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## **Metacommunication in the interactions of depressives.**

Ronald Nelson Casey  
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METACOMMUNICATION IN THE INTERACTIONS OF DEPRESSIVES

A Dissertation Presented

By

Ronald Nelson Casey

Submitted to the Graduate School of the  
University of Massachusetts in partial fulfillment  
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 1979

Psychology

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Ronald Nelson Casey

1979

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A Dissertation Presented

By

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## ABSTRACT

### Metacommunication in the Interactions of Depressives

May 1979

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From recent research and theory has emerged a focus on depression as existing within a system of interpersonal communication which may serve to maintain or even intensify the depressive's symptoms. This study was an effort to examine empirically an aspect of the interactional patterns in the relationships of depressives.

The principal underlying concepts of this research were that the depressive's communications carry an insistent implicit message of, "Do something," and that this message could be made explicit in a manner that would test its significance in arousing affect in others. It is this arousal of affect that may be highly influential in the increasing rejection and narrowing social network the depressive often experiences in his/her interpersonal world.

Sixty female undergraduates were the subjects. Each was assigned randomly to one of six experimental conditions defined by a 2 X 3 factorial design. Subjects were explicitly instructed either to help, not to help, or to interact as they saw fit in a five-minute conversation

initiated by a confederate. It was essential to determine whether subjects were specifically reacting to a depressive presentation as well as to injunctions concerning helping. Half the subjects thus interacted with a confederate role-playing a depressed subject, while half the subjects interacted with a confederate role-playing a nondepressed subject. Self-report measures of the subjects' affect, subjects' perceptions of the confederate's affect, and subjects' interpersonal acceptance-rejection of the confederate were administered following the interaction.

The specific hypotheses of the study were:

- 1) subjects explicitly instructed to help a "depressed" confederate would rate themselves as more depressed, anxious, hostile, and interpersonally rejecting than would subjects not so instructed;
- 2) subjects given no instruction regarding helping a "depressed" confederate would rate themselves as more depressed, anxious, hostile, and interpersonally rejecting than would subjects instructed not to help, i.e., subjects removed from the implicit injunction to help;
- 3) subjects interacting with a "depressed" confederate would perceive the confederate as more depressed, anxious, and hostile than would subjects interacting with a "nondepressed" confederate;
- 4) subjects interacting with a "depressed" confederate would rate themselves as more depressed, anxious, hostile, and interpersonally rejecting than would subjects interacting with



a "nondepressed" confederate.

These hypotheses were, for the most part, not supported. Subjects did perceive the "depressed" confederate as more depressed, anxious, and hostile, but this did not affect self-reports of the subjects' mood or how interpersonally rejecting they were of the confederate. Subjects' reported affective states did not differ depending on whether they were instructed to help a "depressed" confederate, not to help her, or to interact with her as they saw fit. Neither did subjects' ratings of the confederate's interpersonal acceptability vary as a result of these instructions.

Although the results indicated that the design created the desired experimental conditions, it was possible to identify various factors that could have intervened to cause the failure of the study to confirm its hypotheses. The idea that the explicit injunction to help would exacerbate subjects' feelings may not have sufficiently taken into account that the very specificity of the instruction would alleviate affect-arousing ambiguity for subjects. Similarly, eliminating the rather natural choice of being helpful may well have increased frustration for those subjects instructed not to help. Both effects would function to reduce differences the study sought to accentuate. Further, the utilization of stranger dyads in a highly

time-limited interaction with but a role-play of depression could have resulted in a design simply too remote from processes pertinent to the relationships of genuine depressives. Future research could more profitably center on devising methodologies which can be utilized to examine interactions in the ongoing relationships of depressives.

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# CHAPTER I

## INTRODUCTION

Depression is a phenomenon that manifests itself in variations of form and intensity sufficient to have generated considerable effort towards conceptualization of its nature, etiology, and treatment. Various classificatory schemes have attempted comprehensive definitions by organizing the observable differences among depressive states along meaningful dimensions. The American Psychiatric Association's Diagnostic and Statistical Manual (1968) includes categories of depression as neurosis, psychosis, and personality disorder. Reactive depression, as a response to identifiable stress, has been seen as qualitatively distinct from endogenous depression, where precipitating events appear to be lacking and there is evidence of physiological factors (Mendels, 1970). Others have argued for viewing depression as existing on a continuum of experience, such that differences between common mood fluctuations and more highly debilitating forms of depression are quantitative differences in severity only (Wessman and Ricks, 1966; Chodoff, 1974). Akiskal and McKinney (1975) saw the most useful distinction as that between primary and secondary depression, depending essentially on whether the affective disorder was the only major psychiatric condition or was secondary to other disorders.



Biological research on the etiology of depression has focused on genetic endowment and the role of central nervous system biochemistry. There is strong evidence to suggest that inherited biological factors are implicated in depression as a major affective disorder (Winokur, 1975). Koerner (1977) reviewed the biochemical research and concluded that the most influential line of research into biochemical correlates of depression has been the monoamine hypothesis, associating depression with lowered levels of biogenic amines, chemical transmitters of nerve impulses. These findings have not interrupted psychological debate on issues of etiology. The establishment of links between biological factors and depression does not imply simple causality; biological processes may only become triggered as a response to the experience of environmental stress (Rubinstein, 1973). Further, the applicability of biological hypotheses to the entire range of depressive disorders remains controversial (Angst, 1972).

Beginning with the original psychoanalytic papers of Abraham (1911, 1916) and Freud (1917), modern psychological theory has sought to explain the etiology of depression. Perhaps the most significant contribution of the psychoanalytic thinkers has been their continued assertion of Freud's (1917) ideas on the unconscious interplay between depression and hostility in response to real or imagined loss, such that both the depression and the hostility must be accounted for in any formulation of

the etiology and treatment of depression. Bibring's (1953) ego-analytic perspectives on depression de-emphasized the inherent role of hostility, however, in maintaining that depression represented a "partial or complete collapse of the self-esteem of the ego" (p.17).

Beck's (1967, 1974; reviewed in Blaney, 1977) cognitive theory of depression carried further the focus on ego functions. The depressive sees himself, his world, and his future in an extremely negative way, as the result of early loss or the failure to learn strategies to confront stress adequately. Ellis (1962) devised a form of treatment based on direct challenge of the depressive's irrationally self-denigrating perceptions. Of the complex of cognitive, affective, and behavioral symptoms found in depression, primacy here is attached to the depressive's thought processes, with the dejected mood and the behavioral signs of depression as consequences of the hopelessness and helplessness which dominate the depressive's outlook.

The theories cited thus far support Coyne's (1976a) contention that "the study of depression has focused on the individual and his behavior out of his interactional context" (p. 28). Generally, where pertinent references are available, the accent is on the interpersonal impact of the depressive's style.

In the psychoanalytic literature, Cohen et al. (1954) note the tendency of the depressive to have but a few

relationships, in which the depressive is characteristically very demanding and dependent. In a discussion of the transference difficulties with manic-depressives, Jacobson (1954) describes

...the patients' exhausting, sadomasochistic provocations. They may unconsciously blackmail the analyst by playing on his guilt feelings, hoping to get the longed-for response; failing to do so, they may try to elicit from the analyst a show of power, strictness, punitive anger, serving the alternative purpose of getting support for or relief from the relentless superego pressure (p. 601).

Grinker (1964) points out the depressive's difficulty in accepting or utilizing the feedback s/he constantly requests and theorizes that this is a regression "to an earlier pattern of relationship to the world and significant figures from whom he wants information but which he cannot accept" (p. 579). Of the psychoanalytic writers, Bonime (1966) is among those who have focused most extensively on the interpersonal system in which the depressive is involved. His principal working hypothesis is that "depression is a practice" (p. 244). By this is meant that the interpersonal consequences with which depressives must contend are the result of active, albeit often unconscious, maneuvers on the depressives' part, with the aim of rendering them incapable of productive activity.

Bonime includes among the psychodynamics of the depressive "manipulativeness, aversion to influence, unwillingness to give gratification" (p. 245). The depres-



sive's ostensible dependence is really manipulative demanding. The inability to accept or make constructive use of the attempted interventions of others is due to the depressive's experience of such efforts at influence as covert demands. The depressive is unwilling to give since s/he sees such gratification of others as little more than conceding defeat to their exploitative endeavors. Feeling constantly deprived, the depressive is caught up in a "defiant, stubborn, angry, begrudging battle for something-for-nothing" (p. 251).

Given these dynamics as a substantial if not all-inclusive depiction of the depressive's interpersonal world, who would choose to be intimately involved with such a person? Bonime does not treat this issue, but Tabachnick (1961), in an article on suicide attemptors, has delineated the characteristics of these individuals. Since the suicide attemptor is so dependent, one who is attracted to him or her must be "eager to give" and "to be imposed upon" (p. 17). Such a person is also dependent and masochistic, for s/he "needs someone to whom he can give but he has chosen an object who makes him suffer" (p. 17). Both roles in these relationships produce anger, in the suicide attemptors because their needs are impossible for even an extremely giving person to meet, in the significant others because of the incessant demands on their giving and the fact that there is no room for any of their own unmet dependency needs. Both parties in the relationship are "quite likely to ex-

press their anger in some importantly rejecting way" (p. 17). The result is a symbiotic dyad in which the two people relate to each other in a dependent, sadomasochistic fashion.

For the most part, however, the suicide literature suffers from the same lack of emphasis on the interpersonal field as does the literature on depression (Cowgell, 1977). Both Cowgell (1977) in an experimental situation and Rudestam (1971) in a study based on naturalistic observation are able to conclude that one of the major difficulties in suicide prevention is the maladaptive response of others to the potential suicide; denial, rejection, avoidance, and ridicule are prevalent reactions to the communication of suicidal intent.

Learning theory models of depression (e.g., Ullmann and Krasner, 1969; Ferster, 1973, 1974) represent a move towards more extensive examination of how the depressive's behavior is reinforced by the environment, particularly the social environment. Lewinsohn (1972; reviewed in Blaney, 1977) views the depressive's lowered responsiveness as consistent with real or subjectively experienced reductions in reinforcement, and improvement is contingent on the provision of substitute reinforcers and a reduction in reinforcement for the depressive behaviors themselves. The work of Liberman and Raskin (1971) is of particular interest as an attempt to formulate a learning theory framework for depression, including significantly its interpersonal aspects.

In learning theory terms, the onset of depressive behaviors may be viewed as a respondent to environmental changes (e.g., loss of a loved one). The maintenance of depressive behaviors, once they appear, may be viewed as a process of operant conditioning, whereby attention, concern, and sympathy from significant others serve as reinforcement for the symptoms (p. 516).

Liberman and Raskin maintain that the social reinforcement of depression is sufficient to explain the maintenance of depression or its abatement. Since "social reinforcement represents the most important source of motivation for human behavior" (Liberman, 1970, p. 107), this reinforcement, whether sympathy or anger, gives the "sick" person the message that "so long as you continue to produce this undesirable behavior (symptoms), we will be interested and concerned in you" (p. 107). In this context, teaching family members to reinforce constructive rather than maladaptive behaviors can produce the alleviation of depression. In one rather dramatic example, such a change in reinforcement produced clinical improvement in a depressed housewife after a week. A return to solicitude and attention for her complaints by family members brought about the return of a high level of depressive symptomatology. Lest this model sound too simplistic, family therapists have pointed out, from a systems point of view, that changing what the behaviorists refer to as the "reinforcement contingencies" is often complicated by the motivation of other family members to maintain the symptomatology as an integral part of the



family system (Vogel and Bell, 1960; Haley, 1959).

Feldman's (1976) model of depression is one attempt to elaborate on the "system properties of the depressed person's interpersonal world" (p. 389). More specifically, the attempt is to integrate within a systems theory framework the cognitive approach to depression of Beck (1967) and the behavioral concepts of social stimulus and social reinforcement. The model is worthy of attention as one of the few truly interactional models of depression.

The model assumes that in a marriage, the depression in a spouse is part of the homeostasis of the relationship, so that the "depressed person's current patterns of reciprocal interaction with intimate others...exert a powerful effect in the direction of triggering and maintaining the depression" (p. 390). Crucial to the motivation of the nondepressed spouse, as well as to the depressed spouse, are "cognitive schemata of self-depreciation" (p. 392). The nondepressed spouse, however, does not experience the self-depreciation consciously. S/he endeavors to maintain a "defensive self-image of protector and rescuer" (p. 392), and is thus invested in not allowing the depressed spouse to behave in assertive, aggressive, or other ways inconsistent with depression. If the depressed spouse attempts to act in a nondepressed fashion, s/he will trigger "an unconscious search...for a way to regenerate the cycle of depressive symptomatology so that he or she can again be the omnipotent rescuer" (p. 392). In such a marital

system, then, "internal stability (homeostasis) is maintained by negative...feedback" (p. 390). In general systems theory terms (Miller, 1965), negative feedback serves to minimize deviation in a system. Although some negative feedback is necessary to the functioning of any family (Watzlawick, 1967), a family system characterized by extensive negative feedback is denied system change through positive feedback. Positive feedback, as defined by Miller (1965), serves to amplify deviation. Using the term morphogenesis to mean system change, Feldman (1976) summarizes his model as follows:

From an interpersonal-systems point of view, the depressive symptoms are an important aspect of a homeostatic process that is functioning all too well. It is only when the system can be moved away from the existing homeostasis and toward a process of morphogenesis that the depressive symptoms lose their system-maintenance function and begin to change (p. 394).

Coyne's (1976a) model of the interactional aspects of depression, while also derived from a systems perspective, attributes different motivation to the function significant others perform in the maintenance or escalation of a depressive spiral. The initial response of others is generally literal reassurance that the depressive is indeed loved or that all will be fine. The difficulty is that literal response is not at all what the depressive seeks. "Much of the depressive's communication is aimed at ascertaining the nature of relationship or context in which the interaction is taking place" (p. 33). Since the real

nature of the relationships which the depressive is attempting to define may "require time and further messages to be clearly defined" (p. 34), the depressive is left with a dilemma. Others have given him immediate and literal reassurances that "he is worthy and acceptable because they do in fact maintain this attitude toward him, or rather only because he has attempted to elicit such responses" (p. 34). Thus the questioning, often through symptomatology, continues. The depressive repeats the demands or escalates until others withdraw from him or reiterate their assurances while contending with their own increasing hostility and resentment. For those who remain in the interaction, guilt over their anger at someone who is so vividly suffering renders them unable to express directly their feelings about the depressive's constant interpersonal demands.

To test the hypothesis that the depressive exerts a profound emotional effect on those with whom s/he interacts, Coyne (1976b) had subjects engage in a telephone conversation with psychiatric outpatients and normal controls. Subjects were found to be significantly more depressed, hostile, anxious, and rejecting after a conversation with a depressed patient than after conversations with nondepressed patients or normal controls. The study did not "uncover exactly what in the behavior of the depressed person led to mood induction in the subjects" (p. 192), but Coyne hypothesizes that it is the "nonrecip-



rocal-high disclosure of intimate problems that induces the negative affect in others" (p. 192).

In another investigation into interpersonal aspects of depression, Hammen and Peters (1977) found that subjects rejected depressed males more than depressed females, while in another study (Hammen and Peters, 1978), the significant finding was that depressed persons of the opposite sex were rejected. In the latter study, there was not generally greater rejection of depressed males. To explain this discrepancy, differences in the two methodologies were emphasized. In the first experiment, subjects read descriptions of either male or female students who were depicted as reacting to the same situational stress with depression, anxiety, or blunted affect. In the second experiment, subjects conducted a structured interview of students who role-played either depressed or nondepressed conditions. Thus only the latter methodology included an actual encounter. Reasoning that encounters always elicit implicit judgements of acceptability as potential romantic partner or friend, opposite-sex depressed persons would be more subject to rejection. Another potential explanation was simply that "the interviewers were able to feel more empathy or nurturance toward distressed individuals of the same sex" (Hammen and Peters, 1978, p. 329).

Of those theories treated here that address the role of significant others in the maintenance of depression, Tabachnick (1961), from a psychoanalytic perspective,

describes the significant other as dependent and sadomasochistic; Feldman (1976) depicts the significant other as desiring to keep the depressive depressed so as to maintain his defensive stance as rescuer and protector; Coyne (1976a) would have it that the significant other is less pathological but more immobilized by guilt because of the anger s/he feels towards the suffering depressive. With the exception of the Coyne (1976b) study, this theorizing has not been subjected to empirical verification. Having established that depressives exert a strong emotional effect even in stranger dyads, Coyne (1976b) has raised a logical next question by asking what in the depressive's interactions with others leads to the affective response.

Coyne's (1976a) theoretical model is based on the work of the communications theorists. In an article from this school (Haley, 1959), one of the basic rules of communications theory is elucidated as follows:

It is difficult for a person to avoid defining...his relationship with another... All messages not only report but also influence or command. A statement such as, 'I feel bad today,'...also expresses something like, 'Do something about this'...(p. 156).

A logical extension of this would be to speculate that one who presents a chronically depressed style to others presents also a command statement or metacommunication of, "Do something about this, but it won't help" or, "Do something about this, but it won't be enough." This is consistent with Coyne's (1976a) model, in which the reactions

of significant others are influenced by seeing their efforts fall on deaf ears, and with Grinker's (1964) description of the depressive as "in various degrees unable to receive, understand, or respond to the answers which his own messages have elicited" (p. 577).

With any communication, a person may respond by accepting the definition of the relationship offered, rejecting it, or accepting it with a message indicating that s/he is allowing the maneuver. A classic example of the last alternative is provided by Haley (1963), referring to Frieda Fromm-Reichmann's therapeutic style. Given a patient who insisted he was God, Fromm-Reichmann would "smile and say, 'All right, if you wish to be God, I'll let you'" (p. 199). With the depressive, acceptance would be implied in a response such as, "Tell me about it" to the depressive's, "I feel bad," in the use of reassurances, or in a general stance of being available to provide help. Also involved in this acceptance is an implicit contract not to interject one's own interpersonal needs into the situation. Rejection of the offered relationship could be conveyed by placing counter-demands or by withdrawal from the relationship. Establishing that one is allowing the maneuver could be accomplished by communicating that one is letting the depressive indulge his or her neediness for now.

The depressive exerts a powerful pull towards the first of these alternatives, i.e. acceptance, especially initially. The depressive's



initial communications...tend to engage others immediately and to shift the interactive burden to others. The receivers of these messages usually attempt to answer the depressed person's request directly (Coyne, 1976a, p. 33).

Whether one assumes, then, as Tabachnick (1961) or Feldman (1976) would, that there would be self-selection of participants who need to be in the role of help-giver, the outcome is the same. An other who involves himself with a depressive accepts being defined as a help-giver. It may require time for the, "It won't help" or, "It won't be enough" part of the depressive's metacommunication to become apparent, unless the person has a sufficient history with depressives to be aware of this aspect of the communication immediately, but the initial experience of someone accepting the depressive's metacommunication is at the least one of being forced into a particular role. Haley (1959) states, "If one acts helpless, he may in one sense be controlled by the person caring for him, but by acting helpless he defines the relationship as one in which he is taken care of" (pp. 156-7).

From this perspective, it follows that one significant aspect of the reaction of others to the depressive is to this experience of having their own potential definitions of the relationship usurped, particularly by a definition that denies them the gratification of their needs. In psychoanalytic terms, unless a person is highly defended against direct gratification of his or her needs and thus

experiences little ambivalence in being the constant help-giver, it is reasonable to assume that such a definition of a relationship would be affect-arousing. When Coyne (1976b) speculates that the affect arousal is due to the depressive's high rate of disclosure of intimate information which is non-reciprocal, he is suggesting the same interpersonal usurpation and boundary violation as is Haley (1959). Hammen and Peters (1978) speculate that persons feel more interested in or able to assist same-sex depressed persons than depressed persons of the opposite sex and are thus less rejecting. Implicit here is a recognition of the depressive's command to have one, "Do something," for it is on the basis of one's perceived ability to help or interest in helping that the judgement is made.

To this point the discussion of the command functions of the communication has been at a speculative level and has included without verification the assumption that the depressive's metacommunication is, "Do something." Empirical validation of this concept was the principal motive for the current research. The presumed metacommunication of the depressive was made explicit. Given a depressive presentation by a confederate, some subjects were explicitly enjoined by the experimenter to adopt a help-giving posture in relation to the confederate, while others were instructed not to try to help, to merely do what they could to keep a conversation going. A control group instructed to interact as they saw fit provided the normal

interpersonal context in which the depressive communicates. The central hypothesis of this study was, then, that subjects asked to respond to a depressive presentation by attempting to be as helpful as possible would experience and report more affect arousal than subjects not so instructed. Coyne (1976b) found his subjects more hostile, anxious, and depressed after a telephone conversation with depressed patients, and it was hypothesized here that subjects instructed to help would report greater affect on measures of hostility, anxiety, and depression than other subjects. Similarly, subjects instructed not to attempt to help should experience and report less affect-arousal than subjects in control groups. Given that the control condition basically replicated the experimental situation created by Coyne (1976b), then it was consistent with the basic concept of this study to hypothesize that subjects given permission not to respond to the command to, "Do something" would experience and report less negative response to the depressive presentation than subjects for whom the injunction to help was still implicitly effective.

Since these two hypotheses were specific to reactions to a depressive, it was essential to determine that subjects were reacting to the depressive presentation as well as to the injunctions concerning helping. Half of the subjects interacted with a "depressed" confederate, while the other half interacted with a "nondepressed" confederate. It was hypothesized that the subjects would rate the



"depressed" confederate higher on measures of depression, anxiety, and hostility than they would the "nondepressed" confederate. It was further hypothesized that, as a result of these differing perceptions of the confederate, subjects would rate themselves higher on measures of depression, anxiety, and hostility after interacting with a "depressed" confederate than they would after interacting with a "nondepressed" confederate.

Coyne (1976b) found his subjects more interpersonally rejecting after a telephone conversation with depressed patients, and it was hypothesized in this study that subjects interacting with a "depressed" confederate would be more interpersonally rejecting than subjects interacting with a "nondepressed" confederate. Further, subjects instructed to help should report greater interpersonal rejection of the confederate than other subjects. Subjects instructed not to attempt to help were expected to be less rejecting than control subjects, again because the injunction to help would still be implicitly effective for the control group subjects.

As noted previously, the term "depression" is used to define psychological experiences ranging from normal transient affective states to psychoses. In the design of this study, subjects were reacting to a confederate who presented herself as more toward the normal end of this continuum. The assumption that this study had relevance for the understanding of clinical depression was contingent upon

acceptance of the idea that depression in fact exists along a continuum of experience. The concept that states of depression differ quantitatively rather than qualitatively has support in the literature (Wessman and Ricks, 1966; Chodoff, 1974).

Similarly, while the interactive models of Tabachnick (1961), Feldman (1976), and Coyne (1976a), address relationships between intimates, the present study made use of stranger dyads. These dyads obviously involve different processes than relationships between intimates. According to social penetration theory (Altman and Taylor, 1973), the formation of friendships begins with extremely superficial conversations; gradually, more information and information of a more intimate kind is shared as the relationship develops. Chaikin and Derlega (1974) found that subjects rated disclosing intimate information to a stranger as inappropriate and maladjusted. Female subjects rated this disclosure as more inappropriate than did males. Coyne (1976b) invokes social penetration theory to explain the negative reaction of his subjects to a depressive presentation by a stranger, but this is at a speculative level. This study included exploratory measures designed to evaluate the subjects' perceptions of the degree and appropriateness of the personal information the confederate shared with the subjects.

In summary, it was hypothesized that:

- 1) Subjects instructed to help a "depressed"

confederate would be more depressed, anxious, and hostile after a brief interaction than would other subjects interacting with a "depressed" confederate;

2) Subjects given no instruction concerning helping the "depressed" confederate would be more depressed, anxious, and hostile after a brief interaction than would subjects instructed not to attempt to help her;

3) Subjects interacting with a "depressed" confederate would perceive that confederate as more depressed, anxious, and hostile after a brief interaction than would subjects interacting with a "nondepressed" confederate;

4) Subjects interacting with a "depressed" confederate would perceive themselves as more depressed, anxious, and hostile after a brief interaction than would subjects interacting with a "nondepressed" confederate;

5) Subjects instructed to help a "depressed" confederate would be more interpersonally rejecting after a brief interaction than would other subjects interacting with a "depressed" confederate;

6) Subjects given no instruction concerning helping the "depressed" confederate would be more interpersonally rejecting after a brief interaction than would subjects instructed not to attempt to help her;

7) Subjects interacting with a "depressed" confederate would be more interpersonally rejecting of that confederate after a brief interaction than would subjects interacting with a "nondepressed" confederate.



## CHAPTER II

### METHOD

#### Subjects

Undergraduate University students in some psychology courses are required either to participate in approved experiments or submit a substitute paper, while others are given extra credit or simply encouraged to volunteer. Classes were visited and sign-up sheets posted to obtain the sixty female students for this study.

Females were chosen as subjects because, as Gouaux (1971) states, "females...have been found to perform consistently better than males in studies involving the induction of moods" (p. 38). He offers the partial explanation that "females generally feel less reluctant to express induced affect in an experimental situation" (p. 38).

#### Experimenter and Confederates

The experimenter was a male graduate student. All sessions of the experiment were conducted by the experimenter.

The two female confederates were undergraduate students, one a senior and the other a junior, each with backgrounds in psychology. The choice for female confederates was based on Hammen and Peters' (1978) suggestion that affect arousal might be greater in same-sexed pairs.

Training of the confederates included detailed explanation of the procedures by the experimenter and complete rehearsal with four pilot subjects. Each rehearsal was followed by discussion with the experimenter, aimed at ensuring consistency of verbal and affective self-presentation. The only difficulty of note was in creating an unrehearsed, relatively spontaneous atmosphere given the controls required on both content and nonverbal accompaniments (see Procedures). The pilot sessions were observed by the experimenter, and actual data collection did not begin until both the experimenter and the confederate judged that a reasonably natural atmosphere was being achieved.

### Procedures

Subjects were recruited for an experiment in "interpersonal interaction." Prior to each subject's arrival, the experimenter assigned her randomly to one of the six experimental conditions defined by the two Depression conditions and the three Help conditions. The subject's assignment was unknown to the confederates, each of whom interacted with half the subjects in each condition. Subjects were scheduled thirty minutes apart, in blocks of from two to ten subjects for each confederate.

When the subject appeared, the confederate was already waiting in the corridor outside the door to the experiment rooms, two rooms placed one behind the other. Both participants were invited into the inner room, used for the

interviews because of the arrangement of the observation mirror. The experimenter read to them the Informed Consent Statement (Appendix A), required by University regulations, and asked them to sign it. Both "subjects" were told the following:

As I said, the experiment is an examination of different styles of interpersonal interaction. One of you will be asked to think of some things with which you feel you could use some help and then present them to the other person to start a conversation. The conversation will continue for five minutes. At that point I will interrupt you and there will be some questionnaire items to do. Any questions?

The confederate was trained to ask, in a slightly confused manner, "You mean anything we want to talk about?" The experimenter answered in the affirmative.

The experimenter then told them that, in order to determine "who does what" in the experiment, he was going to hand them each a folded slip of paper. On one of them would be printed the word "Interviewer." In actuality, both pieces of paper read "Interviewer" and the subject was always in this role. The confederate was told that she was thus the person the experimenter wanted to start the conversation, and that the "other subject" and he would leave the room to give her a moment or two to think of what she would like to say. The experimenter then ushered the subject out of the interview room.

During this interval, the experimenter gave the subject the various instructions that defined the Help condi-

tions, as described below:

### Help

Actually, I called you out for a somewhat different reason. The other person has been asked to talk with you about some things with which she feels she could use some help. After she finishes telling you whatever it is she wants to discuss, I want you to try to be as helpful as you can.

### No Help

Actually, I called you out for a somewhat different reason. The other person has been asked to talk with you about some things with which she feels she could use some help. After she finishes telling you whatever it is she wants to discuss, I do not want you to do anything specifically to help her other than just doing what you can to keep the conversation going.

### Control

The other person has been asked to talk with you about some things with which she feels she could use some help. After she finishes telling you whatever it is she wants to discuss, you are free to interact with her as you see fit.

The experimenter and the subject returned to the interview room when the confederate indicated she was ready by knocking on the door. The audio tape was turned on, and as the experimenter left the room, the two were instructed to begin.

The confederate then began her rehearsed speech. The wording was the same in all conditions. The only



variations were the nonverbal ones, which were different for the Depressed and the Nondepressed conditions. When the confederate was "depressed," she was slightly slower of speech, smiled less, engaged in less eye contact, and in general appeared rather overburdened and apathetic. When "nondepressed," the confederate was more animated and responsive, and overall appeared to be somewhat troubled by her problems but not overly upset. The confederate's speech follows (adapted from Hammen and Peters, 1978):

I guess there are several things I could talk about, but what's most on my mind lately are school and my boyfriend. I'm taking several really hard courses this semester, and I just don't know how they're going to turn out. And my boyfriend and I aren't getting along all that well either. He just doesn't seem as interested in me as he used to be. I've tried talking to some people in the dorm, but everybody seems really busy right now. I guess that's about it.

Often a subject would interrupt the confederate before she finished, usually with a question. The confederate would respond to the question and then attempt to make a smooth transition back to the prepared material she needed to complete.

After the confederate finished her remarks, the initiative was left to the subject to pursue what the confederate had told her. There were a few common questions which both confederates were rehearsed to answer similarly (Appendix B). For instance, a subject might ask, "How long

have you and your boyfriend been going out together?" Beyond giving answers to a small group of informational questions such as these, however, the confederates responded to inquiries by basically reiterating what they had already said. For instance, if a subject asked, "What exactly do you think is going on with your boyfriend?", the confederate would respond with, "I don't know, exactly. It's just that he doesn't seem as interested in me as he used to be." The three important rules for the confederate were to leave the initiative with the subject, to add no further information or opinions to the interaction than what had been rehearsed, and to be brief and noncommittal in her verbal responses.

The experimenter observed the interaction through a one-way mirror, noting any problems. Eleven subjects had to be eliminated because of some error or inconsistency in the content of the confederate's presentation, and three subjects were eliminated because the experimenter judged the affective tone of the interaction to have been insufficiently depressed or nondepressed. After five minutes, the experimenter interrupted the interaction to explain and administer the pencil-and-paper dependent measures, asking the confederate to go into the outer room to answer her "different" questions.

To assess the subject's mood, the Today Form of the Multiple Affect Adjective Check List (Zuckerman, Lubin, Vogel, and Valerius, 1964; Zuckerman, Lubin, and Robins,

1965) was utilized. The Multiple Affect Adjective Check List (MAACL) contains scales for depression, anxiety, and hostility. It consists of a list of adjectives which a subject checks to indicate which are applicable to his or her current feeling state (Appendix C).

Interpersonal acceptance-rejection of the confederate was assessed by a series of five-point scales derived from Hammen and Peters (1978). The subject was asked how accepting she would be of the confederate as an acquaintance, as a co-worker on a project, or as a close friend. The subject was then asked to rate on five-point scales:

1) how revealing about herself she thought the confederate had been; 2) how appropriate she felt it had been for the confederate to tell her what she had (Appendix D).

As a further test of the subjects' perceptions of the confederate, each subject was asked to fill out another MAACL, this time checking all the words "which you imagine describe how the other person is feeling right now."

The experimenter waited in the outer room until the subject indicated she had finished all the measures, then returned to the interview room to ask the subject if she had any suspicions that there might be some deception involved in the experiment. The eleven subjects who had strong suspicions or felt relatively sure that the supposed "other subject" was really a confederate were not included in the data.



The confederate then joined the experimenter for the debriefing, unless time dictated that she ready herself for the next subject. A written statement (Appendix E) was read to the subject, explaining the true nature of the study. Subjects reacted generally with mild surprise and occasionally with a visible sense of relief to discovering that the "other subject" was in reality a confederate. No subjects expressed any particularly negative reaction to the deception. The subject was excused, following a brief discussion as time allowed and the subject wished.

### Content Analysis

Audio tapes of the interactions between the subjects and the confederates were made for post hoc analysis. It was found that the subjects' portions of the conversations could be divided into six distinct categories: Support, Advice, Information Questions, Problem-Related Questions, Self-Disclosures, and Opinions. The data were scored for the number of each of these types of statements plus Total Questions and Total Content. Interactions belonging to one of the six categories were of greatly varying length, ranging from brief sentences to entire paragraphs, and no attempt was made to control for the lengths of interactions scored as a unit. The scoring categories are described more fully below.

Support. Scored as Support were comments the subject



made expressing understanding of and/or empathy with the confederate's plight. One subject stated:

I know what you're feeling. Especially right around finals. And next year's your last year, and that's on your mind. Wondering whether you're gonna get a job and all that stuff.

Advice. Instances in which the subject made a direct suggestion to the confederate as to what she should do were considered Advice. Regarding the boyfriend problems, one woman suggested:

I think you should just come out and say, 'I want to talk to you.' Just come right out and say it.

Information Questions. Subjects often asked questions about the confederate such as, "What year are you?", "What dorm are you in?", and "How long have you and your boyfriend been seeing each other?" These questions asked directly for more information about the confederate in areas not specifically pertinent to the problems at hand.

Problem-Related Questions. These were questions more closely tied to the difficulties the confederate was identifying. For instance, many subjects asked, in reference to the boyfriend problems, "Have you talked to him about it?" Again in reference to the boyfriend, a question such as, "Has it been building up all semester?" would be scored as a Problem-Related Question.

Total Questions. The two question categories were summed to provide this score.

Self-Disclosures. Any information about themselves which the subjects revealed was scored as a Self-Disclosure. These ranged from comments such as, "I've got a term paper due on Friday" to more personal material, for instance a remark that, "I don't have a boyfriend right now."

Opinions. Included here were opinions offered or conclusions drawn by the subjects. After being informed that the confederate and her boyfriend had been going out for a year, one subject stated, "Maybe he's starting to get a little itchy." Many subjects responded to the confederate's complaints about how overburdened with schoolwork she was with a remark such as, "A lot of people are right now."

Total Content. This was the sum of the scores in the six individual categories.

To assess the reliability of this methodology, an independent rater was asked to score one-half of the data, after being trained in the method used by the experimenter. Pearson product-moment correlation coefficients were calculated for each category. The rater's judgements of each category were positively correlated with those of the experimenter at the .05 level of significance or better.

## CHAPTER III

### RESULTS

#### Method of Analysis

The data were initially analyzed as a three-way analysis of variance. Although the two levels of depression and the three helping conditions defined a 2 x 3 factorial design, Confederate was added as a third factor in order to test for any differential reaction to the two confederates employed in the study. The data will be presented as a three-way design where appropriate. All t-tests were by the Tukey method.

#### MAACL: Self-Ratings

On each scale of the MAACL, certain items ("+" items) are to be checked and others omitted ("0" items), in order to score as more depressed, anxious, or hostile. The score is the total number of "+" items checked added to the number of "0" items omitted.

Means and standard deviations for the subjects' self-ratings on the MAACL are presented in Tables 1-3. There were no significant differences. The predictions of Hypotheses 1, 2, and 4 were not confirmed.

Table 1

Means and Standard Deviations for MAACL Depression Scale:  
Self-Ratings

---

	Depressed	Nondepressed
Help	<u>M</u> 16.1	<u>M</u> 15.2
	<u>SD</u> 7.16	<u>SD</u> 4.92
Control	<u>M</u> 13.5	<u>M</u> 13.7
	<u>SD</u> 8.17	<u>SD</u> 6.57
No Help	<u>M</u> 14.2	<u>M</u> 15.2
	<u>SD</u> 6.27	<u>SD</u> 5.55

---



Table 2

Means and Standard Deviations for MAACL Anxiety Scale:  
Self-Ratings

---

	Depressed	Nondepressed
Help	<u>M</u> 10.0	<u>M</u> 8.0
	<u>SD</u> 4.22	<u>SD</u> 4.74
Control	<u>M</u> 8.2	<u>M</u> 7.1
	<u>SD</u> 4.69	<u>SD</u> 4.33
No Help	<u>M</u> 8.1	<u>M</u> 8.8
	<u>SD</u> 3.76	<u>SD</u> 4.92

---

Table 3

Means and Standard Deviations for MAACL Hostility Scale:  
Self-Ratings

---

	Depressed	Nondepressed
Help	<u>M</u> 7.0	<u>M</u> 6.1
	<u>SD</u> 4.37	<u>SD</u> 3.18
Control	<u>M</u> 6.5	<u>M</u> 5.7
	<u>SD</u> 4.50	<u>SD</u> 2.67
No Help	<u>M</u> 6.8	<u>M</u> 6.7
	<u>SD</u> 3.80	<u>SD</u> 4.30

---

MAACL: Other-Ratings

The subjects' ratings of the confederate's depression are summarized in Tables 4-5. The confederate was seen as more depressed in the Depressed than in the Nondepressed conditions,  $F(1,48) = 12.92$ ,  $p < .001$ . The Depression X Help interaction was also significant,  $F(2,48) = 3.90$ ,  $p < .05$ .  $t$ -Tests ( $p < .05$ ) performed on the means involved in this interaction indicated that the effect was primarily due to the high ratings of the confederate by subjects in the Depressed-Help condition and the low ratings of the confederate in the Nondepressed-Help condition.

Means and standard deviations and a summary of the analysis of variance for the Anxiety scale are contained in Tables 6 and 7. Subjects saw the confederate as more anxious in the Depressed than in the Nondepressed conditions,  $F(1,48) = 8.57$ ,  $p < .005$ . Further, there was a significant Depression X Help interaction,  $F(2,48) = 3.26$ ,  $p < .05$ .  $t$ -Tests performed on the means involved in this interaction indicated that subjects in the Depressed-Help condition rated the confederate as significantly more anxious than subjects in the Nondepressed-Help condition ( $p < .05$ ). Lastly, one of the confederates ( $C_2$ ) was clearly seen as more anxious than the other,  $F(1,48) = 10.74$ ,  $p < .005$ .

On the Hostility scale, as demonstrated in Tables 8 and 9, subjects rated the confederate as more hostile in

Table 4

Means and Standard Deviations for MAACL Depression Scale:  
Other-Ratings

	Depressed	Nondepressed
Help	$C_1$ $\underline{M}$ 29.8	$C_1$ $\underline{M}$ 20.8
	$\underline{SD}$ 4.32	$\underline{SD}$ 3.19
	$C_2$ $\underline{M}$ 30.6	$C_2$ $\underline{M}$ 20.4
	$\underline{SD}$ 3.29	$\underline{SD}$ 7.89
Control	$C_1$ $\underline{M}$ 26.8	$C_1$ $\underline{M}$ 22.0
	$\underline{SD}$ 5.22	$\underline{SD}$ 5.43
	$C_2$ $\underline{M}$ 27.0	$C_2$ $\underline{M}$ 23.2
	$\underline{SD}$ 6.67	$\underline{SD}$ 3.70
No Help	$C_1$ $\underline{M}$ 26.6	$C_1$ $\underline{M}$ 23.8
	$\underline{SD}$ 4.51	$\underline{SD}$ 6.80
	$C_2$ $\underline{M}$ 29.2	$C_2$ $\underline{M}$ 31.0
	$\underline{SD}$ 2.59	$\underline{SD}$ 5.57



Table 5

Analysis of Variance for MAACL Depression Scale:  
Other-Ratings

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Depression (D)	1	345.6	12.92*
Help (H)	2	46.32	1.73
Confederate (C)	1	56.07	2.10
D X H	2	104.45	3.90**
D X C	1	8.07	.30
H X C	2	33.32	1.25
D X H X C	2	10.72	.40
Error	48		
Total	59		

---

\*  $p < .001$

\*\*  $p < .05$

---

Table 6

Means and Standard Deviations for MAACL Anxiety Scale:  
Other-Ratings

	Depressed	Nondepressed
Help	$C_1$ <u>M</u> 15.2	$C_1$ <u>M</u> 10.4
	$C_1$ <u>SD</u> 3.56	$C_1$ <u>SD</u> 1.14
	$C_2$ <u>M</u> 17.2	$C_2$ <u>M</u> 12.2
	$C_2$ <u>SD</u> 1.79	$C_2$ <u>SD</u> 4.97
Control	$C_1$ <u>M</u> 14.0	$C_1$ <u>M</u> 10.8
	$C_1$ <u>SD</u> 1.58	$C_1$ <u>SD</u> 1.79
	$C_2$ <u>M</u> 13.8	$C_2$ <u>M</u> 14.0
	$C_2$ <u>SD</u> 2.68	$C_2$ <u>SD</u> 2.12
No Help	$C_1$ <u>M</u> 12.8	$C_1$ <u>M</u> 12.8
	$C_1$ <u>SD</u> 3.42	$C_1$ <u>SD</u> 3.70
	$C_2$ <u>M</u> 17.2	$C_2$ <u>M</u> 16.6
	$C_2$ <u>SD</u> 2.95	$C_2$ <u>SD</u> 3.36

Table 7

Analysis of Variance for MAACL Anxiety Scale:

Other-Ratings

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Depression (D)	1	74.82	8.57*
Help (H)	2	14.87	1.70
Confederate (C)	1	93.75	10.74*
D X H	2	28.47	3.26**
D X C	1	2.82	.32
H X C	2	9.80	1.12
D X H X C	2	6.07	.70
Error	48	8.73	
Total	59		

---

\*  $p < .005$ \*\*  $p < .05$

Table 8

Means and Standard Deviations for MAACL Hostility Scale:  
Other-Ratings

	Depressed	Nondepressed
Help	$C_1$ <u>M</u> 11.6	$C_1$ <u>M</u> 8.6
	$C_1$ <u>SD</u> 1.67	$C_1$ <u>SD</u> 3.21
	$C_2$ <u>M</u> 8.6	$C_2$ <u>M</u> 7.8
	$C_2$ <u>SD</u> 2.19	$C_2$ <u>SD</u> 3.11
Control	$C_1$ <u>M</u> 9.8	$C_1$ <u>M</u> 8.8
	$C_1$ <u>SD</u> 1.79	$C_1$ <u>SD</u> 2.28
	$C_2$ <u>M</u> 9.8	$C_2$ <u>M</u> 8.4
	$C_2$ <u>SD</u> 2.86	$C_2$ <u>SD</u> 1.67
No Help	$C_1$ <u>M</u> 10.2	$C_1$ <u>M</u> 8.8
	$C_1$ <u>SD</u> 4.09	$C_1$ <u>SD</u> 3.27
	$C_2$ <u>M</u> 11.6	$C_2$ <u>M</u> 9.0
	$C_2$ <u>SD</u> 3.51	$C_2$ <u>SD</u> 3.24



Table 9

Analysis of Variance for MAACL Hostility Scale:  
Other-Ratings

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Depression (D)	1	43.35	5.35*
Help (H)	2	3.52	.43
Confederate (C)	1	2.82	.35
D X H	2	.95	.12
D X C	1	.15	.02
H X C	2	9.32	1.15
D X H X C	2	3.95	.49
Error	48	8.10	
Total	59		

---

\*  $p < .025$

---

the Depressed than in the Nondepressed conditions,  
 $F(1,48) = 5.35, p < .025$ .

Hypothesis 3 was thus confirmed. Subjects saw the confederate as more depressed, anxious, and hostile after the Depressed presentation than after the Nondepressed presentation. There was the additional interesting finding that on the Depression and Anxiety scales, those subjects instructed to help a "depressed" confederate saw her as particularly more depressed and anxious, while those subjects instructed to help a "nondepressed" confederate saw her as particularly less depressed and anxious. Finally, subjects' ratings of the confederate's anxiety provided the only instance of an effect for Confederate among the main dependent variables.

#### MAACL Correlation Matrix

The Pearson product-moment correlation coefficient was utilized to determine the correlations among scores on all the dependent variables. The correlation matrix for the six MAACL scores is contained in Table 10. As would be expected, the Self-Ratings of Depression, Anxiety, and Hostility were all highly positively correlated with each other ( $p < .01$ ), as were the Other-Ratings on Depression, Anxiety, and Hostility ( $p < .01$ ).

Of note is the fact that Self-Ratings on both Depression and Hostility achieved significant positive correlation

Table 10

## MAACL Correlation Matrix

	Depression- Self	Anxiety- Self	Hostility- Self	Depression- Other	Anxiety- Other
Depression- Self	1.00	---	---	---	---
Anxiety- Self	.75*	1.00	---	---	---
Hostility- Self	.72*	.64*	1.00	---	---
Depression- Other	.10	.10	.22	1.00	---
Anxiety- Other	.14	.16	.18	.74*	1.00
Hostility- Other	.34*	.25	.47*	.50*	.41*

\*p &lt;.01, two-tailed

tions with ratings of the confederate on Hostility ( $p < .01$ ). The Self-Ratings on Anxiety were correlated with ratings of the confederate on Hostility at near the .05 level.

Subjects perceived their own depression, anxiety, and hostility as forming a triad of related affects and rated the confederates similarly. That the perceived hostility of the confederate was associated with the subjects' ratings of their own feelings was an unexpected finding.

### Questionnaire

As a test of interpersonal acceptance-rejection, each subject was asked to rate on a scale from 1 to 5, with 5 as most, how much she would like the other person as an acquaintance, a co-worker, or a friend. Means and standard deviations for these three questionnaire items are presented in Tables 11-13. There were no significant differences and Hypotheses 5, 6, and 7 were not confirmed.

On the ratings of the confederate as a potential co-worker, the Depression X Help interaction approached significance,  $F(2,48) = 2.92$ ,  $p < .06$ . An examination of the means in Table 12 shows that subjects in the Depressed-Help condition and the Nondepressed-Control condition both rated the confederate as more acceptable as a co-worker. Assuming that the Nondepressed-Control condition would most nearly simulate normal interaction and thus might be expected to generate higher ratings, there remains to be



Table 11

Means and Standard Deviations for Questionnaire:  
Confederate as Acquaintance

---

	Depressed	Nondepressed
Help	<u>M</u> 3.8	<u>M</u> 3.6
	<u>SD</u> .79	<u>SD</u> .52
Control	<u>M</u> 3.3	<u>M</u> 3.6
	<u>SD</u> .95	<u>SD</u> .52
No Help	<u>M</u> 3.5	<u>M</u> 4.1
	<u>SD</u> .85	<u>SD</u> .57

---

Table 12

Means and Standard Deviations for Questionnaire:  
Confederate as Co-worker

---

	Depressed	Nondepressed
Help	<u>M</u> 4.0	<u>M</u> 3.4
	<u>SD</u> .67	<u>SD</u> .84
Control	<u>M</u> 3.2	<u>M</u> 3.8
	<u>SD</u> 1.14	<u>SD</u> .63
No Help	<u>M</u> 3.4	<u>M</u> 3.4
	<u>SD</u> .70	<u>SD</u> .52

---

Table 13

Means and Standard Deviations for Questionnaire:  
Confederate as Friend

---

	Depressed	Nondepressed
Help	<u>M</u> 3.6	<u>M</u> 3.2
	<u>SD</u> .84	<u>SD</u> .63
Control	<u>M</u> 3.1	<u>M</u> 3.1
	<u>SD</u> .99	<u>SD</u> .74
No Help	<u>M</u> 3.3	<u>M</u> 3.6
	<u>SD</u> .67	<u>SD</u> .84

---

explained the tendency of the subjects in the Depressed-Help condition to rate the confederate as more acceptable on this measure.

The two other questionnaire items asked the subject to rate on a scale from 1 to 5, with 5 as most, how revealing she thought the confederate was being and how appropriate she thought it was for the confederate to reveal what she did. Means and standard deviations for these two questionnaire items are contained in Tables 14 and 15. There were no significant differences for these two exploratory measures. Subjects tended,  $F(1,48) = 3.70$ ,  $p < .06$ , to rate the "depressed" confederate as more revealing than the "nondepressed" confederate.

#### Questionnaire Correlation Matrix

The Pearson product-moment correlation coefficient was used to determine the correlations among the responses to the five questionnaire items. The correlation matrix is presented as Table 16. The responses to how much the subject would like the confederate as acquaintance, as co-worker, and as friend were all positively correlated with each other ( $p < .01$ ).

Table 16 further reveals that the confederate was thought to be more appropriate the more revealing the subjects judged her to be ( $r = +.26$ ,  $p < .05$ ). Subjects also rated the confederate's self-disclosure as



Table 14

Means and Standard Deviations for Questionnaire:  
Confederate as Revealing

---

	Depressed	Nondepressed
Help	<u>M</u> 3.9	<u>M</u> 3.1
	<u>SD</u> 1.20	<u>SD</u> .74
Control	<u>M</u> 3.4	<u>M</u> 3.0
	<u>SD</u> .97	<u>SD</u> .82
No Help	<u>M</u> 3.8	<u>M</u> 3.6
	<u>SD</u> .79	<u>SD</u> 1.07

---

Table 15

Means and Standard Deviations for Questionnaire:  
Confederate as Appropriate

---

	Depressed	Nondepressed
Help	<u>M</u> 4.2	<u>M</u> 4.0
	<u>SD</u> 1.03	<u>SD</u> 1.15
Control	<u>M</u> 3.9	<u>M</u> 3.1
	<u>SD</u> .74	<u>SD</u> 1.10
No Help	<u>M</u> 3.8	<u>M</u> 4.2
	<u>SD</u> 1.23	<u>SD</u> .92

---

Table 16

## Questionnaire Correlation Matrix

	Acquaintance	Co-worker	Friend	Revealing
Acquaintance	1.00	---	---	---
Co-worker	.56*	1.00	---	---
Friend	.69*	.56*	1.00	---
Revealing	.21	.25	.25	1.00
Appropriate	.31**	.15	.23	.26**

\* $p < .01$ , two-tailed\*\* $p < .05$ , two-tailed

more appropriate the more attractive they saw the confederate as a potential acquaintance ( $r = +.31, p < .05$ ).

For clarity of presentation, the correlation among the MAACL scores and those among the questionnaire items were displayed separately as Tables 10 and 16. Of the correlations between scores on the MAACL and the scores on the questionnaire, both the subjects' perceptions of the confederate's depression and the confederate's anxiety were positively correlated with how revealing the subject thought the confederate to be ( $p < .05$ ).

### Content Analysis

A three-way analysis of variance was conducted on each of the content variables described in the Method section. The results are discussed below.

Support (Tables 17-18). Subjects offered varying numbers of supportive statements across Help conditions,  $F(2,48) = 5.02, p < .01$ .  $t$ -Tests on the means involved revealed that Help subjects offered more support than No Help subjects ( $p < .05$ ).

Subjects gave more supportive comments to one of the confederates ( $C_2$ ) than the other,  $F(1,48) = 6.66, p < .01$ . This was the same confederate perceived as more anxious on the MAACL.

Advice (Tables 19-20). Amount of advice given also varied significantly by Help condition,  $F(2,48) = 11.80,$



Table 17

Means and Standard Deviations for Content: Support

	Depressed	Nondepressed
Help	$C_1$ <u>M</u> 3.8	$C_1$ <u>M</u> 3.0
	$C_1$ <u>SD</u> 2.49	$C_1$ <u>SD</u> 1.87
	$C_2$ <u>M</u> 3.4	$C_2$ <u>M</u> 4.2
	$C_2$ <u>SD</u> 2.07	$C_2$ <u>SD</u> 1.64
Control	$C_1$ <u>M</u> .4	$C_1$ <u>M</u> 1.6
	$C_1$ <u>SD</u> .55	$C_1$ <u>SD</u> 1.82
	$C_2$ <u>M</u> 4.2	$C_2$ <u>M</u> 3.8
	$C_2$ <u>SD</u> 4.15	$C_2$ <u>SD</u> 1.30
No Help	$C_1$ <u>M</u> 1.2	$C_1$ <u>M</u> 1.6
	$C_1$ <u>SD</u> 1.30	$C_1$ <u>SD</u> 1.82
	$C_2$ <u>M</u> 1.6	$C_2$ <u>M</u> 2.2
	$C_2$ <u>SD</u> .90	$C_2$ <u>SD</u> .84

Table 18

Analysis of Variance for Content: Support

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Depression (D)	1	1.35	.35
Help (H)	2	19.12	5.02*
Confederate (C)	1	25.35	6.66*
D X H	2	.35	.09
D X C	1	.02	.00
H X C	2	10.85	2.85
D X H X C	2	3.22	.84
Error	48	3.81	
Total	59		

---

\*  $p < .01$

Table 19

Means and Standard Deviations for Content: Advice

	Depressed	Nondepressed
Help	$C_1$ <u>M</u> 4.0	$C_1$ <u>M</u> 1.2
	$C_1$ <u>SD</u> 1.58	$C_1$ <u>SD</u> .84
	$C_2$ <u>M</u> .8	$C_2$ <u>M</u> 2.4
	$C_2$ <u>SD</u> 1.10	$C_2$ <u>SD</u> 2.07
Control	$C_1$ <u>M</u> 1.6	$C_1$ <u>M</u> 1.2
	$C_1$ <u>SD</u> 1.52	$C_1$ <u>SD</u> .84
	$C_2$ <u>M</u> 1.0	$C_2$ <u>M</u> 1.0
	$C_2$ <u>SD</u> 1.41	$C_2$ <u>SD</u> 1.22
No Help	$C_1$ <u>M</u> .2	$C_1$ <u>M</u> 0.0
	$C_1$ <u>SD</u> .45	$C_1$ <u>SD</u> 0.0
	$C_2$ <u>M</u> .2	$C_2$ <u>M</u> .6
	$C_2$ <u>SD</u> .45	$C_2$ <u>SD</u> 1.34

Table 20

## Analysis of Variance for Content: Advice

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Depression (D)	1	.82	.56
Help (H)	2	17.12	11.80*
Confederate (C)	1	2.02	1.39
D X H	2	.62	.43
D X C	1	12.15	8.38**
H X C	2	2.12	1.46
D X H X C	2	6.35	4.38***
Error	48	1.45	
Total	59		

---

\* $p < .001$ \*\* $p < .01$ \*\*\* $p < .025$



$p < .001$ .  $t$ -Tests on the means involved indicated that, as with Support, the Help subjects gave more advice than No Help subjects ( $p < .05$ ).

Both the Depression X Confederate interaction  $F(1,48) = 8.38$ ,  $p < .01$ , and the Depression X Help X Confederate interaction,  $F(2,48) = 4.38$ ,  $p < .025$ , can be accounted for by the distinctly large amount of advice given one of the confederates ( $C_1$ ) in the Depressed-Help condition, as the means in Table 19 demonstrate.  $t$ -Tests performed for the Depression X Help X Confederate interaction showed that the large amount of advice given to  $C_1$  by subjects in the Depressed-Help condition figured in all the significant differences between means ( $p < .05$ ).

Information Questions (Tables 21-22). The number of information questions asked differed significantly across Help conditions,  $F(2,48) = 4.78$ ,  $p < .025$ .  $t$ -Tests showed that No Help subjects asked significantly more information questions than Help subjects ( $p < .05$ ).

Problem-Related Questions (Tables 23-24). There was a significant Depression X Help interaction,  $F(2,48) = 6.06$ ,  $p < .005$ , in this category.  $t$ -Tests indicated that subjects in the Nondepressed-No Help condition asked significantly more of these questions than did subjects in the Depressed-No Help condition.

Total Questions (Tables 25-26). Because of the differences in information questions asked, Total Questions

Table 21

Means and Standard Deviations for Content:  
Information Questions

	Depressed	Nondepressed
Help	$C_1$ <u>M</u> 4.4	$C_1$ <u>M</u> 5.4
	$C_1$ <u>SD</u> 3.91	$C_1$ <u>SD</u> 1.82
	$C_2$ <u>M</u> 4.4	$C_2$ <u>M</u> 8.6
	$C_2$ <u>SD</u> 5.13	$C_2$ <u>SD</u> 6.54
Control	$C_1$ <u>M</u> 3.6	$C_1$ <u>M</u> 6.8
	$C_1$ <u>SD</u> 2.30	$C_1$ <u>SD</u> 1.79
	$C_2$ <u>M</u> 9.4	$C_2$ <u>M</u> 8.2
	$C_2$ <u>SD</u> 6.31	$C_2$ <u>SD</u> 3.96
No Help	$C_1$ <u>M</u> 12.2	$C_1$ <u>M</u> 9.6
	$C_1$ <u>SD</u> 3.35	$C_1$ <u>SD</u> 8.73
	$C_2$ <u>M</u> 12.0	$C_2$ <u>M</u> 7.2
	$C_2$ <u>SD</u> 3.74	$C_2$ <u>SD</u> 4.76

Table 22

Analysis of Variance for Content:  
Information Questions

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Depression (D)	1	.02	.00
Help (H)	2	109.85	4.78*
Confederate (C)	1	25.35	1.10
D X H	2	53.62	2.33
D X C	1	4.82	.21
H X C	2	30.35	1.32
D X H X C	2	19.12	.83
Error	48	22.30	
Total	59		

---

\* $p < .025$

Table 23

Means and Standard Deviations for Content:  
Problem-Related Questions

	Depressed	Nondepressed
Help	$C_1$ <u>M</u> 5.0	$C_1$ <u>M</u> 3.6
	$C_1$ <u>SD</u> 2.35	$C_1$ <u>SD</u> 2.07
	$C_2$ <u>M</u> 4.8	$C_2$ <u>M</u> 4.2
	$C_2$ <u>SD</u> 2.28	$C_2$ <u>SD</u> 2.77
Control	$C_1$ <u>M</u> 5.0	$C_1$ <u>M</u> 3.8
	$C_1$ <u>SD</u> 4.30	$C_1$ <u>SD</u> 2.17
	$C_2$ <u>M</u> 5.8	$C_2$ <u>M</u> 4.0
	$C_2$ <u>SD</u> 3.56	$C_2$ <u>SD</u> 2.74
No Help	$C_1$ <u>M</u> 2.8	$C_1$ <u>M</u> 6.6
	$C_1$ <u>SD</u> 2.59	$C_1$ <u>SD</u> 1.52
	$C_2$ <u>M</u> 2.0	$C_2$ <u>M</u> 5.8
	$C_2$ <u>SD</u> .71	$C_2$ <u>SD</u> 3.03

Table 24

Analysis of Variance for Content:  
Problem-Related Questions

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Depression (D)	1	2.82	.40
Help (H)	2	.65	.09
Confederate (C)	1	.02	.00
D X H	2	42.82	6.06*
D X C	1	.02	.00
H X C	2	2.32	.33
D X H X C	2	.62	.09
Error	48	7.07	
Total	59		

---

\* $p < .005$

---



Table 25

Means and Standard Deviations for Content:  
Total Questions

	Depressed	Nondepressed
Help	$C_1$ <u>M</u> 9.4	$C_1$ <u>M</u> 9.0
	$C_1$ <u>SD</u> 4.62	$C_1$ <u>SD</u> 1.73
	$C_2$ <u>M</u> 9.2	$C_2$ <u>M</u> 12.8
	$C_2$ <u>SD</u> 3.96	$C_2$ <u>SD</u> 6.53
Control	$C_1$ <u>M</u> 8.6	$C_1$ <u>M</u> 10.6
	$C_1$ <u>SD</u> 5.59	$C_1$ <u>SD</u> 2.07
	$C_2$ <u>M</u> 15.2	$C_2$ <u>M</u> 12.2
	$C_2$ <u>SD</u> 6.14	$C_2$ <u>SD</u> 4.02
No Help	$C_1$ <u>M</u> 15.0	$C_1$ <u>M</u> 16.2
	$C_1$ <u>SD</u> 3.67	$C_1$ <u>SD</u> 8.58
	$C_2$ <u>M</u> 14.0	$C_2$ <u>M</u> 13.0
	$C_2$ <u>SD</u> 3.54	$C_2$ <u>SD</u> 6.36

Table 26

Analysis of Variance for Content:  
Total Questions

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Depression (D)	1	2.40	.09
Help (H)	2	102.05	3.92*
Confederate (C)	1	24.07	.92
D X H	2	5.85	.22
D X C	1	4.27	.16
H X C	2	49.12	1.89
D X H X C	2	26.52	1.02
Error	48	26.03	
Total	59		

---

\* $p < .05$

---

also varied significantly across Help conditions,  $F(2,48) = 3.92$ ,  $p < .05$ . According to  $t$ -Tests performed on the cell means, No Help subjects asked more questions than Help subjects ( $p < .05$ ).

Self-Disclosure (Table 27). There were no significant differences.

Opinions (Table 28). There were no significant differences. Subjects tended,  $F(1,48) = 3.09$ ,  $p < .09$ , to offer more opinions to  $C_1$  than to  $C_2$ .

Total Content (Tables 29-30). Subjects engaged in more overall interaction with one of the confederates ( $C_2$ ) than with the other,  $F(1,48) = 6.02$ ,  $p < .025$ . This was the confederate seen as more anxious and given more support.

In summary, these results show that in their effort to comply with their instructions, the subjects defined giving help as offering support and advice, while the restrictions in the No Help condition resulted in many more questions of an informational nature. The results for Support and Advice were thus the reverse of those for Information Questions and Total Questions. This change in subjects' mode of interaction did not result in any differences in Total Content. There were also no differences between Depressed and Nondepressed conditions.

There were several Confederate effects. The confederate ( $C_2$ ) rated as more anxious was given distinctly more support and was in general engaged more by the subjects.

Table 27

Means and Standard Deviations for Content:  
Self-Disclosure

	Depressed	Nondepressed
Help	$C_1$ <u>M</u> 3.0	$C_1$ <u>M</u> 3.6
	$C_1$ <u>SD</u> 3.46	$C_1$ <u>SD</u> 1.52
	$C_2$ <u>M</u> 3.0	$C_2$ <u>M</u> 2.8
	$C_2$ <u>SD</u> 2.35	$C_2$ <u>SD</u> 2.17
Control	$C_1$ <u>M</u> 2.6	$C_1$ <u>M</u> 3.2
	$C_1$ <u>SD</u> 1.52	$C_1$ <u>SD</u> 2.05
	$C_2$ <u>M</u> 3.8	$C_2$ <u>M</u> 5.2
	$C_2$ <u>SD</u> 1.92	$C_2$ <u>SD</u> 2.86
No Help	$C_1$ <u>M</u> 2.6	$C_1$ <u>M</u> 1.4
	$C_1$ <u>SD</u> 2.41	$C_1$ <u>SD</u> 1.52
	$C_2$ <u>M</u> 3.6	$C_2$ <u>M</u> 3.6
	$C_2$ <u>SD</u> 2.30	$C_2$ <u>SD</u> 2.61

Table 28

Means and Standard Deviations for Content:  
Opinions

	Depressed	Nondepressed
Help	$C_1$ $\underline{M}$ 3.0	$C_1$ $\underline{M}$ 2.6
	$\underline{SD}$ 2.45	$\underline{SD}$ 1.82
	$C_2$ $\underline{M}$ 4.2	$C_2$ $\underline{M}$ 3.6
	$\underline{SD}$ 2.78	$\underline{SD}$ 1.52
Control	$C_1$ $\underline{M}$ 3.0	$C_1$ $\underline{M}$ 1.8
	$\underline{SD}$ 1.41	$\underline{SD}$ 1.30
	$C_2$ $\underline{M}$ 3.2	$C_2$ $\underline{M}$ 3.8
	$\underline{SD}$ 2.95	$\underline{SD}$ 2.17
No Help	$C_1$ $\underline{M}$ 1.2	$C_1$ $\underline{M}$ 2.8
	$\underline{SD}$ 1.30	$\underline{SD}$ 1.92
	$C_2$ $\underline{M}$ 2.8	$C_2$ $\underline{M}$ 2.4
	$\underline{SD}$ 2.17	$\underline{SD}$ 2.07



Table 29

Means and Standard Deviations for Content:  
Total Content

	Depressed	Nondepressed
Help	$C_1$ $\underline{M}$ 23.2	$C_1$ $\underline{M}$ 19.4
	$\underline{SD}$ 8.76	$\underline{SD}$ 5.55
	$C_2$ $\underline{M}$ 20.6	$C_2$ $\underline{M}$ 25.8
	$\underline{SD}$ 7.06	$\underline{SD}$ 8.98
Control	$C_1$ $\underline{M}$ 16.2	$C_1$ $\underline{M}$ 18.4
	$\underline{SD}$ 7.29	$\underline{SD}$ 4.39
	$C_2$ $\underline{M}$ 27.4	$C_2$ $\underline{M}$ 26.0
	$\underline{SD}$ 9.81	$\underline{SD}$ 3.00
No Help	$C_1$ $\underline{M}$ 20.2	$C_1$ $\underline{M}$ 22.0
	$\underline{SD}$ 2.68	$\underline{SD}$ 7.14
	$C_2$ $\underline{M}$ 22.2	$C_2$ $\underline{M}$ 21.8
	$\underline{SD}$ 1.64	$\underline{SD}$ 4.21

Table 30

## Analysis of Variance for Content:

## Total Content

---

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Depression (D)	1	5.4	.13
Help (H)	2	2.52	.06
Confederate (C)	1	248.07	6.02*
D X H	2	.15	.00
D X C	1	4.27	.10
H X C	2	107.92	2.62
D X H X C	2	59.62	1.45
Error	48	41.2	
Total	59		

---

\* $p < .025$

---

The other confederate ( $C_1$ ) was given significantly more advice in the Depressed-Help condition than either confederate was given in the other conditions. Although a qualitative, impressionistic evaluation of the tapes by the researcher did not result in the detection of any patterned differences in the emotional tones of the subjects' reactions to the two confederates, significant differences were obtained.

## CHAPTER IV

### DISCUSSION

#### Hypotheses

The hypotheses of this study were: 1) subjects explicitly instructed to help a "depressed" confederate would feel more depressed, anxious, hostile, and interpersonally rejecting after an interaction with that confederate than would subjects not so instructed; 2) subjects removed from even the implicit injunction to help a "depressed" confederate by being told not to do so would be less depressed, anxious, hostile, and interpersonally rejecting after an interaction than subjects given no instruction; 3) subjects interacting with a "depressed" confederate would perceive that confederate as more depressed, anxious, and hostile after a brief interaction than would subjects interacting with a "nondepressed" confederate; 4) as a consequence, subjects would rate themselves more depressed, anxious, hostile, and interpersonally rejecting after interacting with a "depressed" confederate than they would after interacting with a "nondepressed" confederate.

These hypotheses were, for the most part, not confirmed. Subjects did perceive the "depressed" confederate as more depressed, anxious, and hostile, but this did not affect self-reports of the subjects' mood or of how ac-

cepting they were of the confederate. Subjects' reported affective states did not differ depending on whether they were told to help a "depressed" confederate, told not to help her, or given no instruction at all. Neither did their ratings of the confederate's interpersonal acceptability differ as a result of these instructions. Difficulties must, therefore, have existed in either the methodology or the underlying concepts of this study.

### Methodology

Initial examination of the results reveals definite evidence that the design did work to create the desired experimental conditions. Subjects clearly saw the "depressed" confederate as more depressed, anxious, and hostile than the "nondepressed" confederate. Further, subjects tended to see the "depressed" confederate as more revealing and to associate their perceptions of the confederate's anxiety and depression with how revealing they felt her to be. These results suggest that the subjects were responding to an emotional tone established by the confederate. As there were no differences between Depressed and Nondepressed conditions in terms of content, subjects could not have been using this to judge how revealing they felt the subject to have been.

From the content analysis, one can conclude that subjects instructed to help were active and direct in their



efforts to aid the confederate with support and advice. Those subjects instructed not to help relied much more on asking primarily information-gathering questions which were not specifically relevant to the problems the confederate was describing. These subjects were complying with the experimenter's injunction to "just do what you can to keep the conversation going."

The apparent success of these manipulations did not, however, cause differing reports of the subject's own feelings, or differences in interpersonal acceptance-rejection. Assuming for discussion that there may have been some real differences which were not detected by the measures employed, were there signs that for the purposes of this study, the MAACL and/or the questionnaire were insufficiently sensitive instruments?

On the contrary, the MAACL did suffice to distinguish subjects' perceptions of the confederate's mood state in the predicted direction. The findings that the subjects' self-ratings on the various scales of the MAACL correlated well with each other, as did the ratings of the confederate, were findings conforming to expectations for this instrument. There remains the possibility, however, that subject differences were all within a narrowly normal range too small for the MAACL to differentiate.

Another possible explanation for the MAACL's inability to detect subject differences is that the subjects reacted

defensively to this self-report measure. Subjects might have found it easier to rate the confederate more honestly than they did themselves and may have minimized their own feelings in their self-reports. There was little clear-cut evidence that the subjects were somehow masking their genuine feelings. There was a tendency for the subjects to consider the "depressed" confederate whom they were supposed to help as particularly attractive as a potential co-worker. This violates both the theory behind this study as well as common sense, and suggests something of a "reaction formation," in psychoanalytic terms.

Other than this sign of possible defensiveness on the questionnaire, it would appear that the interpersonal acceptance-rejection portion of the questionnaire was also an adequate instrument. In addition to its productive use elsewhere (Hammen and Peters, 1978), another argument for the validity of this portion of the questionnaire is the fact that the ratings of the confederate as potential acquaintance, co-worker, and friend were all positively correlated with each other, as would be expected. As with the MAACL, however, real differences may have been within a range too narrow for the questionnaire to detect.

Although there were few indications that the subjects were obscuring their emotional states, there is evidence that the subjects were responding to variables other than those intended as the focus of this study. Subjects asso-

ciated their own depression, anxiety, and hostility specifically with perceived hostility in the confederate. More importantly, there were confederate effects in the analyses of variance, effects which the design sought to avoid. Seeing one of the confederates as more anxious than the other, the subjects responded with more support, opinions, and total activity. The other confederate elicited a great deal of advice when she was "depressed" and the subject was attempting to help her. The latter two effects were due to the personalities of the confederates, while the first indicates that, across confederates, it was to the confederate's perceived hostility that the subjects were particularly responsive. Since merely an association can be determined by these correlations, one can only speculate as to cause and effect. It may have been that as the subjects' feelings intensified, their perceptions of the confederate's hostility increased. Equally difficult to explain would be the possibility that factors in the situation led subjects to be sensitive particularly to their perceptions of the confederate's hostility and to react accordingly.

That subjects' reports of their own feelings and interpersonal acceptance-rejection did not vary between Depressed and Nondepressed conditions is contradictory to Coyne's (1976b) findings. The differences in the two methodologies are instructive in the search for methodological problems



in the current study. Coyne's subjects interacted as they saw fit for twenty minutes by phone with clinically depressed patients. The additional controls in the current research, utilized in an attempt to investigate the hypotheses in a more tightly controlled laboratory setting, may well have caused restrictions in the design too severe for the hypotheses to be tested adequately. Given the brevity of the interaction, the subjects may not have had time to develop emotional reactions to the various tasks they were being given, or to the confederate's perceived depression. Similarly, subjects' perceptions of the confederate as more or less depressed, anxious, and hostile did not significantly alter their actions in the experimental situation. There probably was not time for the subjects to develop much beyond a very limited repertoire of interactive styles which did not reflect the differences in their perceptions of the confederate. Although this was most likely a constraint of secondary importance to simply the constraints imposed by the experimenter's instructions to the subjects in the Help and No Help conditions, a longer interaction time might have allowed the subjects to develop more differentiated strategies based on their perceptions of the confederate. It should be noted, however, that the choice for a five-minute interaction was made after observing from the pilot work that after about five minutes, and often before, subjects simply ran out of things to say.

The brevity of the interaction may also have worked against the creation of a situation eliciting the kinds of feelings there would be in an ongoing relationship or even one where there existed some explicit expectation that the relationship would be continued. The fact that these were stranger dyads can be equally implicated here. The design may not have been sensitive enough to the different processes in interactions between people in an ongoing relationship and those between strangers.

There was slight evidence that the dyads in the current study did not behave like other stranger dyads. Unlike Chaikin and Derlega's (1974) subjects, who rated disclosing intimate information to a stranger as inappropriate and maladjusted, the subjects' ratings in this study of how appropriate they thought the confederate to have been were positively correlated with how revealing they perceived her as being. This evidence is, however, much too slim to weaken the argument that testing global relationship issues in stranger dyads is of tenuous validity. Allowed by the brevity of the interaction, and greatly encouraged by the fact that they were interacting with a stranger with problems, subjects may have found it easy to keep in place defensive processes such as emotional distancing by keeping very much in mind that this was "just" an experiment. One subject admitted spontaneously that she was finding it hard to "take the whole thing seriously."



The subjects' behavior would be, then, consistent with their self-reports on affect, i.e., they acted differently according to the experimenter's instructions, but there was little or no specific affect associated with these actions, or with their differing perceptions of the confederate.

The fact remains that Coyne (1976b) found differences in stranger dyads. Other factors must be sought. In addition to the relative brevity of the interactions in the current study, Coyne's subjects engaged in a telephone conversation and not a face-to-face interaction. The heightened intensity of a face-to-face experimental situation would result in an increase in any tendency the subjects might have to respond defensively on the self-report measures. Subjects in the present study knew they were being audio-taped as well as observed by the experimenter. Many subjects appeared to the experimenter to be anxious over this, over the prospect of having to interact around personal issues with a stranger, and/or over trying to define for themselves the very general instructions given them. Particularly in the No Help condition, subjects commented during the debriefing that they found the experimenter's instructions very "frustrating" to implement. An impressionistic evaluation of the tone of the interviews indicated that indeed, No Help subjects appeared more nervous and hesitant than other subjects. These re-

actions did not make their way into the results. These observations do not prove, however, that the subjects responded defensively on the self-report measures. Their reactions may have, in fact, averaged out across conditions, or again the differences may have been too small for the measures to detect.

Whatever heightened in vivo quality may have been created by the face-to-face interactions of this study may have been more than offset by the fact that the confederate was role-playing, while Coyne (1976b) used depressed psychiatric outpatients. For instance, correlations in the Coyne study indicated that subjects' mood was more sensitive to the depression of the person with whom they interacted than to her hostility, as in the current study. Comparison is made difficult by the fact that Coyne's patients completed their own MAACL, while in this study subjects associated their depression, anxiety, and hostility to perceived hostility in the confederate. One can speculate, however, that the role-playing of the "depressed" confederate was not sufficiently powerful to induce the subjects to react to the confederate's "depression" in ways at all similar to how they would react to a genuine depressive.

A comparison of the MAACL means in the Coyne (1976b) study and the current study demonstrate, however, that the range of scores for the subjects' depression, anxiety, and

hostility, in response to a "depressed" presentation, was similar in both experiments. On the other hand, subjects in this study responded to the "nondepressed" confederate with higher ratings of their own depression, anxiety, and hostility than Coyne's subjects did to either nondepressed patients or normal controls. The "nondepressed" confederate here may not have elicited reactions based on perceptions of her as "nondepressed," but rather as relatively less depressed than the "depressed" confederate, and not sufficiently so to reduce the subjects' depression, anxiety, of hostility.

There is, then, the possibility that the confederate's role-play did not work to create distinct Depressed versus Nondepressed categories. In interacting with both the "depressed" and the "nondepressed" confederate, the subjects were responding to an identical set of problems. It may have been difficult for them to see the confederate as nondepressed, given the difficulties she was describing. By comparison, both partners in Coyne's (1976b) dyads were allowed to interact more freely in terms of content and time, perhaps allowing the development of more differentiated responses to the Depressed versus Nondepressed dimension of the study.

Although extensive analysis of the content of the interactions in the Coyne (1976b) study is not available, Coyne did find that the amount of time subjects spent

talking about themselves relative to talking about the other was smaller when that other was depressed than when she was not. Further, subjects talked relatively less about themselves and more about the other when that other was a normal control than when she was a nondepressed patient. The higher self-disclosure rate of those subjects interacting with nondepressed patients may be indicative of a more relaxed atmosphere in the Nondepressed condition than the present study was able to engender, given that the "nondepressed" confederate was still presenting herself as burdened by problems that required the subject's attention.

### Concepts

Given the scope of the methodological considerations involved in the failure of this study to substantiate its hypotheses, it is difficult to draw conclusions about the merits of the study's organizing conceptualization. Assuming for the sake of discussion that there may have been inadequacies in the basic concepts, one can speculate that the Help conditions worked in ways contrary to expectation.

Making explicit the injunction to help may have reduced, rather than increased, the intensity of the subjects' feelings. Part of the difficulty of interacting with a depressed person is often the apathy and vagueness around definitions of what it is s/he is really complaining about or what is needed. Part of the task in psychotherapy



with a couple can be thought of as an attempt to make explicit the problematic implicit messages on which each member of the couple acts. To have at least an explicit structure imposed on the interaction might well function to alleviate the emotional reaction to a depressive.

It is also possible that removing from their repertoire the natural choice of responding in a helpful fashion was affect-arousing for the No Help subjects, in that this served to increase the ambiguity of the situation for them. The comments of several No Help subjects that they found this condition very "frustrating" have already been noted. Whatever affect reduction may have been accomplished by the attempt to have the subjects not feel obligated to help may have been more than offset by the feelings aroused by having a prohibition placed on an otherwise likely mode of interaction. In clinical practice, one would counsel a marital partner not merely to stop behaving in a certain fashion but would help the patient work towards alternative, more productive behaviors. In the Liberman (1970) study, family members were taught to stop reinforcing a depressive's maladaptive behaviors and to reinforce constructive behaviors.

The conceptualization of the study can be seriously challenged at a more fundamental level. The methodological problems detailed previously must inevitably call into question the utilization of a laboratory paradigm to in-



investigate the hypotheses. The theoretical models of Tabachnick (1961), Feldman (1976), and Coyne (1976a) strongly suggest that it takes time and a whole complex of personal and interpersonal motivations for an interactional pattern to develop. Had there been more significant results in the current study, it would have been necessary to generalize only quite cautiously to processes beyond those pertinent to the initial stages of a relationship with a depressive. Coyne's (1976a) model clearly implies a number of stages to the elaboration of a depressive's interpersonal systems. It may well be that the kinds of interpersonal processes this study sought to examine in the laboratory are actually characteristic only of later stages, i.e., of relationships between intimates. This does not dictate that a laboratory paradigm is necessarily ineffectual, only that it would be more profitable to attempt to utilize a paradigm that avoids the conceptual and methodological difficulties inherent in utilizing stranger dyads in a brief interaction.

The assumption of this study that the emotional reactions elicited would differ only quantitatively from expectations for interactions with a genuinely depressed person is also questionable. One can reasonably speculate that in a relationship with a more chronically depressed person, a point is reached at which a qualitative leap occurs in the other's feelings about the depressive, en-

gendered by the intensifying conflict between the felt necessity of continued support and acceptance in the face of growing guilt and anger. The conceptualization of this study did not allow for the possibility that the processes under investigation might be peculiar to events following such a qualitative change.

### Conclusion

From previous comments it can be concluded that future research into the interpersonal systems of depressives should pursue direct investigation of ongoing relationships rather than laboratory simulations of relationships. This does not imply that a laboratory paradigm per se would be necessarily inappropriate. On the contrary, intense examination of a controlled portion of the interactions in a couple with an ostensibly depressed partner could prove to be quite productive.

In particular, the post hoc content analysis employed in this study was invaluable. A couple's interactions could be examined similarly. Judges could also rate a series of variables designed to explore the nonverbal concomitants of the couple's interactions, thus providing for comparisons with both members' self-reports. The current study would have been improved by less reliance on self-report, and future research should utilize more observer ratings to compensate for the potential complications of

self-report measures.

Evident is the necessity for extensive research into the environmental factors operating to maintain and encourage the depressive's world view. The depressive does not differ from anyone else in having internal processes critically affected by interactions with the environment, and the trend towards direct examination of those interactions can only serve to increase our understanding of the phenomenon of depression.

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## A P P E N D I X    A

## INFORMED CONSENT FORM

This experiment is an examination of different styles of interpersonal interaction. You will be asked to engage in a brief conversation with another person. One of you will be asked to decide on a topic of personal importance to you and then present that topic to the other person to start the conversation.

This conversation will be audio-taped and observed by the experimenter. The tapes will be used only for the purposes of the study. When the study is completed, the tapes will be erased.

Any questions you have about the procedures will be answered before the experiment begins.

I agree to participate in this experiment. I understand that I may withdraw my consent and discontinue participation at any time.

Signed: \_\_\_\_\_



A P P E N D I X    B  
I N F O R M A T I O N   Q U E S T I O N S

<u>Questions</u>	<u>Answers</u>
What year are you?	Junior.
What are the hard courses?	Zoology, Chemistry, Psychology.
What's your major?	Psychology.
Where are you from?	Greenfield.
What dorm do you live in?	John Quincy Adams.
Where does your boyfriend live?	Same dorm.
Where is he from?	Boston.
Did you meet him here?	Yes.
How long have you been seeing him?	About a year.
What are you doing for the summer?	That's still up in the air.

## A P P E N D I X C

## MAACL

1.	—	active	45.	—	fit
2.	—	adventurous	46.	—	forlorn
3.	—	affectionate	47.	—	frank
4.	—	afraid	48.	—	free
5.	—	agitated	49.	—	friendly
6.	—	agreeable	50.	—	frightened
7.	—	aggressive	51.	—	furious
8.	—	alive	52.	—	gay
9.	—	alone	53.	—	gentle
10.	—	amiable	54.	—	glad
11.	—	amused	55.	—	gloomy
12.	—	angry	56.	—	good
13.	—	annoyed	57.	—	good-natured
14.	—	awful	58.	—	grim
15.	—	bashful	59.	—	happy
16.	—	bitter	60.	—	healthy
17.	—	blue	61.	—	hopeless
18.	—	bored	62.	—	hostile
19.	—	calm	63.	—	impatient
20.	—	cautious	64.	—	incensed
21.	—	cheerful	65.	—	indignant
22.	—	clean	66.	—	inspired
23.	—	complaining	67.	—	interested
24.	—	contented	68.	—	irritated
25.	—	contrary	69.	—	jealous
26.	—	cool	70.	—	joyful
27.	—	cooperative	71.	—	kindly
28.	—	critical	72.	—	lonely
29.	—	cross	73.	—	lost
30.	—	cruel	74.	—	loving
31.	—	daring	75.	—	low
32.	—	desperate	76.	—	lucky
33.	—	destroyed	77.	—	mad
34.	—	devoted	78.	—	mean
35.	—	disagreeable	79.	—	meek
36.	—	discontented	80.	—	merry
37.	—	discouraged	81.	—	mild
38.	—	disgusted	82.	—	miserable
39.	—	displeased	83.	—	nervous
40.	—	energetic	84.	—	obliging
41.	—	enraged	85.	—	offended
42.	—	enthusiastic	86.	—	outraged
43.	—	fearful	87.	—	panicky
44.	—	fine	88.	—	patient

- |      |     |           |      |     |               |
|------|-----|-----------|------|-----|---------------|
| 89.  | ___ | peaceful  | 111. | ___ | sunk          |
| 90.  | ___ | pleased   | 112. | ___ | sympathetic   |
| 91.  | ___ | pleasant  | 113. | ___ | tame          |
| 92.  | ___ | polite    | 114. | ___ | tender        |
| 93.  | ___ | powerful  | 115. | ___ | tense         |
| 94.  | ___ | quiet     | 116. | ___ | terrible      |
| 95.  | ___ | reckless  | 117. | ___ | terrified     |
| 96.  | ___ | rejected  | 118. | ___ | thoughtful    |
| 97.  | ___ | rough     | 119. | ___ | timid         |
| 98.  | ___ | sad       | 120. | ___ | tormented     |
| 99.  | ___ | safe      | 121. | ___ | understanding |
| 100. | ___ | satisfied | 122. | ___ | unhappy       |
| 101. | ___ | secure    | 123. | ___ | unsociable    |
| 102. | ___ | shaky     | 124. | ___ | upset         |
| 103. | ___ | shy       | 125. | ___ | vexed         |
| 104. | ___ | soothed   | 126. | ___ | warm          |
| 105. | ___ | steady    | 127. | ___ | whole         |
| 106. | ___ | stubborn  | 128. | ___ | wild          |
| 107. | ___ | stormy    | 129. | ___ | willful       |
| 108. | ___ | strong    | 130. | ___ | wilted        |
| 109. | ___ | suffering | 131. | ___ | worrying      |
| 110. | ___ | sullen    | 132. | ___ | young         |

A P P E N D I X     D

# QUESTIONNAIRE

Please answer the following questions by circling  
a number on the scale under each question.

How much would you like this person to be an acquaintance of yours?

not at all 2 3 4 5  
a great deal

How much would you like this person to be working  
with you on a project?

not at all 1 2 3 4 5 a great deal

How much would you like this person to be a close friend of yours?

not at all 2 3 4 5  
a great deal

How revealing about herself do you feel the other person was?

not at all 1 2 3 4 5 extremely

How appropriate do you feel it was for the other person to tell you what she did?

1 2 3 4 5  
not at all \_\_\_\_\_ extremely

A P P E N D I X    E  
DEBRIEFING STATEMENT

The study in which you have just participated is an examination of how people respond to someone who is depressed. The particular hypotheses are that the depressive presents himself or herself as needing a great deal of help and that this arouses affect in others.

The person with whom you interacted is a "confederate." She is assisting in this study by role-playing either a depressed or a nondepressed style. Thus some subjects will be responding to personal problems presented by someone who acts depressed, while others will hear the same problems from someone who does not act depressed. Having these two situations enables us to examine how much of your response was specifically to the interpersonal style of the confederate. A confederate was used to insure that the stimulus presented was consistent for all subjects, a vital consideration in experimental research.

Some subjects will receive instructions to help the confederate as much as possible, others will be instructed to interact as they see fit, and still others will be told to do no more than encourage the other person to talk. We want to see if putting some subjects under explicit pressure to help the other person results in stronger reactions on those measures you were given. If it does, our



hypotheses will be supported. We believe that depressives in many ways communicate "I am needy" to their environment. This causes others to feel negative affect toward them and often reject them.

We ask you not to disclose the purpose of the study to anyone.

If you wish to know how the study turns out, please leave your name and summer address with the experimenter.

Thank you for your participation.



