for punishing oneself or avoiding others.

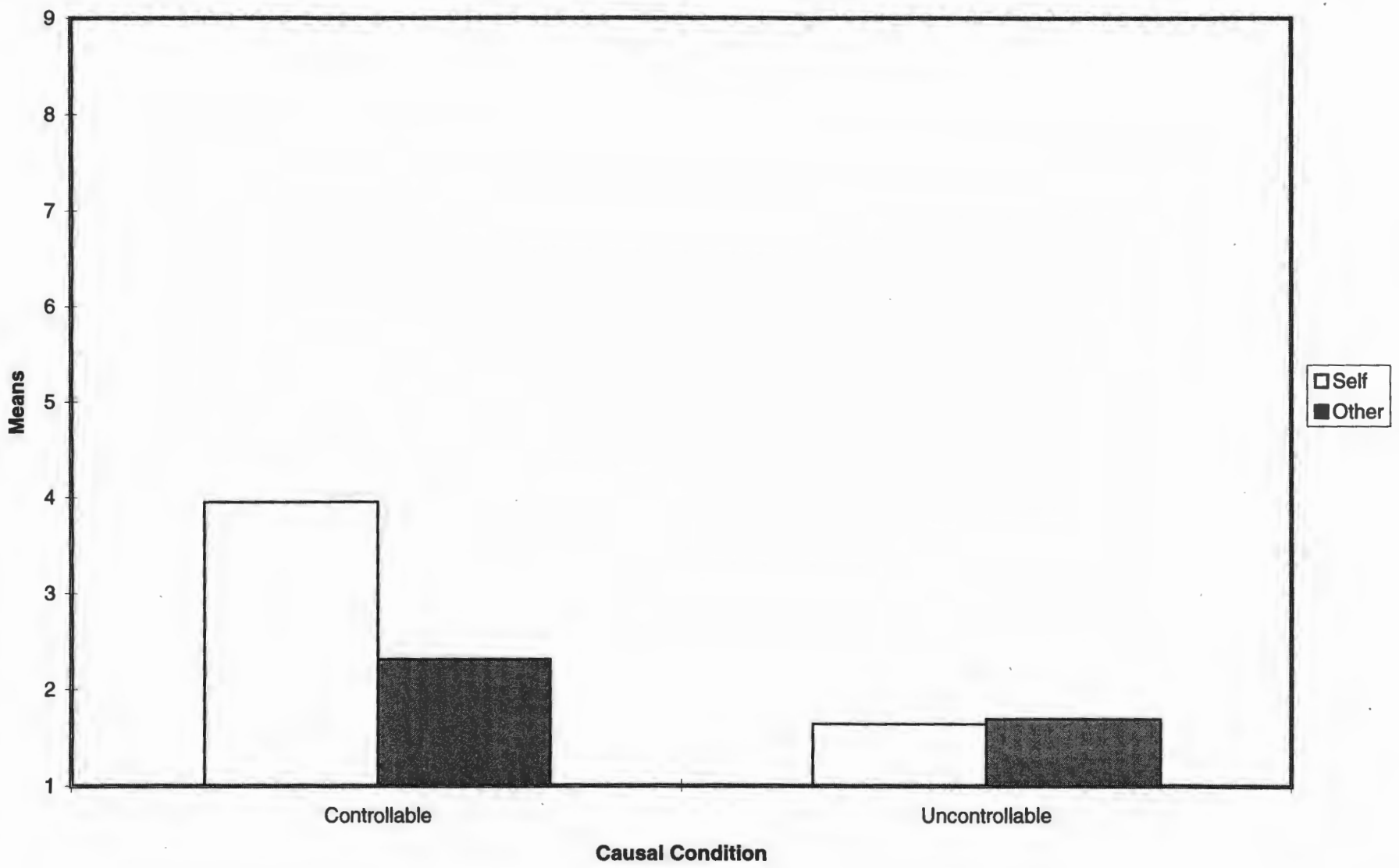


Figure 19. Heart Disease: C x D interaction for punishing oneself or avoiding others.

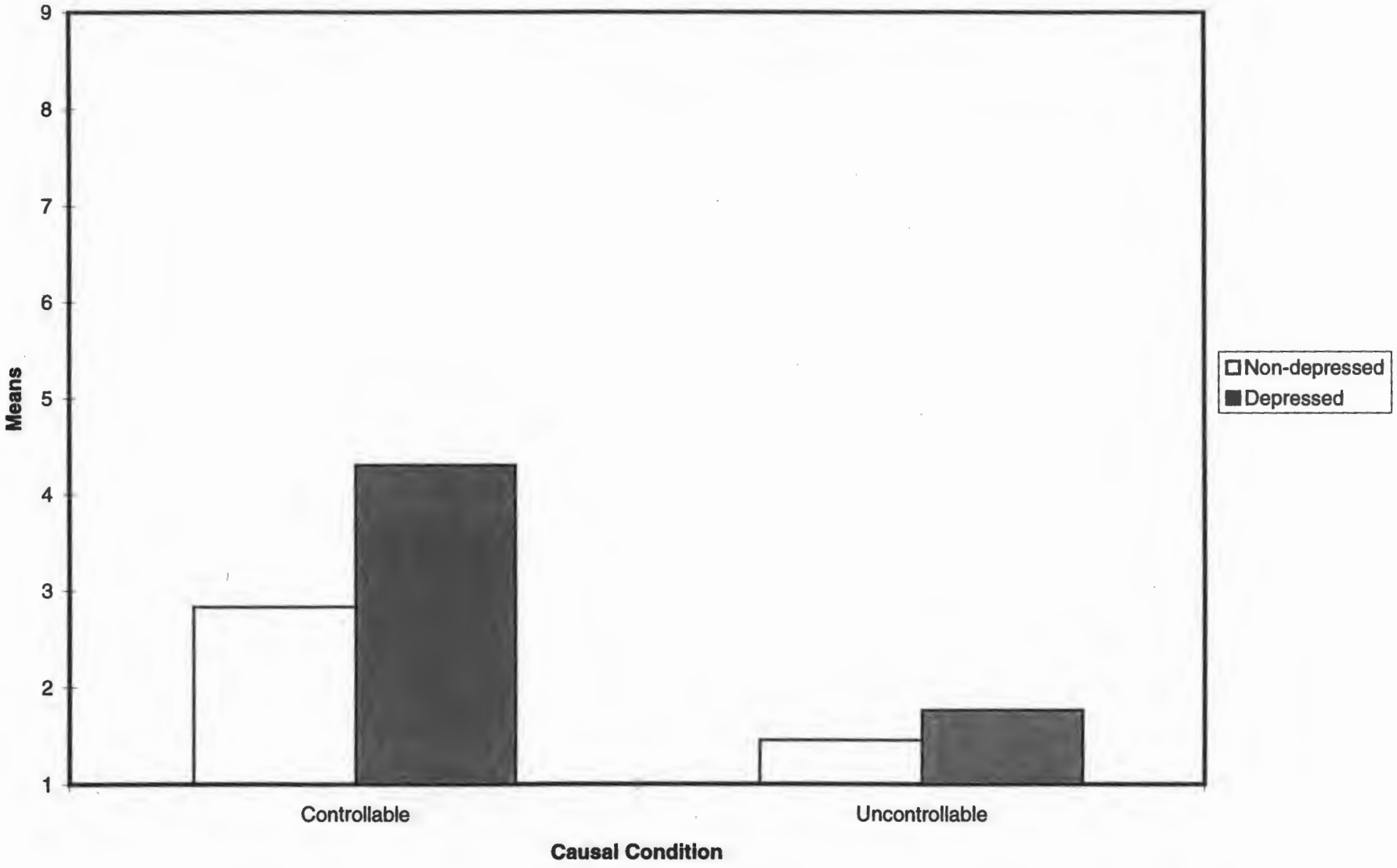


Figure 20. Paraplegia: C x D interaction for punishing oneself or avoiding others.

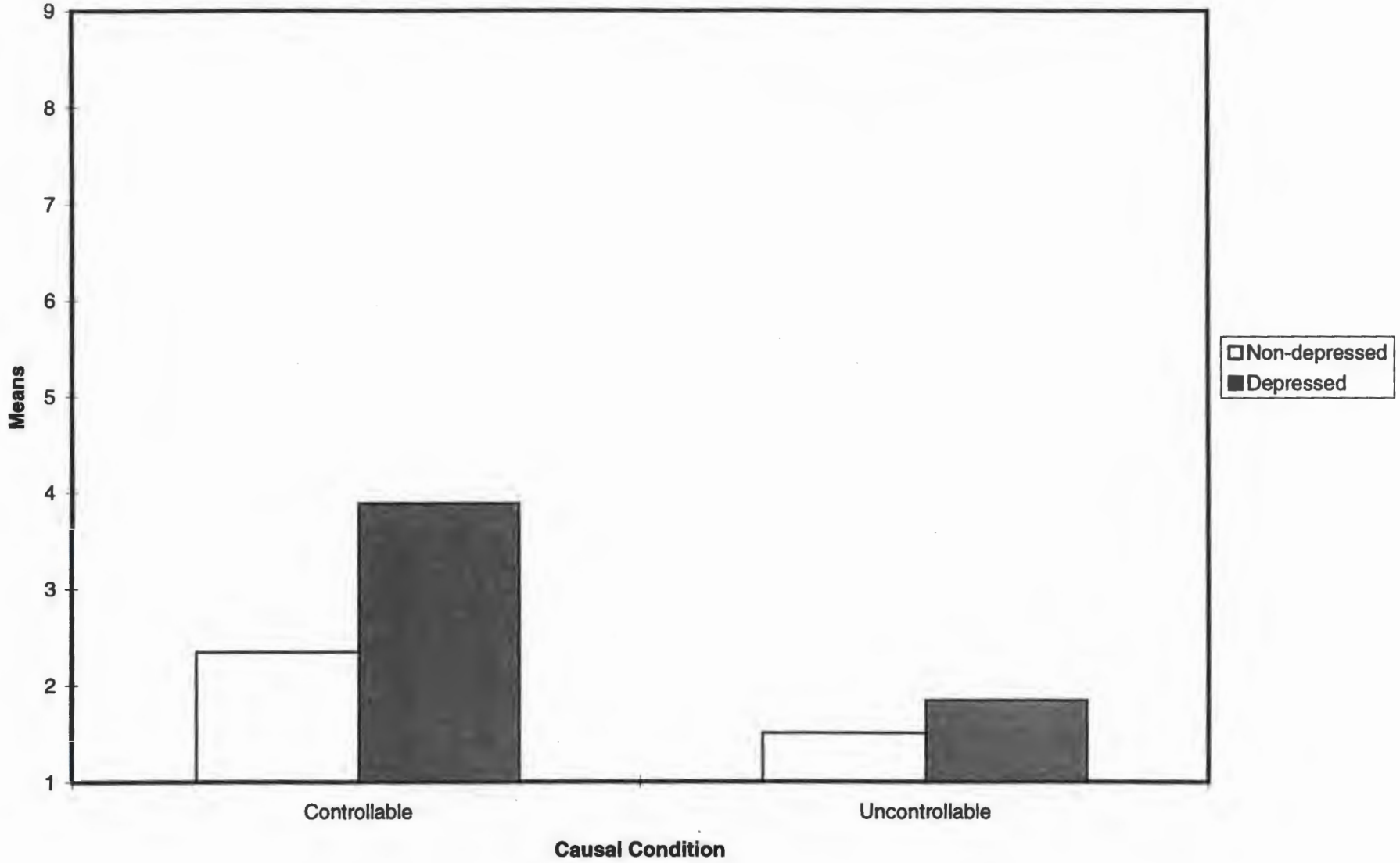


Figure 21. Paraplegia: T x D interaction for punishing oneself or avoiding others.

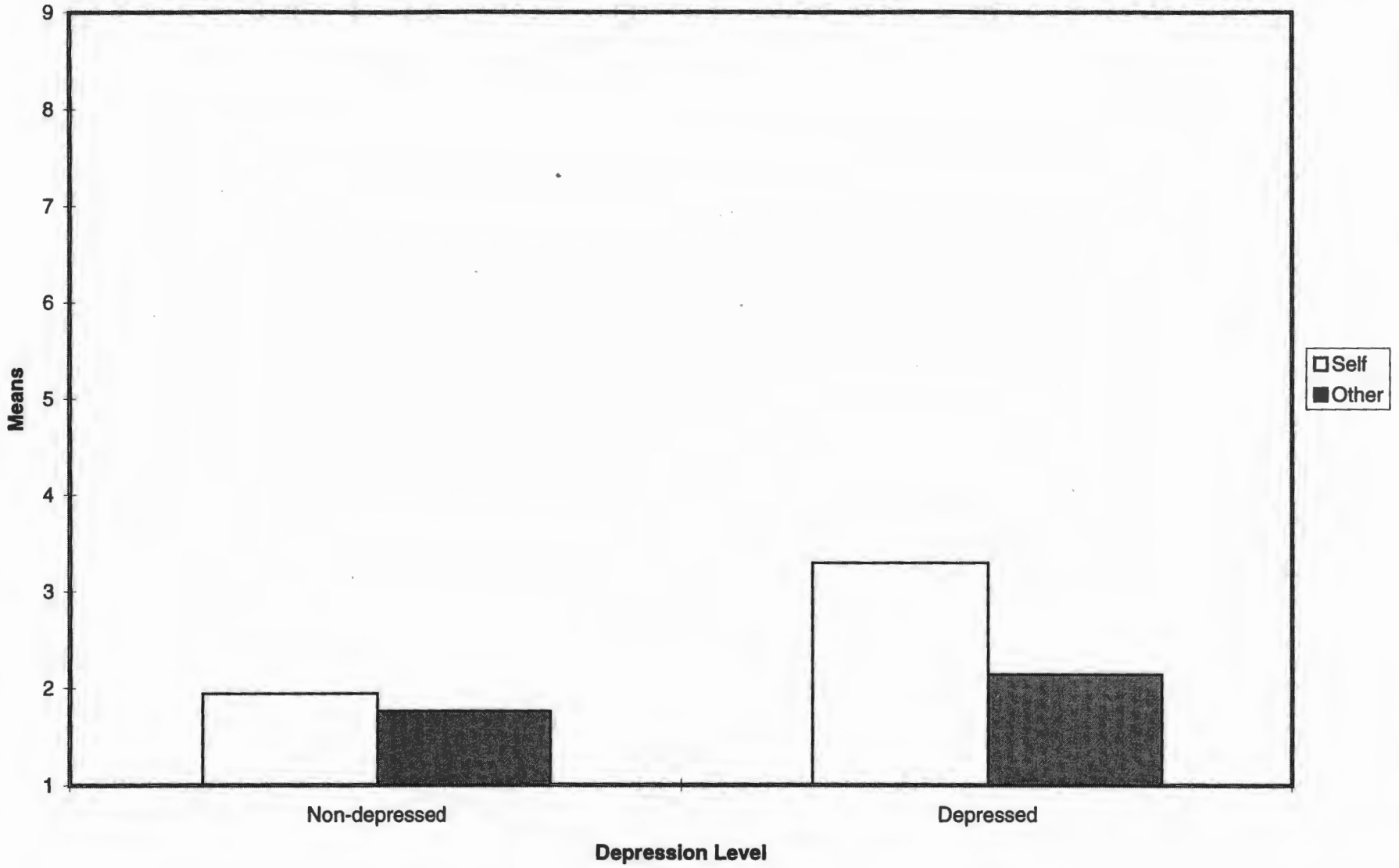


Figure 22. Skin Cancer: T x C x D interaction for punishing oneself or avoiding others.

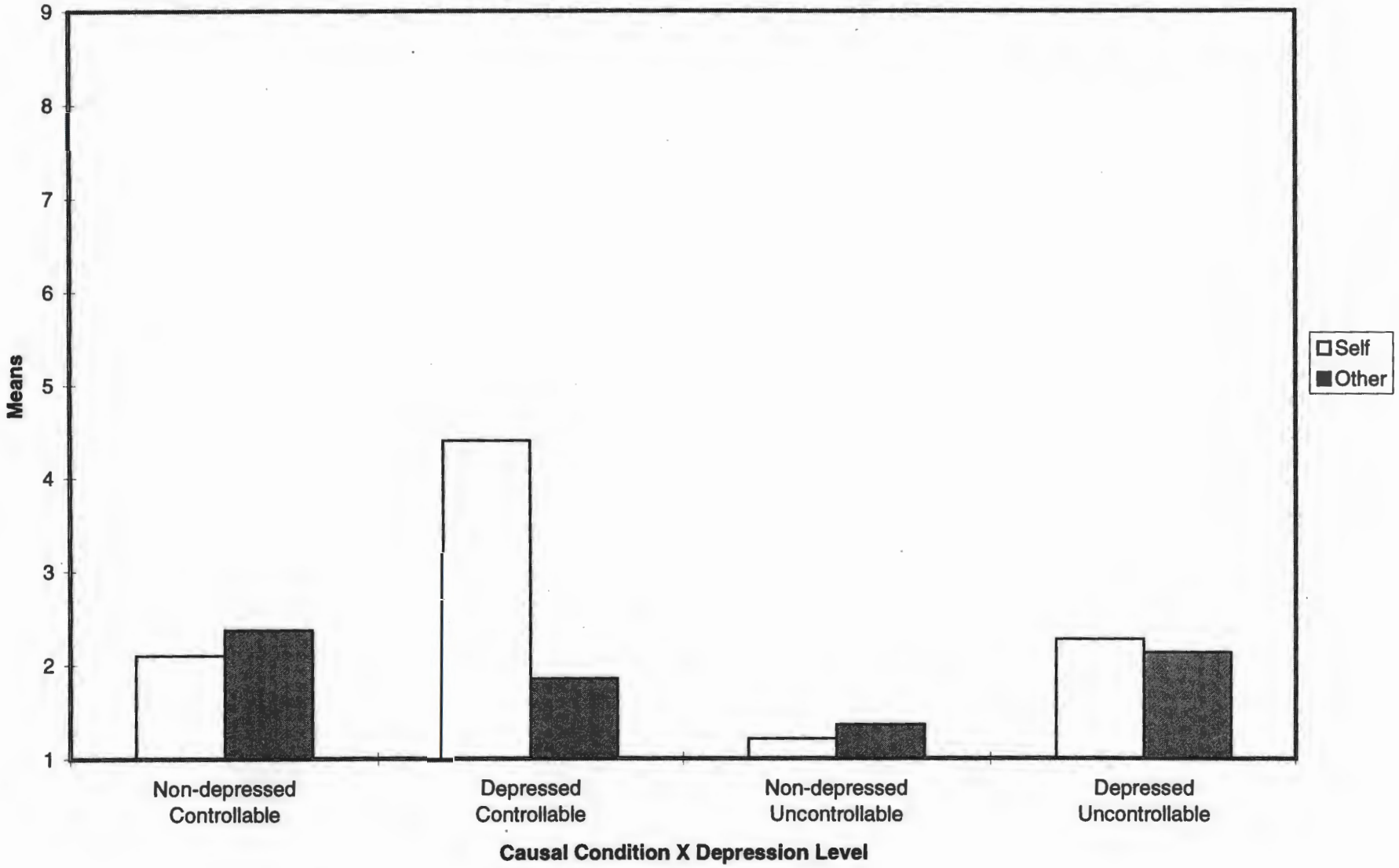
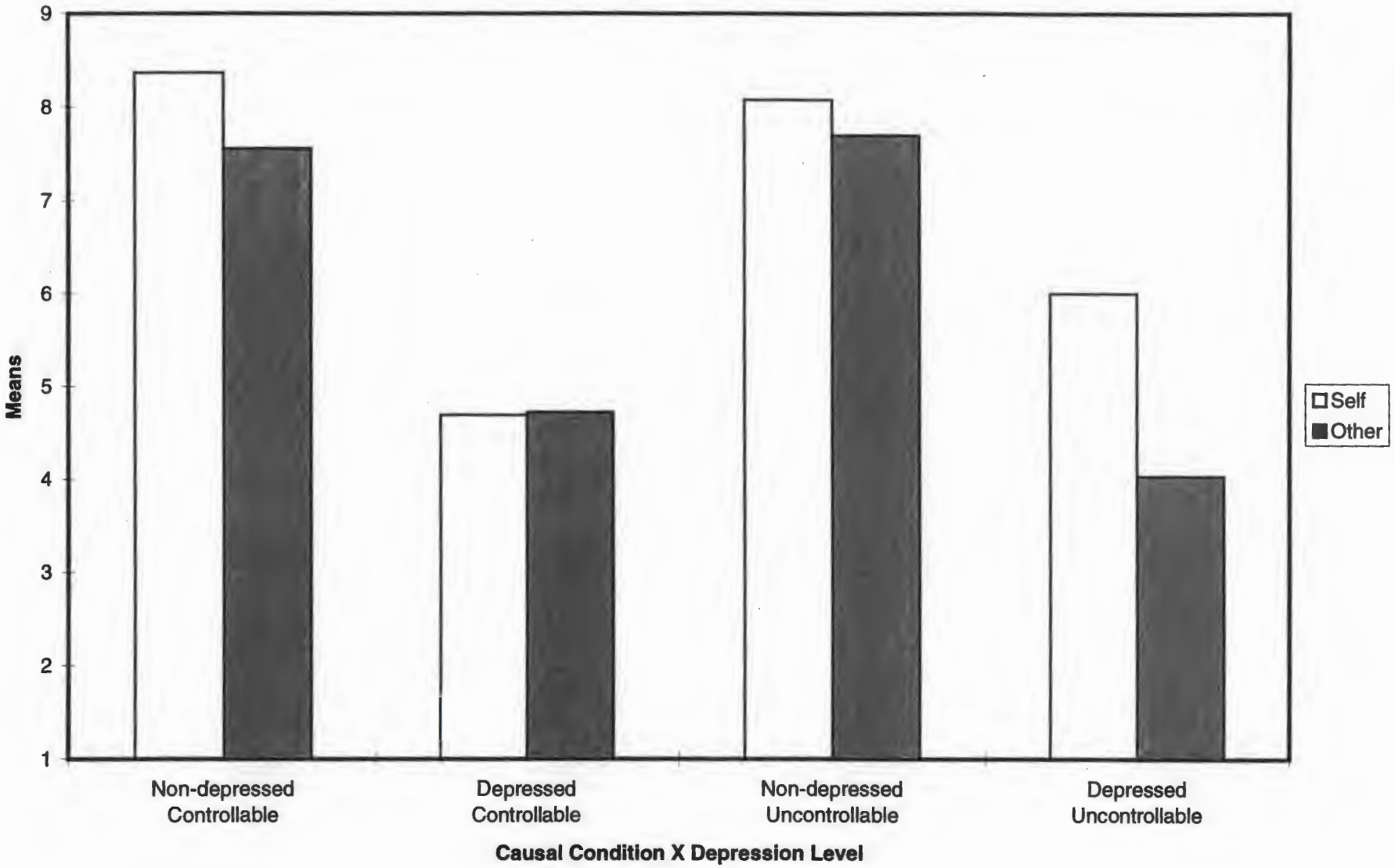
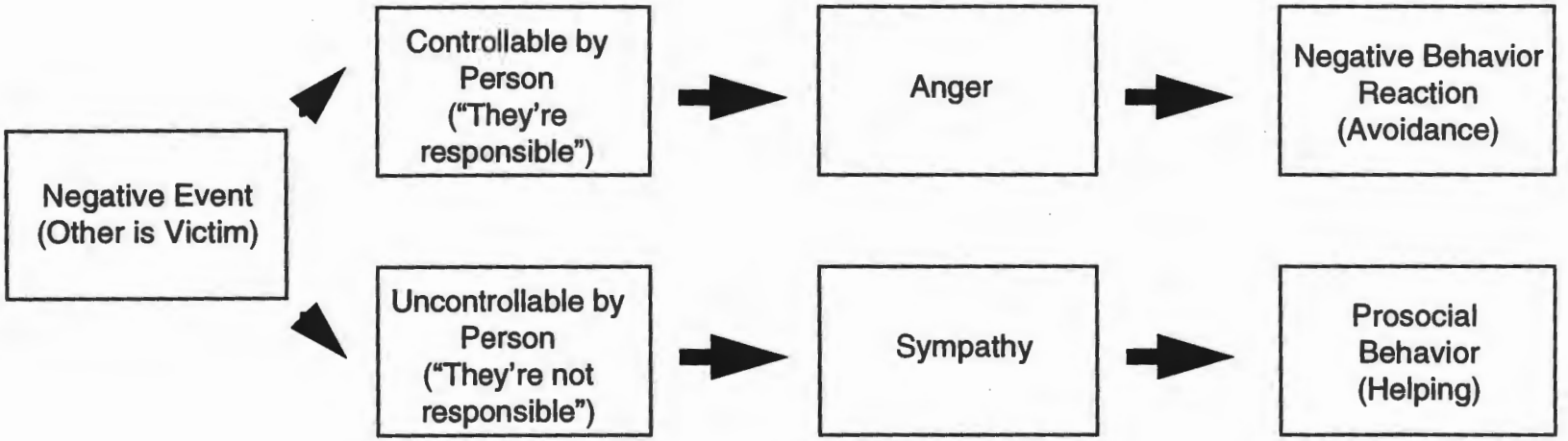


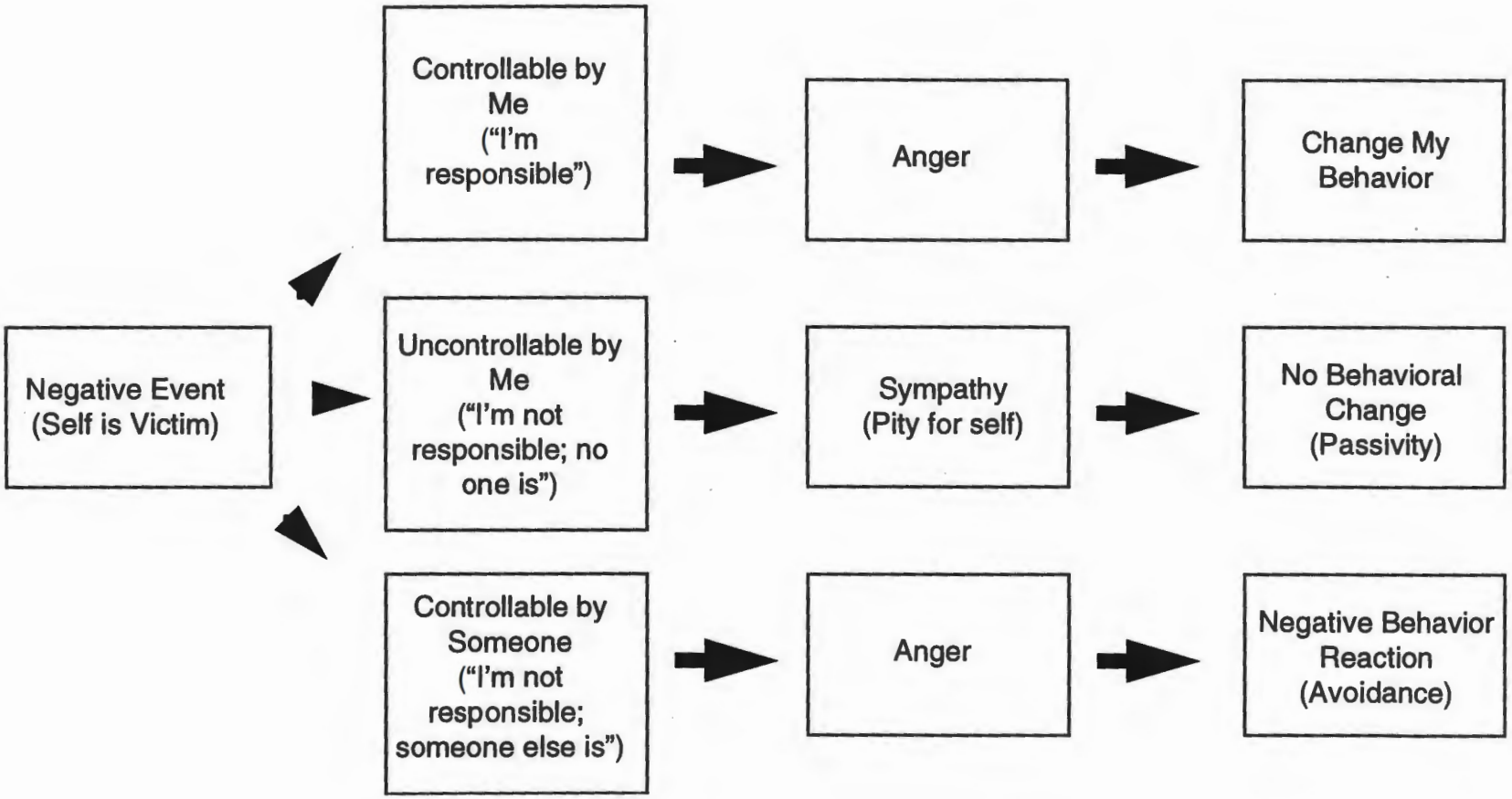
Figure 23. AIDS: T x C x D interaction for behavior change tendencies.



Appendix A: Person Perception - The Responsibility Judgement Model (Weiner, 1995)



Appendix B: Self Perception - Implications from Weiner's (1995) Responsibility Judgement Model



Appendix C

BECK DEPRESSION INVENTORY

On this questionnaire are a group of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling **the PAST WEEK, INCLUDING TODAY!** Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. **Be sure to read all the statements in each group before making your decision.**

---

1 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.

---

2 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.

---

3 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failure.
3 I feel I am a complete failure as a person.

---

4 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.

---

5 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel guilty most of the time.
3 I feel guilty all of the time.

---

6 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7	0	I don't feel disappointed in myself.
	1	I am disappointed in myself.
	2	I am disgusted with myself.
	3	I hate myself.
8	0	I don't feel I am any worse than anybody else.
	1	I am critical of myself for my weaknesses or mistakes.
	2	I blame myself all the time for my faults.
	3	I blame myself for everything bad that happens.
9	0	I don't have any thoughts of killing myself.
	1	I have thoughts of killing myself, but I would not carry them out.
	2	I would like to kill myself.
	3	I would kill myself if I had the chance.
10	0	I don't cry anymore than usual.
	1	I cry more now than I used to.
	2	I cry all of the time now.
	3	I used to be able to cry, but now I can't cry even though I want to.
11	0	I am no more irritated now than I ever am.
	1	I get annoyed or irritated more easily than I used to.
	2	I feel irritated all of the time now.
	3	I don't get irritated at all by the things that used to irritate me.
12	0	I have not lost interest in other people.
	1	I am less interested in other people than I used to be.
	2	I have lost most of my interest in other people.
	3	I have lost all of my interest in other people.
13	0	I make decisions about as well as I ever could.
	1	I put off making decisions more than I used to.
	2	I have greater difficulty in making decisions than before.
	3	I can't make decisions at all anymore.
14	0	I don't feel I look any worse that I used to.
	1	I am worried that I an looking old or unattractive.
	2	I feel that there are permanent changes in my appearance that make me look unattractive.
	3	I believe that I look ugly.

15 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

16 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it very hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

17 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

19 0 I haven't lost much weight.
1 I have lost more than 5 pounds
2 I have lost more than 10 pounds
3 I have lost more than 15 pounds
I am purposefully trying to lose weight by eating less. Yes___ No___

20 0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it is hard to think of much else.
3 I am so worried about my physical problems, that I cannot think about anything else.

21 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

Appendix D: Reasons for Misfortunes Questionnaires

Reasons For Misfortune - Self

INSTRUCTIONS:

The items on the following pages present specific misfortunes or problems that might happen to anyone. For each item a cause is identified. Think about how you would respond if the misfortune happened to you for that reason. After reading each misfortune, *rate that cause* on each of the fifteen scales provided by circling *one* number on each scale. *When doing the ratings, be sure to* ***focus on the cause*** *(that is, the reason for the onset) of the problem,* ***NOT on the problem.*** This may be difficult at times. In other words, *make sure you are rating the cause of the* misfortune, and NOT the misfortune itself.

The term "*Other People*" referred to in the rating questions means *anyone else* (that is, *anyone other than you*).

Please take your time when doing the ratings - make sure you read the questions carefully. You may find that there is more than one way of interpreting some of the rating questions. Please interpret these questions in the way that is *most meaningful to you.* ***There are no right or wrong answers to these questions.***

To summarize, ***for each of the 4 misfortunes***, you should:

1) Read each misfortune and the reason/cause given for each one

2) then, rate *that cause* by circling *one* number on each of the fifteen scales provided each time you do the ratings, *be sure to* ***focus on the cause*** (i.e., the reason for the problem), ***NOT on the problem.***

3) if you find there is more than one way of interpreting a question, interpret it in a way that is *most meaningful to you.*

4) please read the questions carefully.

PLEASE ANSWER ALL OF THE QUESTIONS. Keep in mind **that there are no right or wrong answers**. Please refer back to the instructions if you are unsure about what to do. It should take 10 minutes to finish this questionnaire. **You are, of course, free to stop participating at any time.**

1. Skin Cancer:
Cause: something you inherited

Think about **only this cause** of your developing skin cancer. The items below concern your impressions or opinions of **only this cause**. Circle **one** number on each of the following 15 scales.

What do you think?

How responsible are you for developing skin cancer?

Completely responsible	9 8 7 6 5 4 3 2 1	Not at all responsible

*Is **the cause** something:*

That reflects an aspect of you	9 8 7 6 5 4 3 2 1	Reflects an aspect of your situation
Permanent	9 8 7 6 5 4 3 2 1	Temporary
You can regulate	9 8 7 6 5 4 3 2 1	You cannot regulate
Over which others have power	9 8 7 6 5 4 3 2 1	Over which others have no power
About you	9 8 7 6 5 4 3 2 1	About others
Over which you have power	9 8 7 6 5 4 3 2 1	Over which you have no power
Unchangeable	9 8 7 6 5 4 3 2 1	Changeable
Other people can regulate	9 8 7 6 5 4 3 2 1	Other people cannot regulate

How would you feel about yourself if inheritance was the cause of your developing skin cancer?

Angry at yourself	9 8 7 6 5 4 3 2 1	Not at all angry at yourself
Sorry for yourself	9 8 7 6 5 4 3 2 1	Not at all sorry for yourself
Sad for yourself	9 8 7 6 5 4 3 2 1	Not at all sad for yourself

What would you do?

Do something to help yourself if you could	9 8 7 6 5 4 3 2 1	Do nothing to help yourself
Punish yourself if you could	9 8 7 6 5 4 3 2 1	Not punish yourself
Change the way you act if you could	9 8 7 6 5 4 3 2 1	Not change the way you act

2. AIDS:
Cause: blood transfusion during an emergency operation

Think about **only this cause** of your developing AIDS. The items below concern your impressions or opinions of **only this cause**. Circle **one** number on each of the following 15 scales.

What do you think?

How responsible are you for developing AIDS?

Completely responsible	9	8	7	6	5	4	3	2	1	Not at all responsible

*Is **the cause** something:*

That reflects an aspect of you	9	8	7	6	5	4	3	2	1	Reflects an aspect of your situation
Permanent	9	8	7	6	5	4	3	2	1	Temporary
You can regulate	9	8	7	6	5	4	3	2	1	You cannot regulate
Over which others have power	9	8	7	6	5	4	3	2	1	Over which others have no power
About you	9	8	7	6	5	4	3	2	1	About others
Over which you have power	9	8	7	6	5	4	3	2	1	Over which you have no power
Unchangeable	9	8	7	6	5	4	3	2	1	Changeable
Other people can regulate	9	8	7	6	5	4	3	2	1	Other people cannot regulate

How would you feel about yourself if a blood transfusion during an emergency operation was the cause of your developing AIDS?

Angry at yourself	9	8	7	6	5	4	3	2	1	Not at all angry at yourself
Sorry for yourself	9	8	7	6	5	4	3	2	1	Not at all sorry for yourself
Sad for yourself	9	8	7	6	5	4	3	2	1	Not at all sad for yourself

What would you do?

Do something to help yourself if you could	9	8	7	6	5	4	3	2	1	Do nothing to help yourself
Punish yourself if you could	9	8	7	6	5	4	3	2	1	Not punish yourself
Change the way you act if you could	9	8	7	6	5	4	3	2	1	Not change the way you act

3. Paraplegia:
Cause: rear-ended by a drunk driver

Think about **only this cause** of your becoming a paraplegic. The items below concern your impressions or opinions of **only this cause**. Circle **one** number on each of the following 15 scales.

What do you think?

How responsible are you for becoming a paraplegic?

Completely responsible	9 8 7 6 5 4 3 2 1	Not at all responsible

*Is **the cause** something:*

That reflects an aspect of you	9 8 7 6 5 4 3 2 1	Reflects an aspect of your situation
Permanent	9 8 7 6 5 4 3 2 1	Temporary
You can regulate	9 8 7 6 5 4 3 2 1	You cannot regulate
Over which others have power	9 8 7 6 5 4 3 2 1	Over which others have no power
About you	9 8 7 6 5 4 3 2 1	About others
Over which you have power	9 8 7 6 5 4 3 2 1	Over which you have no power
Unchangeable	9 8 7 6 5 4 3 2 1	Changeable
Other people can regulate	9 8 7 6 5 4 3 2 1	Other people cannot regulate

How would you feel about yourself if being rear-ended by a drunk driver was the cause of your becoming a paraplegic?

Angry at yourself	9 8 7 6 5 4 3 2 1	Not at all angry at yourself
Sorry for yourself	9 8 7 6 5 4 3 2 1	Not at all sorry for yourself
Sad for yourself	9 8 7 6 5 4 3 2 1	Not at all sad for yourself

What would you do?

Do something to help yourself if you could	9 8 7 6 5 4 3 2 1	Do nothing to help yourself
Punish yourself if you could	9 8 7 6 5 4 3 2 1	Not punish yourself
Change the way you act if you could	9 8 7 6 5 4 3 2 1	Not change the way you act

4. Heart Disease:
Cause: something you inherited

Think about **only this cause** of your developing heart disease. The items below concern your impressions or opinions of **only this cause**. Circle **one** number on each of the following 15 scales.

What do you think?

How responsible are you for developing heart disease?

Completely responsible	9 8 7 6 5 4 3 2 1	Not at all responsible

*Is **the cause** something:*

That reflects an aspect of you	9 8 7 6 5 4 3 2 1	Reflects an aspect of your situation
Permanent	9 8 7 6 5 4 3 2 1	Temporary
You can regulate	9 8 7 6 5 4 3 2 1	You cannot regulate
Over which others have power	9 8 7 6 5 4 3 2 1	Over which others have no power
About you	9 8 7 6 5 4 3 2 1	About others
Over which you have power	9 8 7 6 5 4 3 2 1	Over which you have no power
Unchangeable	9 8 7 6 5 4 3 2 1	Changeable
Other people can regulate	9 8 7 6 5 4 3 2 1	Other people cannot regulate

How would you feel about yourself if inheritance was the cause of your developing heart disease?

Angry at yourself	9 8 7 6 5 4 3 2 1	Not at all angry at yourself
Sorry for yourself	9 8 7 6 5 4 3 2 1	Not at all sorry for yourself
Sad for yourself	9 8 7 6 5 4 3 2 1	Not at all sad for yourself

What would you do?

Do something to help yourself if you could	9 8 7 6 5 4 3 2 1	Do nothing to help yourself
Punish yourself if you could	9 8 7 6 5 4 3 2 1	Not punish yourself
Change the way you act if you could	9 8 7 6 5 4 3 2 1	Not change the way you act

Reasons for Misfortune - Other

INSTRUCTIONS:

The items on the following pages present specific misfortunes or problems that might happen to anyone. For each item a cause is identified. Think about how you would respond if the misfortune happened to someone (other than yourself) for that reason. After reading each misfortune, *rate that cause* on each of the fifteen scales provided by circling *one* number on each scale. *When doing the ratings, be sure to* ***focus on the cause*** *(that is, the reason for the onset) of the problem,* ***NOT on the problem.*** This may be difficult at times. In other words, *make sure you are rating the cause of the* misfortune, and NOT the misfortune itself.

"*The person*" referred to in the rating questions means *the person who has the problem*; the term "*Other people*" referred to in the ratings means *anyone else* (that is, *anyone other than the person with the problem*).

Please take your time when doing the ratings - make sure you read the questions carefully. You may find that there is more than one way of interpreting some of the rating questions. Please interpret these questions in the way that is *most meaningful to you.* ***There are no right or wrong answers to these questions.***

To summarize, ***for each of the 4 misfortunes***, you should:

1) Read each misfortune and the reason/cause given for each one

2) then, rate *that cause* by circling *one* number on each of the fifteen scales provided - each time you do the ratings, *be sure to* ***focus on the cause*** (i.e., the reason for the problem), ***NOT on the problem.***

3) if you find there is more than one way of interpreting a question, interpret it in a way that is *most meaningful to you.*

4) please read the questions carefully.

PLEASE ANSWER ALL OF THE QUESTIONS. Keep in mind **that there are no right or wrong answers**. Please refer back to the instructions if you are unsure about what to do. It should take 10 minutes to finish this questionnaire. **You are, of course, free to stop participating at any time.**

1. Skin Cancer:
Cause: excessive sun-tanning

Think about **only this cause** of this person developing skin cancer. The items below concern your impressions or opinions of **only this cause**. Circle **one** number on each of the following 15 scales.

What do you think?

How responsible is this person for developing skin cancer?

Completely responsible	9	8	7	6	5	4	3	2	1	Not at all responsible

*Is **the cause** something:*

That reflects an aspect the person	9	8	7	6	5	4	3	2	1	Reflects an aspect of their situation
Permanent	9	8	7	6	5	4	3	2	1	Temporary
The person can regulate	9	8	7	6	5	4	3	2	1	The person cannot regulate
Over which others have power	9	8	7	6	5	4	3	2	1	Over which others have no power
About the person	9	8	7	6	5	4	3	2	1	About others
Over which the person has power	9	8	7	6	5	4	3	2	1	Over which the person has no power
Unchangeable	9	8	7	6	5	4	3	2	1	Changeable
Other people can regulate	9	8	7	6	5	4	3	2	1	Other people cannot regulate

How would you feel about the person if excessive sun-tanning was the cause of their developing skin cancer?

Angry at the person	9	8	7	6	5	4	3	2	1	Not at all angry at the person
Sorry for the person	9	8	7	6	5	4	3	2	1	Not at all sorry for the person
Sad for the person	9	8	7	6	5	4	3	2	1	Not at all sad for the person

What would you do?

Do something to help the person if you could	9	8	7	6	5	4	3	2	1	Do nothing to help the person
Avoid the person if you could	9	8	7	6	5	4	3	2	1	Not avoid the person if you could
Encourage the person to change the way they act if you could	9	8	7	6	5	4	3	2	1	Not encourage the person to change the way they act

2. AIDS:
Cause: promiscuous sex (unprotected)

Think about **only this cause** of this person developing AIDS. The items below concern your impressions or opinions of **only this cause**. Circle **one** number on each of the following 15 scales.

What do you think?

How responsible is this person for developing AIDS?

Completely responsible	9	8	7	6	5	4	3	2	1	Not at all responsible

*Is **the cause** something:*

That reflects an aspect the person	9	8	7	6	5	4	3	2	1	Reflects an aspect of their situation
Permanent	9	8	7	6	5	4	3	2	1	Temporary
The person can regulate	9	8	7	6	5	4	3	2	1	The person cannot regulate
Over which others have power	9	8	7	6	5	4	3	2	1	Over which others have no power
About the person	9	8	7	6	5	4	3	2	1	About others
Over which the person has power	9	8	7	6	5	4	3	2	1	Over which the person has no power
Unchangeable	9	8	7	6	5	4	3	2	1	Changeable
Other people can regulate	9	8	7	6	5	4	3	2	1	Other people cannot regulate

How would you feel about the person if promiscuous sex (unprotected) was the cause of their developing AIDS?

Angry at the person	9	8	7	6	5	4	3	2	1	Not at all angry at the person
Sorry for the person	9	8	7	6	5	4	3	2	1	Not at all sorry for the person
Sad for the person	9	8	7	6	5	4	3	2	1	Not at all sad for the person

What would you do?

Do something to help the person if you could	9	8	7	6	5	4	3	2	1	Do nothing to help the person
Avoid the person if you could	9	8	7	6	5	4	3	2	1	Not avoid the person if you could
Encourage the person to change the way they act if you could	9	8	7	6	5	4	3	2	1	Not encourage the person to change the way they act

3. Paraplegia:
Cause: jumping off a cliff into the lake for fun

Think about **only this cause** of this person becoming a paraplegic. The items below concern your impressions or opinions of **only this cause**. Circle **one** number on each of the following 15 scales.

What do you think?

How responsible is this person for becoming a paraplegic?

Completely responsible	9 8 7 6 5 4 3 2 1	Not at all responsible

*Is **the cause** something:*

That reflects an aspect the person	9 8 7 6 5 4 3 2 1	Reflects an aspect of their situation
Permanent	9 8 7 6 5 4 3 2 1	Temporary
The person can regulate	9 8 7 6 5 4 3 2 1	The person cannot regulate
Over which others have power	9 8 7 6 5 4 3 2 1	Over which others have no power
About the person	9 8 7 6 5 4 3 2 1	About others
Over which the person has power	9 8 7 6 5 4 3 2 1	Over which the person has no power
Unchangeable	9 8 7 6 5 4 3 2 1	Changeable
Other people can regulate	9 8 7 6 5 4 3 2 1	Other people cannot regulate

How would you feel about the person if jumping off a cliff into the lake for fun was the cause of their becoming paraplegic?

Angry at the person	9 8 7 6 5 4 3 2 1	Not at all angry at the person
Sorry for the person	9 8 7 6 5 4 3 2 1	Not at all sorry for the person
Sad for the person	9 8 7 6 5 4 3 2 1	Not at all sad for the person

What would you do?

Do something to help the person if you could	9 8 7 6 5 4 3 2 1	Do nothing to help the person
Avoid the person if you could	9 8 7 6 5 4 3 2 1	Not avoid the person if you could
Encourage the person to change the way they act if you could	9 8 7 6 5 4 3 2 1	Not encourage the person to change the way they act

4. Heart Disease:
Cause: excessive smoking and bad diet

Think about **only this cause** of this person developing heart disease. The items below concern your impressions or opinions of **only this cause**. Circle **one** number on each of the following 15 scales.

What do you think?

How responsible is this person for developing heart disease?

Completely responsible	9	8	7	6	5	4	3	2	1	Not at all responsible

*Is **the cause** something:*

That reflects an aspect the person	9	8	7	6	5	4	3	2	1	Reflects an aspect of their situation
Permanent	9	8	7	6	5	4	3	2	1	Temporary
The person can regulate	9	8	7	6	5	4	3	2	1	The person cannot regulate
Over which others have power	9	8	7	6	5	4	3	2	1	Over which others have no power
About the person	9	8	7	6	5	4	3	2	1	About others
Over which the person has power	9	8	7	6	5	4	3	2	1	Over which the person has no power
Unchangeable	9	8	7	6	5	4	3	2	1	Changeable
Other people can regulate	9	8	7	6	5	4	3	2	1	Other people cannot regulate

How would you feel about the person if excessive smoking and bad diet was the cause of their developing heart disease?

Angry at the person	9	8	7	6	5	4	3	2	1	Not at all angry at the person
Sorry for the person	9	8	7	6	5	4	3	2	1	Not at all sorry for the person
Sad for the person	9	8	7	6	5	4	3	2	1	Not at all sad for the person

What would you do?

Do something to help the person if you could	9	8	7	6	5	4	3	2	1	Do nothing to help the person
Avoid the person if you could	9	8	7	6	5	4	3	2	1	Not avoid the person if you could
Encourage the person to change the way they act if you could	9	8	7	6	5	4	3	2	1	Not encourage the person to change the way they act

Appendix E: Happiness Measure Scale

EMOTIONS QUESTIONNAIRE

PART I DIRECTIONS:
Use the list below to answer the following question: **In general, how happy or unhappy have you felt over the past week (including today)**? Check the **one** statement below that best describes **your average happiness**.

____ 10. Extremely happy (feeling ecstatic, joyous, fantastic!)

____ 9. Very Happy (feeling really good, elated!)

____ 8. Pretty Happy (spirits high, feeling good.)

____ 7. Mildly happy (feeling fairly good and somewhat cheerful.)

____ 6. Slightly happy (just a bit above neutral.)

____ 5. Neutral (not particularly happy or unhappy.)

____ 4. Slightly unhappy (just a bit below neutral.)

____ 3. Mildly unhappy (just a little low.)

____ 2. Pretty unhappy (somewhat "blue", spirits down.)

____ 1. Very unhappy (depressed, spirits very low.)

____ 0. Extremely unhappy (utterly depressed, completely down.)

PART II DIRECTIONS:
Consider your emotions a moment further. **On the average**, what percent of the time have you felt happy over the past week (including today)? What percent of the time did you feel unhappy? What percent of the time did you feel neutral (neither happy nor unhappy)? Write down your best estimates, as well as you can, in the space below. Make sure the three figures add-up to equal 100%.

ON THE AVERAGE:

The percent of time I felt happy _____%

The percent of time I felt unhappy _____%

The percent of time I felt neutral _____%

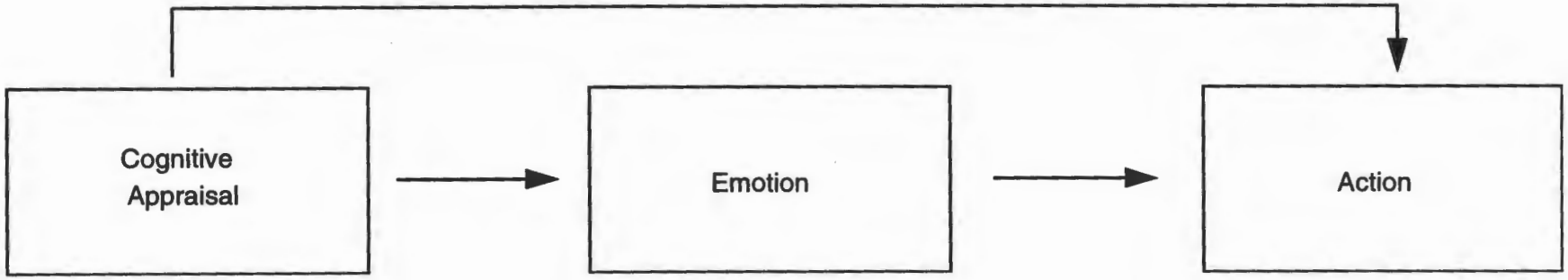
TOTAL: 100%

PROFILE SHEET FOR HAPPINESS MEASURES

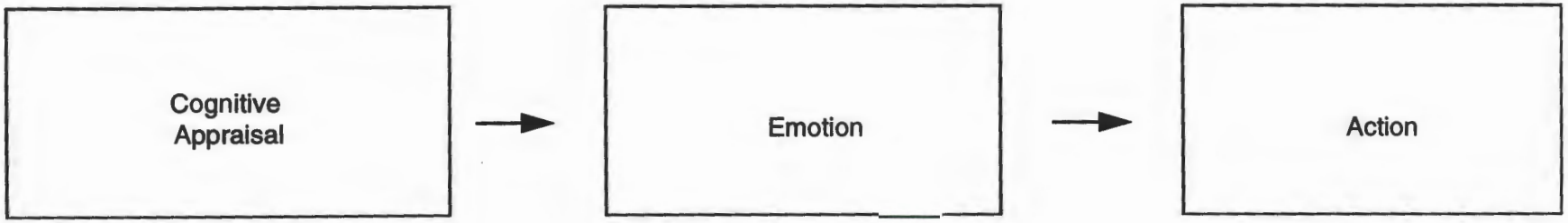
The scale score and the three percentage estimates are used directly as raw scores. The combination score = [scale score X 10 + happy %] / 2.

	Intensity (I) Scale Score	Frequency (F) %Happy	%Unhappy	%Neutral	(I + F) Combination Score	
Description of Scores		100 ___ 95 ___			100 ____	80 70
Extremely Happy	10 ___	90 ___ 85 ___			95 ___ 90 ___	
Very Happy	9 ___	80 ___ 75 ___	0 ___ 5 ___	0 ___	85 ___ 80 ___	60
Pretty Happy	8 ___	70 ___ 65 ___	10 ___	10 ___	75 ___ 70 ___	
Mildly Happy	7 ___	60 ___ 55 ___	15 ___ 20 ___	20 ___	65 ___	50
Slightly Happy	6 ___	50 ___ 45 ___ 40 ___ 35 ___	25 ___ 30 ___	30 ___ 40 ___	60 ___ 55 ___ 50 ___ 45 ___	40
Neutral	5 ___	30 ___ 25 ___ 20 ___	35 ___ 40 ___ 45 ___	50 ___ 60 ___	40 ___ 35 ___ 30 ___	
Slightly Unhappy	4 ___	15 ___				30
Mildly Unhappy	3 ___	10 ___ 5 ___	50 ___ 55 ___	70 ___	25 ___ 20 ___	
Pretty Unhappy	2 ___	0 ___	60 ___	80___	15 ___ 10 ___	20
Very Unhappy	1 ___	65 ___ 70 ___	90___		5 ___	
Extremely Unhappy	0 ___	75 ___	100___		0 ___	10
Raw Scores	_____	_____	_____	_____	_____	_____

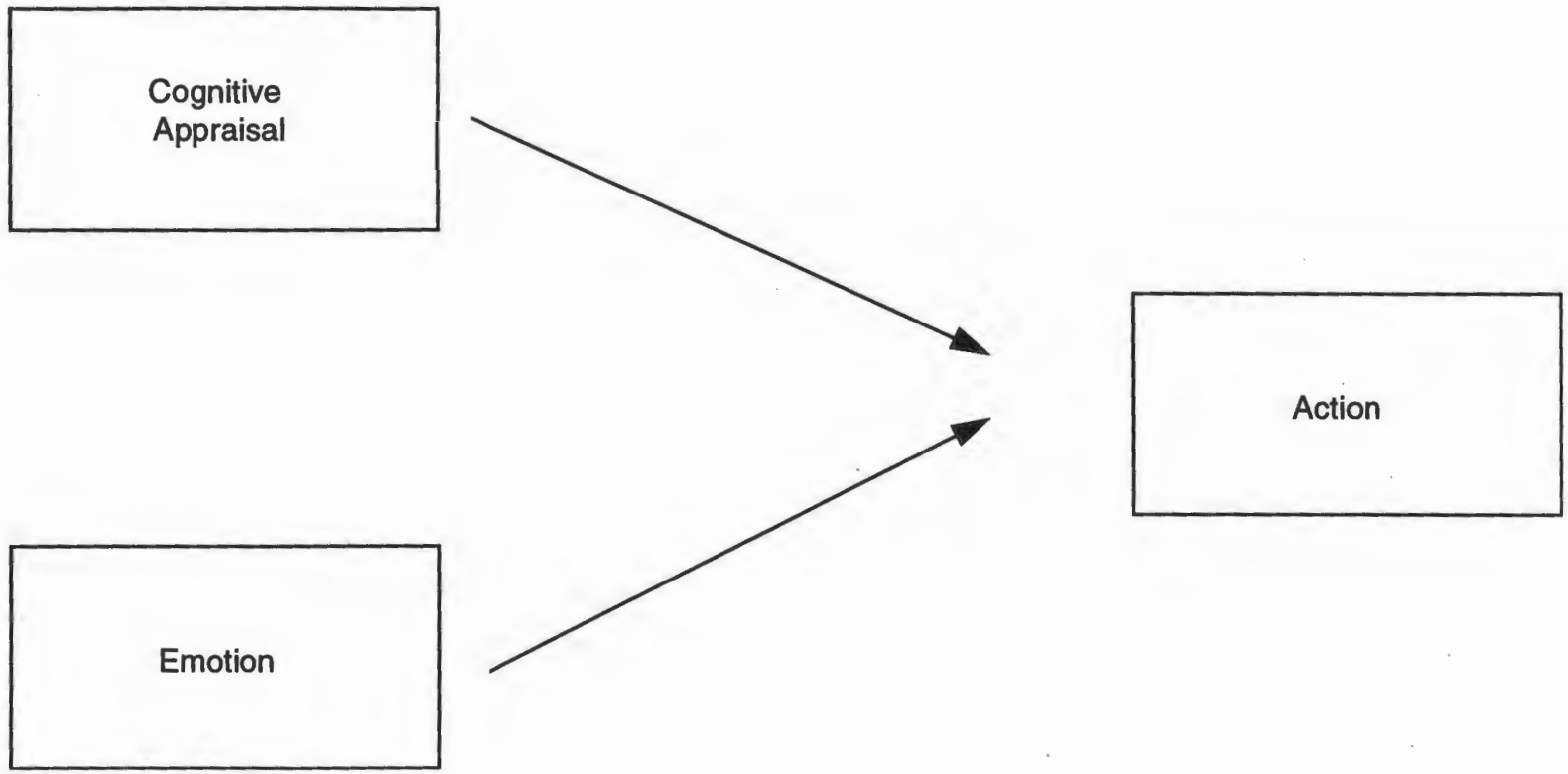
Appendix F: Model 0 (Saturated Model)



Appendix G: Model 1 (Emotion Mediational Model)



Appendix H: Model 2 (Independent Effects Model)



Appendix I: Model 3 (Cognition Mediational Model)