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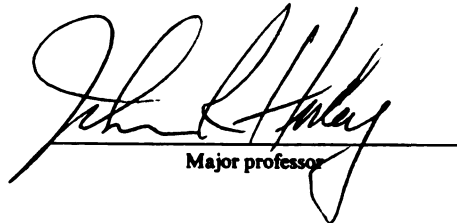
FOUR COPING STYLES AND INTERPERSONAL BEHAVIOR

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FOUR COPING STYLES AND INTERPERSONAL BEHAVIOR

By

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ABSTRACT

FOUR COPING STYLES AND INTERPERSONAL BEHAVIOR

By

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Attempting to extend prior evidence that two widely-used personality measures interactively relate to interpersonal behavior, the Marlowe-Crowne Scale (MCS) and Bendig's short form of Taylor's Manifest Anxiety Scale (B-MAS) were administered to 78 undergraduates in 16 small, mixed sex groups that each convened for about 50 hours during a ten-week period. Within-group interpersonal behaviors were rated on different occasions by all group peers and self on two instruments. Splitting participants by the median MCS and B-MAS scores formed four "coping style" groups: Low-Anxious (low MCS, low B-MAS), Repressors (high MCS, low B-MAS), High-Anxious (low MCS, high B-MAS), and Defensive High-Anxious (high MCS, high B-MAS).

The central hypothesis was that across a diverse set of interpersonal behaviors peers would rate Repressors the least effective and Low-Anxious the most effective. Employing a multiple correlation method, significant interactions of the MCS and B-MAS with the interpersonal measures were required to support the hypothesis, and relatively few were found. The five (of 15) peer-rated behaviors that did interact significantly generally yielded outcomes inconsistent with the main hypothesis. Peers did not rate the Repressors as least interpersonally effective nor the Low-Anxious as most effective.

Unexpectedly, Repressors were rated marginally most effective on certain variables.

Surprisingly, peers rated the Defensive High-Anxious as highest on anxiety and hostility, but lowest for insight, liking, and acceptance of others. Leaders of similar groups should be advised of the special interpersonal difficulties likely to be experienced by group members high on both anxiety and defensiveness if this finding is confirmed.

Consistent with a secondary hypothesis, Repressors used the narrowest range for rating the interpersonal behavior of self and others. This may reflect both their desire to be favorably viewed by others and related efforts to avoid interpersonal conflict. MCS scores consistently correlated negatively (significantly in 2 of 4 cases) with range. Considering other pertinent evidence (Hurley, 1986), this finding suggests that both rater's range and MCS tap defensiveness.

The unexpected outcomes seem partially attributable to a combination of sample characteristics and the comparatively broad criteria employed for constituting the present coping groups.

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INTRODUCTION

This study will examine the extent to which a personality questionnaire method of measuring four different styles of coping with or defending against anxiety will predict the interpersonal behavior of small-group members, as viewed from the vantage point of self and peers. Particular attention will be paid to the specific set of interpersonal behaviors expected to be differentially associated with the four styles. Of additional interest are discrepancies between perceptions of self versus others expected to be associated with the four different styles.

"Anxiety" and "defense" are concepts with a long tradition in psychology's attempts to understand both normal personality development and psychopathology. Their dynamic interaction has been portrayed by some theorists as the core around which the individuals' character evolves. As "character" is essentially expressed by stable differences in individuals' patterns of interpersonal behavior, this study will, in general terms, investigate whether particular styles of defense find expression in observed interpersonal behavior. What follows is a brief overview of how some of the more important theorists have conceptualized the nature and interplay of defense and anxiety.

Freud published his "final" theory of anxiety in 1925. Previously he had regarded anxiety as 1) a product of the build-up and nonrelease of instinctual energy (libido), or 2) a physical

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"transformation" of libido, that is, an expression of a drive that has been pushed out of consciousness. The final theory posited anxiety as a "signal" of the return of the repressed, a signal that serves under ideal circumstances to activate defenses. Defenses are thus directed toward the alleviation of anxiety related to unconsciously experienced threat. Freud's formulation of the functions and origins of anxiety and defense served to clarify the foundation on which the symptoms of the psychoneuroses develop. Although he elaborated a theory of normal development and explored how psychosexual fixation and sublimation can leave their mark on adult character, he did not concern himself with character or personality formation per se. Freud's primary interest was with ego's management of the dangers posed by instinctual drives and how symptomatology results when the ego is unsuccessful.

Wilhelm Reich was the first to systematically present a theory relating Freud's ideas regarding instinct, conflict, and defense to the formation of character. He posited that defenses against specific libidinal drives (oral, anal, phallic) can become generalized and rigidified "transformed into chronic attitudes, into chronic automatic modes of reaction" (see Shapiro, 1964, p. 7). While individual defense mechanisms serve to screen unitary conflictual drive impulses from awareness, the more global character defense or "character armor" develops to ensure that ego remains buffered from interpersonal relationships and other environmental stimuli that could activate the potentially disruptive chain of impulse, anxiety, and defense and/or symptom. To illustrate, a pervasively passive manner of interacting with others may serve to

insure that hostility from both outside and within is not consciously experienced (Reich, 1933, p. 96). Reich conceived of the basic infantile conflict as representing both the germinal core and the life-long rasion d'etre of character defense. Thus the passive individual, when fully pyschoanalyzed, might be found to be defending against patricidal rage. Of immediate relevance here is the close association posited between the genetic conflict, the defensive function of the ego, and the character of the individual.

At this early point in psychoanalytic thought, the "ego" had essentially been explicated only in terms of the defensive function it served within the psyche. Thus, the terms "ego", "character", and "defense" shared a good deal more common meaning than is the case today among contemporary analytic theorists.

Heinz Hartman and other ego psychologists, such as Anna Freud, expanded on Freud's understanding of the intrapsychic economics of instincts, anxiety, and defense to elaborate an "adaptive" perspective in which the person is seen as involved in a transforming interaction with the external world. From this interaction the individual develops stable modes (based on "ego functions" both genetically and socially determined) of navigating the environment and meeting instinctual needs. Thus, Hartman elaborated from Freud's conflict-based view of psychic structure and development, to a broader framework, in which both pathological and normal "character structure" might be understood (Hartman, 1958). Hartman was primarily interested in demonstrating that a) there are functions of the ego (e.g., memory, perception, intellect) that have

their origins outside of the clash of conflict, and b) that the social environment, in addition to infantile drive derivatives and conflicts, has a significant and continuing impact on the form and functioning of the ego. As Shapiro (1964) noted, Hartman and the other ego psychologists were not particularly interested, as Reich had been, with the question of "character types" or modes of interpersonal relating per se, but they did provide a more thorough-going theoretical ground from which to articulate how such stable patterns could evolve and be maintained.

Thus far in this brief overview a general shift may be observed from an essentially intrapsychic, id impulse based perspective on the linkages between anxiety, defense and character/personality to a more contextually based interpersonal view. Sullivan's conceptualization of the process represented a continuation of this trend. For Sullivan, personality dynamics were seen as revolving around an unabating motive to maintain self-esteem and avoid the anxiety which can emerge in any interpersonal situation. He defined the "self" as a "system within the personality, built up from innumerable experiences from early life, the central notion of which is that we satisfy the people that matter to us and therefore satisfy ourselves, and are spared the experience of anxiety" (Sullivan, 1964, p. 218). From infancy and throughout adulthood, anxiety may arise when we experience disapproval or rejection from others who are significant to us. As Sullivan suggests above, feelings of rejection can also emerge when memories derived from internalized representations or

"personifications" of self and significant others are activated in present interpersonal situations.

Defenses, or "security operations" as Sullivan more typically called them, are all those maneuvers the "self-system" uses to protect itself from experiencing anxiety. The greater the anxiety, the greater the potential threat to the person's security or self-esteem. Self-esteem is maintained, and anxiety averted, when we are able to hold positive conceptions of ourselves and perceive that these conceptions are shared by others. While we tend to behave in ways congruent with our positive self-image, security operations, such as selective inattention, work to insure that threatening incongruity does not enter conscious awareness. While acknowledging that no one functions without security operations and the distortions of social reality they entail, Sullivan stated that "mental health is achieved to the extent that one becomes aware of one's interpersonal relations. . ." (Sullivan, 1940, p. 207).

Unlike Reich, Sullivan was not inclined to speak of a set of personality typologies or traits. For Sullivan, "Personality was not the cause of behavior, but more the effect of social factors" (Rychlak, 1981, p. 352). Like Freud, Hartman, Anna Freud and Reich, however, Sullivan placed "anxiety" and "defense" in positions of central importance to his theory of both normal and pathological personality development and current functioning.

While the present study does not set out to support any one of the above theoretical positions against another,

it takes an interpersonal vantage point and has a decidedly Sullivanian flavor. Self- and peer-perceptions will be compared and the discrepancies between the two will be viewed as reflecting the distortion inherent to defensive processes. In what follows we will shift from the theoretical toward the empirical.

The field of experimental personality psychology became interested in "anxiety-reducing defense mechanisms" during the late '40 and early '50's by way of a series of perception experiments then dubbed the "new look" (Byrne, 1964). The basic premise, Sullivanian in character, behind these studies was stated by Bruner and Postman as follows (1947a).

"Perception is a form of adaptive behavior. Its operation reflects not only the characteristics of sensorineural processes, but also the dominant needs, attitudes, and values of the organism. For perception involves a selection by the organism of a relatively small fraction of the multiplicity of potential stimuli to which it is exposed at any moment in time".

In their prototypic experiment, Bruner and Postman (1947) examined individual differences in adaptation to threatening stimuli in the form of words with sexual and other potentially unsettling content. In the first stage of the experiment the undergraduate subjects were asked to associate to a range of words of varying estimated threat. Duration of response latency was used as a measure of the degree of actual threat posed, for that individual, by each of the 99 stimulus words. Two weeks later subjects were tachistoscopically presented with 18 words, with 6 words each being selected from each subject's highest, lowest, and middle range of response latencies. The 18 stimulus words were individually presented for increasing lengths of time until correctly identified.

Two distinct patterns of response to the threatening stimuli unexpectedly emerged. While one group of subjects showed the anticipated tendency toward increased delay in response to the more threatening stimulus words, the other group showed the reverse pattern of shorter response latencies to the more threatening words. In other words, one group adapted by avoidance and the other group adapted by approach to the threatening stimuli. These two patterns were labeled "perceptual defense" and "perceptual vigilance", respectively. Much experimental work followed from this ground-breaking study. (For reviews see Blum 1955; Eriksen, 1954; Golddiamond, 1958).

However, the methodology and some basic assumptions behind "perceptual defense" research came under increasing criticism. The reliability of the mode of measurement was questioned and the observed results, to cite one critic, could be more parsimoniously explained in terms of learning and familiarity with the stimulus, rather than as a reflection of an unconscious perceptual process. Despite this, interest grew in finding ways of empirically measuring the two adaptive or defensive styles. As Byrne (1964) wrote:

An examination of the perceptual studies and the subsequent work suggests rather strongly the presence of an approach-avoidance sort of dimension with respect to response to threatening stimuli. . . . these behavior tendencies appear to be fairly pervasive ones in that they are identifiable in perceptual responses, responses given to projective tests, behavior in learning and memory tasks, and in symptoms of maladjustment. Such relational fertility is a convincing argument for the value of pursuing this variable in further research. (p. 173).

Over roughly a five year period, through the work of several researchers, an 127-item Repression-Sensitization Scale, purporting

to measure this approach-avoidance dimension was derived from the MMPI. Each of the two ends of this scale were viewed as broadly encompassing two distinct sets of defense mechanisms. The avoidance or "repression" end of this scale was considered to be associated with mechanisms, such as repression, denial, and rationalization, that served to block awareness of threatening stimuli. The "sensitizing" end of the scale was, on the other hand, seen as related to those defense mechanisms, such as intellectualization and obsessive rumination, which aim to reduce anxiety by directly engaging, and thereby attempting to control, the threatening stimulus (Byrne 1964, p. 169).

The reliability of the final form of the R-S Scale was acceptable: internal consistency coefficient was reported at .98 and test-retest reliability after a three month period was .82. As the notion of repression-sensitization had developed out of work on perceptual defense, it made sense to examine whether the new scale would predict the expected differential response to threatening stimuli. In an unpublished doctoral dissertation, Tempone (1962) induced a failure experience in an anagram recognition task. Following this, subjects were tachistiscopically presented with a series of words among which the solved anagrams were interspersed. Repressing and sensistizing subjects did exhibit the expected response to the threatening (failure associated) words. Repressors showed increased recognition threshholds to threat, while the sensitizers showed the reverse pattern of diminished response latencies. This and several other published studies (e.g., Byrne et

al., 1963; Davison 1963; Gossett 1964) represented the first hopeful indications of the R-S scale's construct validity.

Studies were soon conducted relating the new measure of defense with a variety of personality variables. For instance, the R-S scale (with low to high scores representing a continuum from repression to sensitization) showed substantial negative correlations with the MMPI Hysteria, Lie, Defensiveness (K) and Ego Strength scales, while substantial postive correlations obtained with Depression, Psychasthenia, Neuroticism, and Social Introversion (Joy, 1963; Bell & Byrne, 1974). Other investigators have found the same pattern of higher R-S scores (i.e., in the sensitization direction) associated with greater self-reported distress or psychological maladjustment. While other studies which were not based on self-report indicated important differences between repressors and sensitizers, the strikingly high corrlations between the R-S scale and other personality measures has in recent times brought the "defense" interpretation of the scale into question.

Perhaps the most convincing evidence has been presented by those who, like Weinberger et al. (1979), argue that the R-S scale might best be thought of as an alternate measure of trait anxiety. For instance, Taylor's (1953) Manifest Anxiety Scale (MAS) and the R-S have been found to correlate from .87 to .94 (Abbott, 1972; Golin et al., 1967; Joy, 1963; Weinberger et al., 1979).

While the R-S scale is now less frequently employed as a measure of defensiveness, interest in psychometrically

operationalizing "repression" increased, and the R-S scale played a part in the development of a more valid method.

The point of departure in this process was the demonstration that the "repression" end of the R-S scale actually included two heterogeneous groups, "defensive repressors" and "nondefensive repressor" (Holroyed, 1972; Kahn, 1971; Lefcourt, 1969.). While both repressor types have low R-S scores, they were also differentiated on the basis of high or low scores on the Marlowe-Crowne Scale, which is used as the measure of defensiveness (Crowne & Marlowe, 1964).

Readers are likely aware that the Marlowe-Crowne Scale (MCS) was originally constructed as a measure of "social desirablity"; or the tendency to respond to test items in a socially acceptable or self-enhancing manner (Crowne & Marlowe, 1960). Since its inception, researchers have increasingly come to a broader view the scale (for review see Evans, 1980). The empirical support for the present "defensiveness" interpretation of the MCS will be elaborated in the next chapter.

The "defensive repressor" (high MCS scorer) was said to be characterized by "perceptual defense", avoidance of threatening cognitions and affects, and other manifestations of maladjustment. Their low R-S scores were viewed as reflecting defensive distortion. On the other hand, the low R-S score of the "nondefensive repressor" was regarded as accurately depicting their lack of maladustment and an attendant clearer perception of both internal and external

reality (Kahn & Schill 1971; Schill & Altzoff 1968, Schill & Black, 1969; Schill, Emmanuel, Pederson, Schneider, & Wachowiak,1970).

Recognition by some researchers that the R-S scale could be more accurately and econonically understood as a measure of manifest anxiety rendered obsolete the rather confusing terminology of "defensive" and "nondefensive" repression. While these terms were used as recently as 1981 (Nielson & Fleck), greater clarity results from simply relabelling R-S as anxiety, the term earlier applied to the MMPI primary factor. Increasingly, however, researchers have come to simply use an anxiety measure, such as the MAS, in the first place.

Employment of the MCS with a trait anxiety index permits differentiation, by way of a two by two matrix, of four styles of coping with or defending against anxiety. Low and high anxiety groups are each subdivided into two additional groups. Thus, the high MCS - low anxiety group has been labeled "repressors"; the low MCS - low anxiety group is labeled "low-anxious"; high MCS - high anxiety group has been labeled "defensive high anxious"; and finally, the low MCS - high anxious group has been labeled "high-anxious" (Weinberger et al. , 1979; Asendorpf et al., 1983; Doster, 1975). One clear advantage of this set of terms over those employed by the repression-sensitization researchers, is that the measure of defense and that which is defended against, that is, anxiety, are differentiated and correspond to variables posited by personality theoreticans since Freud. Important questions about the MCS remaining largely unanswered include: a) what specific sorts of

defenses the MCS measures, and b) what types of internal threats are actually tapped by a paper and pencil anxiety measure? Despite these questions. this four-way classification system appears to be a very useful one, as will become evident in what folows.

Doster (1975) was apparently the first to look at differential performance of groups of subjects representing these four quadrants, in a study on the objectively rated performance and self-perceptions of subjects in a structured, therapy analogue interview. The interview followed three weeks after a "role induction" session in which the nature and benefits of verbal self-exploration were described. During the structured interview subjects were instructed to self-disclose about six individually presented topics. Before the interview subjects had been asked to anticipate both their levels of comfort and self-disclosure in relation to each topic. Following the experiment subjects rated themselves on their _actual_ levels of comfort and self-disclosure. The taped interviews were objectively judged on amount of disclosure, speech duration, silence quotient, reaction time following presentation of the topic, and frequency of inquiry.

On the basis of prior research (see Evans, 1982 review) the two groups scoring lower on the MCS would be expected to disclose more than the two groups with higher MCS scores. While the low defensive-low anxious, "better adjusted" group was judged as most disclosing (and most verbal) they were, surprisingly, only slightly more so than the high defensive -high anxiety group. Both the high defensive-low anxiety "repressors" _and_ the low defensive-high

anxiety "vulnerables" were significantly less dislcosing than the above mentioned groups. While these findings were not entirely consistent with predictions, Doster also reported interesting findings related to other behavioral and self-report dimensions.

Of particular note were intergroup variations in degree of agreement between subject and judge-based ratings of disclosure. Only the low defensive (low MCS) subjects, whether low or high on anxiety, achieved significant correlations between the cross-source (self and judge) ratings on self-disclosure. Additionally, all groups except the high defensive-low anxiety "repressors" obtained significant linkages between depth of self-rated disclosure (disclosure being the assigned task) and time spent verablizing about each topic. Finally, only for the two low defensive groups was there a significant relationship between reported comfort in talking about a topic and the depth of judged self-disclosure. In other words, the low defensive subjects reported higher levels of comfort when talking more intimately. In summarizing these and other findings, several conclusions (Doster, 1975) were offered:

The sensitive behavioral impressions shown by the low defensive individuals may reflect a greater integration of cognitive, emotional, and expressive components of interpersonal behavior. The behavioral correlates of their self-perceptions closely approximated their pattern of verbal behavior in which depth of self-exploration varied with duration of speech and lengthy silences. Finally, the direct relationship between their levels of personal comfort and depth of self-disclosure provides further evidence of integrated experiencing among low defensive individuals.

In several respects the role-induction procedure was least effective with high defensive-low anxious individuals (repressors) . Their low level of self-exploration and relative lack of integration among behavioral components are indications of the defensive distortion and control attributed to this group.

Weinberger, Schwartz, and Davidson (1979) conducted a study which further explored Doster's notions of "integration of components" (in this case physiological, subjective, and behavioral) comparing persons with repressive, low-anxious, and anxious coping styles in their response to a phrase-association task which included neutral, sexual, and aggressive phrases. During the phrase association task three physiological measures were also used including heart rate, spontaneous skin resistance, and forehead muscle tension. At the behavioral level, reaction time and verbal disturbance were measured. Following the task, individuals were asked to rate their awareness of a variety of bodily reactions; and completed several personality measures one of which differentiated between cognitively and somatically experienced anxiety.

While two groups of subjects had claimed low anxiety on the MAS prior to the experimental task, they showed markedly different patterns of response on the dependent measures. The repressors (again, defined by high MCS and low MAS trait anxiety scores) showed a consistent discrepancy between self-avowed and physiologically and behaviorally assessed anxiety. Repressors' performance on the phrase association task was characterized by higher (generally significantly higher) content avoidance and increasingly slower reaction times for sexual and aggressive phrases. Their higher anxiety level was further confirmed by higher levels of verbal interference, heart rate, sweat gland secretion, and forhead muscle tension. Across most of these same measures, "high anxious" persons showed a level of response falling between that of the low anxious and repressor groups. Thus, those who reported <u>low</u> trait

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anxiety, in combination with <u>high</u> defensiveness scores, actually exhibited the highest degree of distress during the experimental task.

Curiously, these three groups did not differ in terms of reported awareness of physiological responsivity during this experiment, this despite the fact that the repressors were internally undergoing an exceptionally high intensity of reaction. Further evidence of the repressors' poorer "integration of components" was also apparent in their performance on a trait anxiety measure (given prior to the task) containing cognitive and somatic subscales. Only the repressors showed a signifcant discrepancy between the two subscales, rating self lower on cognitively than on somatically-experienced anxiety.

An interesting pattern of results also emerged when pre and post-experiment trait anxiety scores of the three groups were compared. The low anxious persons' scores remained relatively stable, while the repressors actually became even more entrenched in their defensive denial of anxiety. Investigators reported that all repressors, without exception, reported lower post-test than pre-test trait anxiety. The high anxious persons showed the reverse pattern, rating themselves significantly <u>more</u> anxious at post-test, their awareness of their own stress during the phrase association task apparently resulting in a shift in self-perception.

One finding of this study has particular relevance to the present study in that it relates to how these "coping styles" can come to be reflected in self-evaluation and interpersonal

orientation. Participants were presented with the final task of briefly "describing their most important characteristics" (p. 379).

As stated by the authors, "The repressors preoccupation with mastering negative emotion and rigorously controlling their behavior was particularly striking. They clearly value a rational, nonemotional appraoch to life. . . Each statement reflects the central importance to repressors of cognitive self-control". For example, "not overly worried, I reason rationally", "utilitarian", "I usually plan whatever I do", "I do not get upset very easily", "subjugate emotion". In contrast, low anxious persons described themselves in ways that emphasized their spontaniety, flexibility and interest in interpersonal relationships. To illustrate, "like being with people", "outgoing friendly person", "open, happy, active". The self-descriptions of the "high anxious" (intermediate MCS and high MAS) subjects tended to reflect, by contrast, a somewhat more negative and interpersonally withdrawn view of self. Some examples were, "shy, worried about what others might think", "quiet uncomplaining", "slow in making friends", "independence. . . sometimes to the point of alienation" (Weinberger et al, 1979, p. 378).

In an important subsequent study Asendorpf and Scherer (1983) attempted to replicate and extend Weinberger's et al.'s work. As in that prior study, male undergraduates were asked to give associations to phrases of sexual, aggressive, or neutral content. During the task sujects' pulse rates were measured and facial responses where recorded via hidden video camera. At the end of the

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task subjects rated the intensity of their own emotional responses on a five point scale. Those emotions rated included, anxiety, happiness, anger, and sadness. Judges rated the video tapes over a range of emotions including, expressive, happy, anxious, angry, and surprised. A range of emotional reactions were included in both self-ratings and judges ratings in an effort to test the hypothsesis that predicted group differences in anxiety might also be applicable to other emotions as well. Following the association task subjects viewed three short movies (neutral, funny, neutral) during (or as the case may be, following) which each of the preceeding measures was employed. These conditions were added to "control for differences in emotional reaction unrelated to anxiety". Before describing their results in more detail, it is interesting to note that it was only in relation to group differences in anxiety that significant results were observed. Thus, the Marlowe-Crowne Scale may specifically be viewed as a measure of the tendency to deny anxiety.

Weinberger's study had included three of the four possible groups from the two by two matrix formed by defensiveness and anxiety. Asendorpf and Scherer included a defensive high anxious group in addition to the three groups (low anxiety, repressors, high anxiety) Weinberger had studied. Specific predictions for each of the four groups were made in terms of differential performance across a) self-rated, b) autonomically measured (heart rate), and c) objectively judged facial response.

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After all scores were baseline corrected, the following patterns of results emerged. Repressors reported low anxiety after the anxiety provoking association task yet showed high levels of anxiety both facially and autonomically during the task. The low anxious subjects, showing the opposite pattern, rated their anxiety at intermediate levels after the association task, although they exhibited low levels of facial and autonomic anxiety during the task. The high-anxious group showed high levels of anxiety across all three behavioral modalities, while the defensive high-anxious group scored at consistently intermediate levels on each of the three.

The investigators view the finding that repressors show high facial anxiety as supporting the hypothesis that these individuals tend to be "self-deceptive" as opposed to "other deceptive" in their reports of low anxiety. In other words, their denial of this affect is most likely the result of a process that takes place out of conscious awareness-- the title "repressor" thus fits rather well. One original finding of this study, as noted above, was that it is "anxiety" and not other emotions that is defended against. And it appears that it is specifically sexual or aggressive stimuli that activated increases in heart rate and facial anxiety. In all of this, one hears echoes of classical pyschodynamic theory.

The present construct of "defensive" or "coping styles", defined by the particular organization of trait anxiety and MCS defensiveness scores, describes not only responses to specific potentially threatening stimuli, but may also generalize, as

Weinberger's findings suggest, to encompass more global ways of navigating the interpersonal world. When placed in an social situation in which a high premium is placed on self-revelation, affective responsiveness, and genuine communication, how might persons representing of the four coping styles respond? Will they be seen in particular ways by others? And how will they perceive their own behavior in such circumstances? These questions will be explored in the present study.

While modeled after the three studies reviewed thus far, this study will differ methodologically in some important ways. In each of the cited studies, subjects were selected from samples depending on the combination of high or low scores on the Marlowe Crowne and the anxiety measure. To form the experimental groups on which t-tests and ANOVA were performed, each study excluded over half of the original subjects (112, 200, 210 in order of presentation) to insure that final groupings represented "the extremes" of MCS and anxiety scores. Both measures represent continuous variables, but have been treated by the investigators above as discrete. As a result, much information is lost about the two variables effects across a wider distribution of scores.

This study will employ the data from the entire sample of subjects for whom full data sets were obtained, 78 subjects. Instead of using a t-test or ANOVA design, multiple regression will be employed. This method will be used to determine main affects attributable to both defensivenss and anxiety as well as the additive effects of the two variables combined. If interactive

effects are found to be significant, then the next step will be to unravel the specific nature of these interactions. The method to be employed, detailed in the methods section, will permit statements about each of the four "coping" groups investigated in the germinal studies on which this study is based.

METHOD

Participants

Participants in this study were 86 male and female undergraduates enrolled in an upper level psychology course entitled, "Small Experiential Groups for Interpersonal Learning". Data were collected from group members enrolled in the ten-week course in one of three terms. Subjects were informed that participating in this study was strictly voluntary and not a course requirement. The 78 persons who completed all measure were included in this study. Of these 78, 37 were male and 41 were female.

Groups

In accordance with the usual course procedure, participants were divided into groups composed of from four to seven members. Group assignments were made primarily on the basis of members' scheduling constraints. Other related priorities included efforts to balance males and females in each group and to insure that friends and acquaintances were placed in different groups. There were a total of 16 groups. Each group was led by one or two facilitators. The facilitators were either clinical psychology graduate students or, more typically, former group members who had received training in group leadership. Facilitators were not counted among the 78 participants of the study, although their ratings of others were included.

Over the course of the ten week term, each group met for a total of about fifty hours; two 90-minute sessions per week and two 12-hour "marathon" sessions usually conducted near the third and seventh weeks of the term.

Measures

Trait Measures

In the first week of the term, all group members were given a 53 item true-false inventory (see Appendix B) combining the 33 items of the Marlowe-Crowne Scale (MCS) and the 20 items of the Bendig Short Form of the Manifest Anxiety Scale (B-MAS).

Originally the MCS was constructed as a measure of "social desirability", the differential tendency to respond to test items in a socially desirable manner (Crowne & Marlowe, 1960). While its psychometric characteristics were satisfactory, exactly what the scale measured remained ambiguous. Several years after its inception, Crowne & Marlowe (1964) reinterpreted the scale as actually measuring the "need for approval". Still more recent findings strongly suggest that MCS actually measures, not so much approval seeking, but the "defensive avoidance of social disapproval" (Asendorpf et al., 1983, p. 1335) or "defensive denial of those aspects of experience which are uniquely and individually threatening to the self-concept or ego integrity of the individual" (Millham & Kellogg, 1980, p. 457). While the the MCS continues to be used to assess the extent to which other scales are "saturated by social desirability", in spite of strong evidence discrediting this

notion (McCrae & Costa, 1983), researchers have increasingly employed the MCS as a measure of an individual difference variable (for reviews, see Strickland, 1977; and Evans, 1980). Other pertinent MCS studies will be introduced as needed in the discussion section. The experimental support for the present use of the MCS in defining four coping or defensive styles has been reviewed in the introduction.

Bendig's (1956) short form of Taylor's (1953) Manifest Anxiety Scale, is composed of the 20 most predictively valid and internally consistent items from the original 50-item form. The scale is considered interchangeable with the longer form and was used in one of the studies upon which the present work was modeled (Weinberger et al., 1979). The MCS and the B-MAS (or MAS) have been found to correlate between the - .2 to - .45 range (Millimet, 1970).

Interpersonal Measures

Two different rating scales of interpersonal behavior were employed in this study. One rating scale was administered twice, at roughly the third and seventh weeks of the term, and the other scale was administered once at about the eighth week of the term. The twice-administered measure was used to tap what has repeatedly been found to be the two basic dimensions of interpersonal behavior (see review by Hurley, 1980). The dimension labels used in this study will be those applied by Hurley: ARO (acceptance vs. rejection of others) and ARS (acceptance vs. rejection of self). The latter rating scale, devised by this researcher specifically for use in
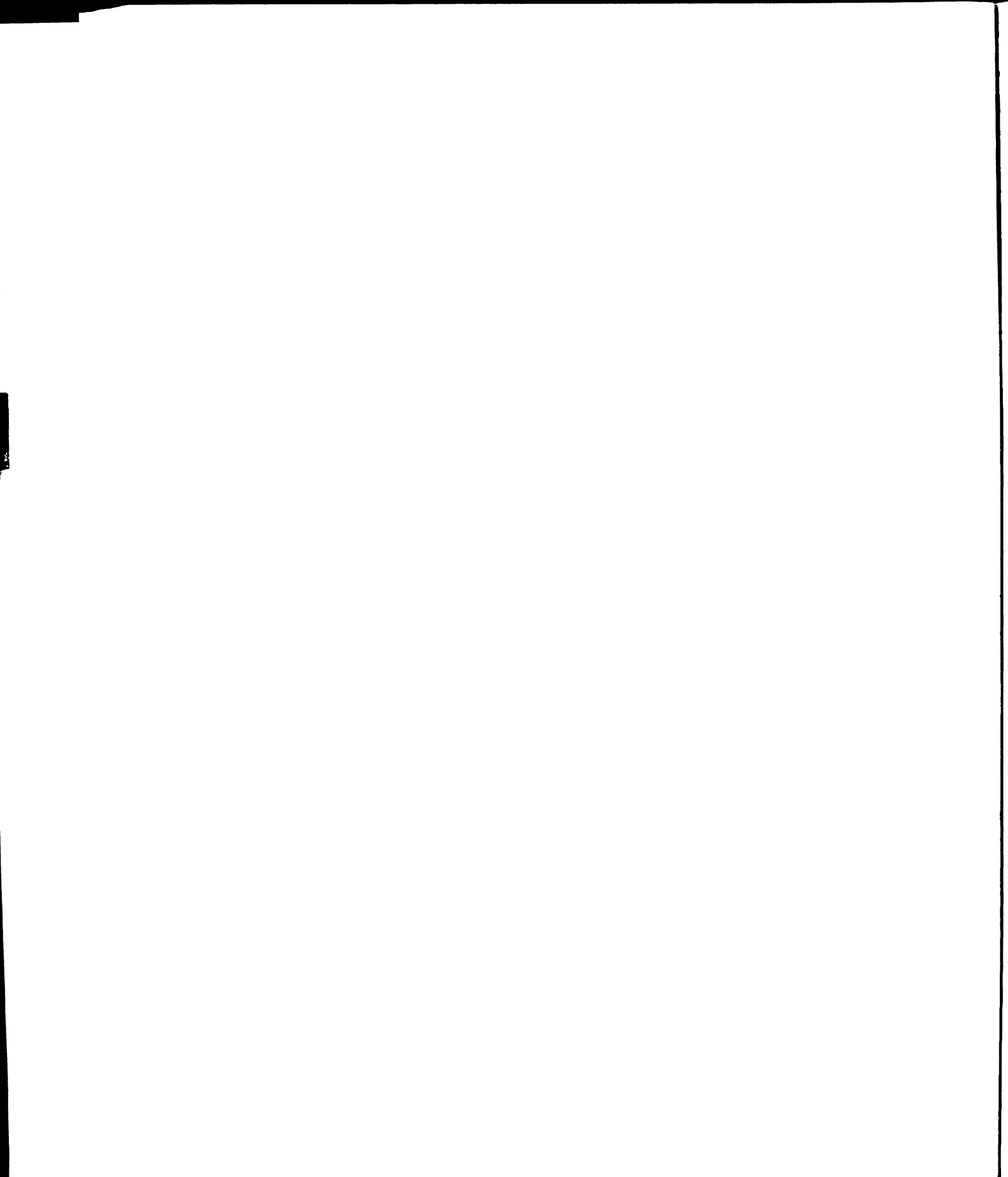
these groups (Myers, 1985), was constructed to allow assessment of eleven "narrow band" interpersonal behaviors. Both measures are described in greater detail below.

The first measure, which yields ARS and ARO scores, was constructed by Hurley to serve as a time efficient means of gaining the same basic information provided by, among numerous other examples, the Interpersonal Checklist (ICL), Interpersonal Behavior Inventory, or Charts of Social Behavior (LaForge and Suczek, 1955; Lorr et al., 1965; Benjamin, 1979). The Hurley Interpersonal Rating Scale (HIRS) is composed of eight bipolar semantic differential scales, with four scales representing each of the two dimensions. Several studies (Hurley, 1976; Hurley & Rosenthal, 1978; Small and Hurley; and Hurley, 1986) have firmly supported the convergent, discriminant, and construct validity of ARO and ARS measures. Group member's were instructed to rate (from 0 to 9) all members of their group, including self, on each of the eight scales. The four ARS subscales are Shows Feelings--Hides Feelings, Expressive--Guarded, Active--Passive, and Dominant--Submissive. The parallel ARO subscales are Warm--Cold, Helps Others--Harms Others, Gentle--Harsh, and Accepts others--Rejects others. Scores from these eight subscales (four representing each dimension) are then summed to form ARO and ARS composites. Self-ratings and those given by peers are tallied separately to permit their separate comparison on each dimension. All peer-ratings of each member were summed and divided by the N of group members.

The Group Interpersonal Rating Scale (GIRS) is a 24 item measure composed of 11 miniscales each of which is represented by two or, less typically, three items (see Appendix C). Participants were asked to choose on a five point Likert scale how well the item describes each member's within-group behavior. The miniscales are the outcome of a multiple groups confirmatory factor analysis on a set of 50 original items constructed by the author. The eleven final scales all have high internal consistency (coefficient alphas of .86 or above) and showed sufficient independence from each other to support their inclusion (Myers, 1985). While it is very likely that these scales are reducible to the ARS and ARO factors or dimensions, they were devised to provide, in a brief amount of time, a broad and highly differentiated profile of a group member's range of interpersonal behaviors as viewed by both self and peers. Certain of these scales may be viewed as encompassing non-situation specific types of behavior, while others are more clearly pertinent to a group therapy or interpersonal learning group situation. The scales are labeled as follows, Participation, Intimacy, Insight, Anger Acknowledgement, Interest in Feedback, Caring, Hostility, Group Investment, Self-Effacement, Anxiety, and Liking.

As will be the case with the two HIRS dimensions, total scores on individual scales will be summed across peers/raters, and divided by N of raters, to yield a mean score on each scale for each group member. The means may then be compared with the member's self-ratings on each scale. For HIRS dimensions and GIRS subscales,

the differences between the peer and self-ratings (P-S) will be calculated and will referred to as "discrepancy scores".

One additional derived measure labeled "rater's range" will be examined in this study. Rater's range refers to the range of scores an individual is willing allot when rating own and peers behavior. Hurley (1986) notes that while rater's range has been studied by other investigators (Saal, Downey, & Lahey, 1980; Schmitt and Lapin, 1980), little attention has been focused on the interpersonal correlates of range. Examining rater's range computed on the two HIRS dimensions, Hurley (1986) found that narrower-range group members tended to give all group members, self included, higher ratings than did wider-range members. Interestingly, peers tended to view the narrow-range user as nonassertive (low self-acceptance) and as extremely friendly (other-accepting). In contrast to members with narrower ranges, the wider-range members were viewed as "moderately" friendly and relatively more assertive. Hurley concluded that narrower-range members "seem mainly oriented toward avoiding interpersonal tensions through a nonassertive and overly deferential manner while harboring an inflated view of self". By contrast "the wider-range users' interpersonal posture appears more open, better-balanced, and noninflated".

In the present study MCS measured defensiveness will be expected to correlate with narrower range as computed on the two HIRS dimensions. More specific predictions will be put forward in the following chapter.

Procedure

As previously described, the Marlowe-Crowne and Bendig MAS were administered in the initial full class meeting. At this time the general nature of the study was explained as dealing with variables related to group members perceptions of each other. Both orally and in written instructions, it was explained that participation in the study was strictly voluntary and could be ceased at any time. Participants were advised that their scores on the personality measure, and ratings from the GIRS would remain fully confidential. As the HIRS has traditionally been used as feedback device in this small group oriented course, members were also aware that these ratings would be shared within each group.

The HIRS was administered in approximately the third and seventh weeks of the groups, about 21 and 42 hours into each group's life. It takes approximately 15 minutes to rate all members of a group including self. Members were allowed several days to complete and turn in their rating packets. After the results were compiled, each member was given complete feedback about how s/he had rated and been rated by each other group member on within group behaviors. Each group typically spends an hour or more reviewing, clarifying, and reacting to (or silently stewing over, as sometimes happens) their ratings in the group's subsequent session.

The 24-item GIRS was distributed and completed during the eighth week of the term. The average amount of time needed to finish these ratings was estimated to have been about twenty

minutes. As noted above, members were assured that GIRS data would remain confidential. Full data sets (MCS, B-MAS, HIRS, GIRS) were obtained from 78 out of 86 potential participants. Two members dropped out of their groups prior to the administration of the GIRS, and six members chose not the complete the GIRS.

HYPOTHESES AND METHOD OF ANALYSIS

The following hypotheses are primarily based on the results (see previous section) of Weinberger, et al. (1979) and Asendorpf et al. (1983), who compared repressors with the other coping types and found that repressors manifested defensive avoidance of negative affects; particularly anger and anxiety. Weinberger et al. gave · additional evidence that coping styles may also be more generally reflected in stable modes of interpersonal relating.

In general the Repressors are hypothesized as the most defensive and least interpersonally competent group and the Low Anxious as the least defended and most interpersonally competent group. The remaining two groups are expected to fall in between these two; more specific predictions will be made below.

In the interest of conciseness and clarity, the Marlowe-Crowne Scale (MCS) will at times be referred to as the measure of "defensiveness" and the Bendig Manifest Anxiety Scale (B-MAS) as the measure of "anxiety" or "trait anxiety". Additionally, each of the four coping groups will be referred to as follows:

a) Low-Anxious (LA)   = Lower MCS and Lower B-MAS

b) High-Anxious (HA)   = Lower MCS and Higher B-MAS

c) Repressors (REP)   = Higher MCS and Lower B-MAS

d) Defensive High-Anxious (DHA) = Higher MCS and Higher B-MAS
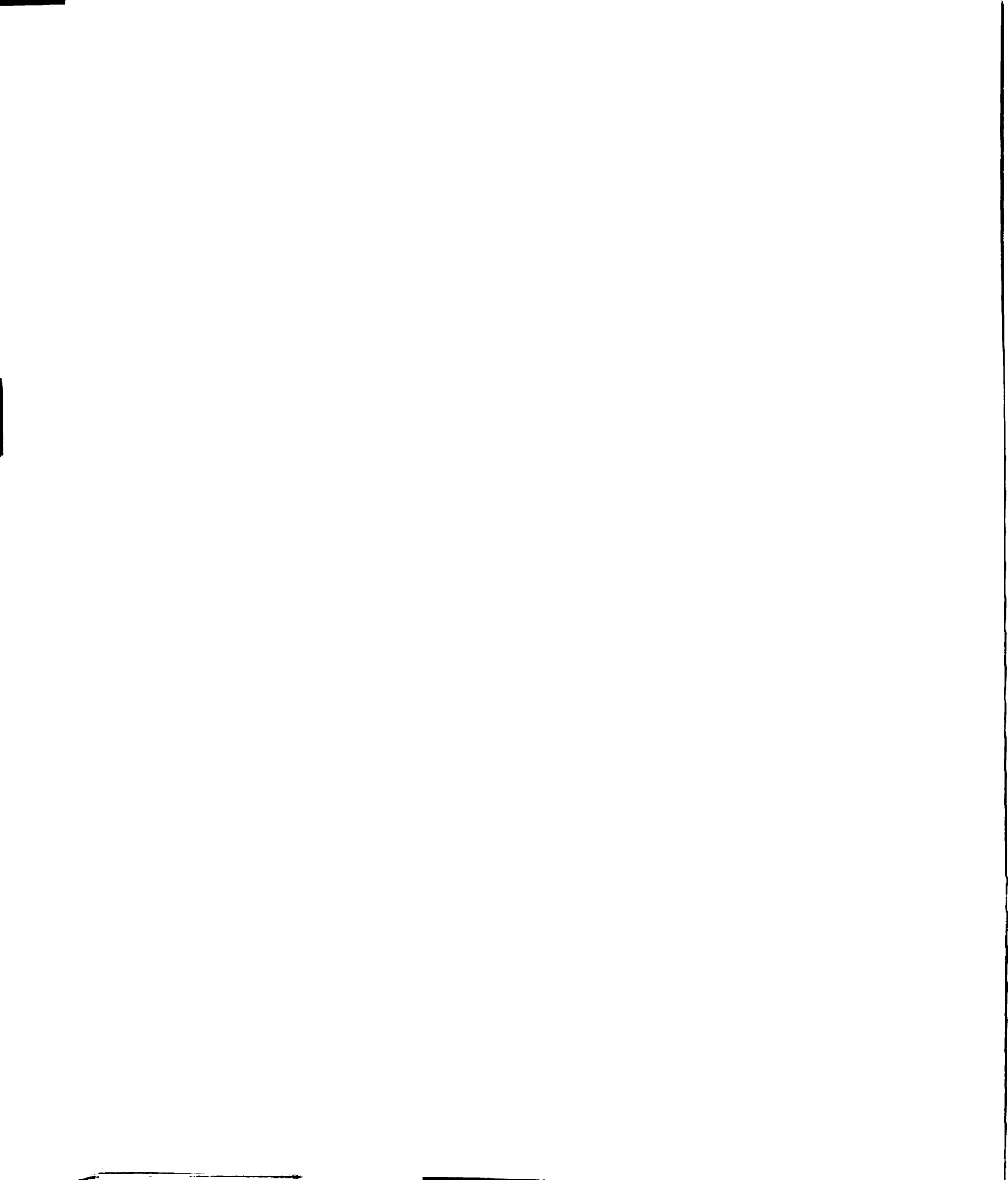
Peer-Ratings

Hypothesis 1a:

There will be an interaction between defensiveness and anxiety with regard to peer-ratings of interpersonal behavior, such that Repressors, among the four groups will receive the least favorable peer evaluations. By contrast, the Low-Anxious group will receive the most favorable peer evaluations. Between these two groups, the Defensive High-Anxious will be rated less positively than the High-Anxious group. In summary, LA > HA > DHA > REP.

Hypothesis 1b:

When the simple main effects of MCS defensiveness are considered individually, higher MCS scores will be associated with less favorable peer evaluations.

Self-Ratings

Hypothesis 2a:

There will be an interaction between the defensiveness and anxiety variables such that the Repressors will rate themselves most favorably, when compared with the other three groups, across all interpersonal variables. No specific predictions are made in relation to the remaining three groups.

Hypothesis 2b:

When the simple main effects of MCS defensiveness are considered individually, higher MCS scores will be associated with more favorable self-evaluations on all interpersonal variables.

Peer-Rating and Self-Rating Discrepancy

Hypothesis 3a:

The independent variables will interact such that Repressors, when compared with the other three groups, will be found to have the largest peer-rating/self-rating discrepancy scores. The Low-Anxious group will have the smallest degree of discrepancy, followed by High-Anxious, and Defensive High-Anxious. In summary, on magnitude of discrepancy: Rep > DHA > HA > LA. Since a majority of members tend to be self-overraters the "peer minus self" formula is expected to produce (in sum) negatively signed discrepancies for all groups.

Hypothesis 3b:

When the simple main effects of MCS defensiveness are considered individually, higher MCS scores will be associated with larger (negatively signed) peer/self discrepancy scores on all variables.

Rater's Range Scores

Hypothesis 4a:

The independent variables will interact such that Repressors will use the narrowest range of ratings in evaluating peers (see method section for description of "range"). Low-Anxious Members will use the largest range. The remaining two groups will fall between these two, with the DHA group showing a narrower range than HA. In Summary, the results on rater's range will be as follows: Rep < DHA < HA < LA.

Hypothesis 4b:

When the simple main effects of MCS defensiveness are considered individually, higher MCS scores will be associated with narrower rater's range scores.

In this study, peer-ratings (as opposed to self-ratings) will

be considered the closest accessible approximation of "objective

reality" of interpersonal behavior.   While it is certain that

peers may construe what they observe in ways that may systematically

distort "objective reality", and in so doing influence the
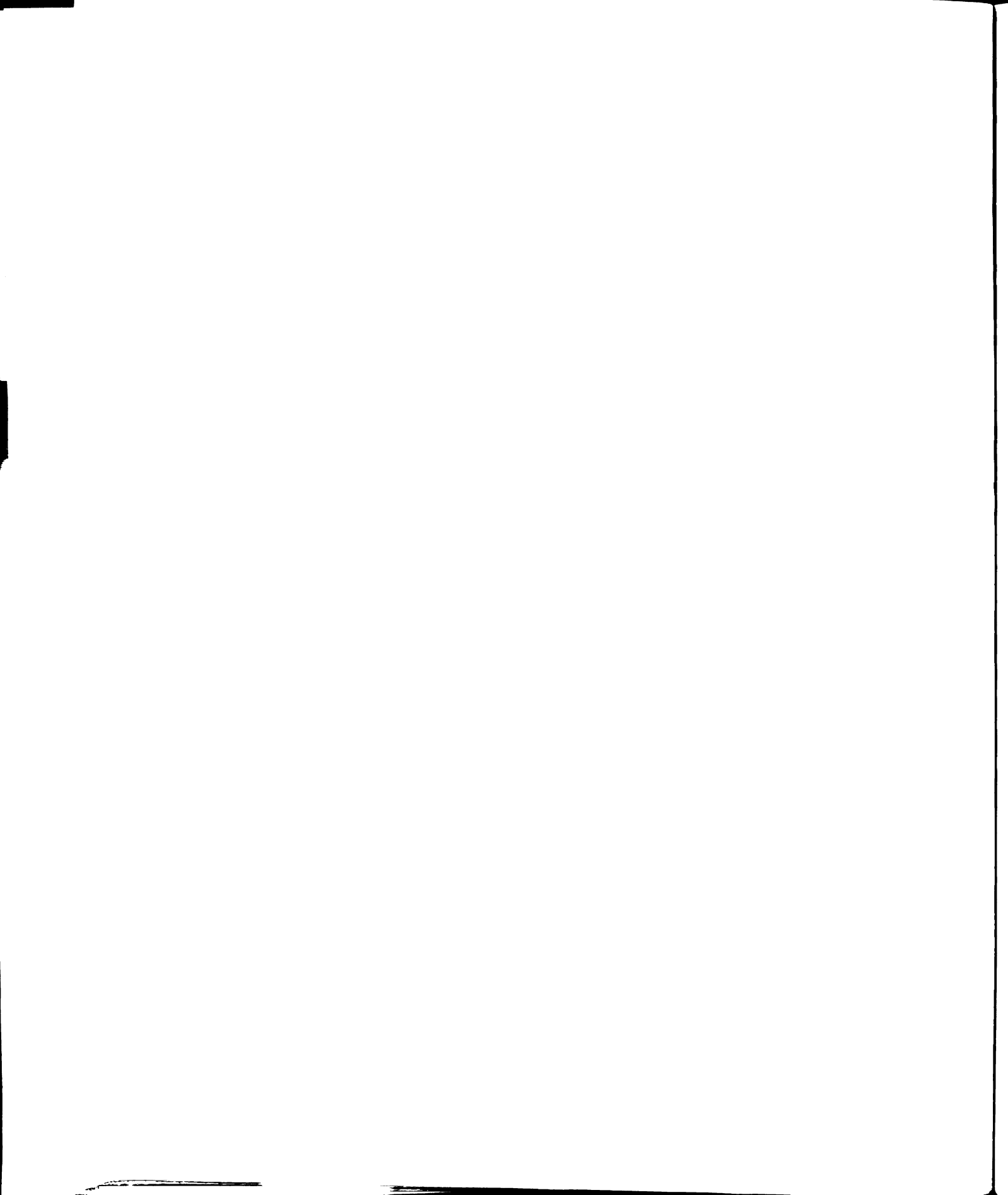
interpersonal phenomenon taking place, this amalgam of accurate and inaccurate perceptions does, nevertheless, form the consensual "interpersonal reality" that each individual experiences, interprets, and responds to. As all ratings given by peers (from 4 to 7) will be pooled, we can say that these composite scores represent the person's "effective interpersonal behavior" as it is perceived by peers.

Individuals who rate their own behavior considerably higher or lower than peers did, will be charged with having a "distorted" view of self within this small group context. These distortions, as discussed previously, are considered a direct outcome and a reflection of the individuals defensive functioning, and it is here assumed that the distortion/defensiveness extends into other areas of the person's life as well. It may be noted that a majority of group members tend to overrate-self (Flores, 1986).

METHOD OF ANALYSIS

Multiple regression analysis will be employed with MCS "Defensive" and B-MAS "Anxiety" being used as predictor variables of the interpersonal perception dependent measures.

As a first step in this analysis, the main effects of each the two predictor variables on the dependent measures will be assessed by means of Pearson's r. Next, multiple regression of the MCS and B-MAS with the dependent measures will allow assessment of additive effects. Finally the MCS X B-MAS interaction will be

entered into the regression equation. If a significant interaction is found, then a further analysis will be performed to highlight the nature of the interaction. Both predictor variables will be divided at their medians and a 2 x 2 table constructed, thus allowing direct comparison of the four coping styles on those dependent variables showing a significant interaction. This further analysis will only be performed for dependent variables for which there was a significant defensiveness X anxiety interaction.

Given the relatively small sample size in the present study, data from males and females will be analyzed jointly. In the two major works on which this study is based, all subjects were male (Weinberger et al., 1979 and Asendorpf et al., 1983). Thus, while it seems likely that there are sex differences in the interpersonal behavior of coping group members, this possibility will need to be empirically explored in future research.

Throughout this study, all hypothesized linkages between most variables will be tested for significance at the .05 level using one-tailed tests. Since no specific predictions were made regarding B-MAS and dependent measure correlations, two-tailed tests of significance will be employed for these linkages. In the interest of highlighting general trends in the data, relationships reaching the .10 significance level will also be reported.

RESULTS

I. Preliminary Statistical Analyses of Measurures

A. Predictor Variables

The Marlowe-Crowne Scale (MCS) and Bendig's short-form of the Manifest Anxiety Scale (B-MAS) were the two predictor, or independent, variables employed in this investigation. Means, standard deviations, and ranges obtained for these measures are shown in Table I.

Table I

Means, Standard Deviations, and Ranges

for MCS and B-MAS (N = 78)

	Mean	Standard Deviation	Range
MCS	12.73	4.90	2 - 26
MAS	8.76	3.87	0 - 20

As anticipated, there was a low but significant negative correlation between the MCS and MAS ($\underline{r}$ (78) = -.28). This degree of relationship is consistent with the findings of other researchers who have reported correlations of between -.20 and -.45 (Millmet, 1970). The value in multiple regression analysis of having predictor varibles of lower levels of shared variance has been noted by Cohen (1983).

It was considered important to examine the the degree of relationship between the two predictor varibles and the sex of the group member. The level of association between MCS and sex was nil (r (78) = .00), while the link with the MAS was small but significant (r (78) = .23, p < .023). This positive correlation indicates that the women tended to score higher for anxiety than men.

B. Dependent Variables

The dependent measures examined in this study include the two dimensioned HIRS (Hurley Interpersonal Rating Scale) and GIRS (Group Interpersonal Rating Scale). It may be recalled that the HIRS yields two composite scores representing the two superordinate dimensions of interpersonal behavior; and additionally that the measure was administered in the 3rd and 7th weeks of each groups' 10 week life-span. The GIRS, by contrast, included 11 behaviorally narrow-band miniscales and was administered only once at approximately the 8th week.

In what follows, relevant psychometric data will be presented for both measures. Descriptive statistics for the additional scales derived from the two primary instruments will also be shown, that is, discrepancy and rater's range scores.

1.   Hurley Interpersonal Rating Scale (HIRS)

A.   Self-Acceptance and Other-Acceptance

Table 2 provided means, standard deviations, and ranges for the HIRS' two dimensions, acceptance/rejection of self (ARS) and acceptance/rejection of others (ARO). Both "early" (3rd week) and "late" (7th week) data are represented in Table 2. On each occasion both peer and self-ratings were collected. Table 2's means and standard deviations are comparable to those found in other studies involving college populations (Hurley, 1986). In this and all other tables relating to the HIRS, "peer" ratings were based on the mean of ratings given by peers.

B.   Peer/Self Discrepancy Scores

Table 3 shows descriptive statistics for peer/self discrepancy scores for the HIRS. As discussed earlier, discrepancy scores are formed by subtracting aggregated and averaged peer-ratings from self-ratings (P - S). Thus, self-overrating is indicated by a negative sign and self-underrating is indicated by a positive sign.

C.   Rater's Range Scores for SAR and ARO

Rater's range (see method section for description) was calculated by subtracting each group member's lowest from their highest rating given to others and self. Range was figured on each of the two HIRS dimensions at both 3rd and 7th week administrations.   Table 4 shows the

TABLE 2

ARS and ARO Peer and Self-Ratings
Mean, Standard Deviations, and Range (N =78)

Variable	Mean	S.D.	Range
3rd Week			
ARS (peer)	21.3	6.6	7.0 - 33.1
ARS (self)	24.6	6.6	3.0 - 34.0
ARO (peer)	25.3	4.3	13.3 - 33.4
ARO (self)	25.7	5.4	7.0 - 34.0
7th Week			
ARS (peer)	23.5	5.9	6.3 - 34.3
ARS (self)	25.8	5.7	10.0 - 36.0
ARO (peer)	26.5	4.1	15.2 - 35.3
ARO (self)	26.4	5.6	8.0 - 35.0

TABLE 3

ARS and ARO Discrepancies *
Means, Standard Deviations, and Ranges (N = 78)

Variable	Mean	S.D.	Range
3rd Week			
ARS	-3.2	5.7	-18.0 to 8.4
ARO	-0.4	5.0	-15.0 to 13.9
7th Week			
ARS	-2.3	4.8	-13.7 to 10.8
ARO	.2	5.0	-9.8 to 16.2

* = Mean rating by group peers minus self-rating

TABLE 4

ARS and ARO Rater's Range
Means, Standard Deviations, and Ranges (N = 78)

Variable	Mean	S.D.	Range
Third Week			
ARS	19.8	7.3	6.0 - 36.0
ARO	13.8	6.6	3.0 - 32.0
Seventh Week			
ARS	17.5	6.5	7.0 - 32.0
ARO	13.2	4.9	2.0 - 26.0

relevant descriptive statistics for rater's range.   Group members were
more inclined to use greater range when rating peer's for
self-acceptance (ARS) as compared with other-acceptance (ARO).

2.   Group Interpersonal Rating Scales (GIRS)

As discussed previously, the GIRS contains 11 behaviorally
specific miniscales. Each group member rated peers and self on the 25
items of the GIRS, with the exception that members did not rate self on
the two "Liking" items. As with the the HIRS, peer ratings were
aggregated and divided by the N of members in the group; thus self and
peer-ratings are in comparable units of measurement.   It may be
recalled that the range of possible scores for each item, and each
scale, was from 1 to 5.

Table 5 shows descriptive statistics for both GIRS peer and
self-ratings. Included here are also the reliabilities (coefficient
alphas) for each scale.   Coefficient alphas (Nunnally), 1978) were
figured separately for peer and self ratings.   The internal consistency
of most scales was quite high. All alphas of peer-ratings were above
.84, and seven of ten alphas for self-ratings were above .70.   The
three lower self-rating alphas were on Hostility (.65), Feedback
Interest (.59), and Self-Effacement (.55). There are two likely
explanations for the lower self-rating alphas: a) members may use a
slightly different standard of evaluation on certain items when
considering their own behavior, and, b) the fact that self-rating
coefficient alphas were based on 78 individual ratings in contrast to

TABLE 5

Group Interpersonal Rating Scales (GIRS)
Coefficient Alpha, Mean, Standard Deviation, and Range (N = 78)

Variable	Alpha	Mean	S.D.	Range
Participation (P) +	.97	3.3	.9	1.6 - 4.9
Participation (S) *	.86	3.8	.8	2.0 - 5.0
Intimacy (P)	.96	2.7	.8	1.3 - 4.6
Intimacy (S)	.82	3.1	.9	1.0 - 5.0
Insight (P)	.89	3.1	.7	1.6 - 4.8
Insight (S)	.72	3.7	.8	2.0 - 5.0
Anger Acknowl. (P)	.92	3.0	.9	1.4 - 4.8
Anger Acknowl. (S)	.78	3.5	1.0	1.5 - 5.0
Feedback Interest (P)	.88	3.5	.7	2.0 - 4.9
Feedback Interest (S)	.59	4.1	.7	2.0 - 5.0
Caring (P)	.96	3.5	.8	2.0 - 5.0
Caring (S)	.83	3.8	.8	1.5 - 5.0
Group Investment (P)	.93	3.9	.7	1.2 - 5.0
Group Investment (S)	.70	4.3	.7	2.0 - 5.0
Hostility (P)	.89	2.3	.8	1.0 - 4.1
Hostility (S)	.65	2.2	.9	1.0 - 5.0
Self-Effacement (P)	.85	2.6	.8	1.2 - 4.6
Self-Effacement (S)	.56	2.6	.9	1.0 - 5.0
Anxiety (P)	.94	2.6	.8	1.2 - 4.7
Anxiety (S)	.87	2.2	.9	1.0 - 4.3
Liking (P)	.91	3.8	.6	1.9 - 4.8

+ (P) = peer-ratings
* (S) = self-ratings

TABLE 6

Peer Minus Self-Rating Discrepancy Scores for GIRS
Mean, Standard Deviation, and Range (N = 78)

Variable	Mean	Standard Deviation	Range
Participation	-0.5	0.7	-2.7 to 1.1
Intimacy	-0.4	0.7	-2.0 to 1.6
Insight	-0.6	0.8	-2.8 to 1.2
Anger Acknowl.	-0.5	1.0	-2.6 to 2.2
Feedback Interest	-0.6	0.8	-2.5 to 1.4
Caring	-0.3	0.7	-1.6 to 0.9
Group Investment	-0.3	0.7	-1.7 to 1.7
Hostility	0.1	0.9	-2.6 to 2.4
Self-Effacement	0.1	0.7	-1.8 to 2.0
Anxiety	0.3	0.7	-1.7 to 1.8

over 300 peer ratings (prior to aggregation). The higher number of ratings virtually insures an increment in reliability (Nunnally, 1978).

Table 6 provides GIRS peer and self-rating discrepancy scores. As was the case with HIRS discrepancies, self-ratings were subtracted from peer-ratings, thus, a negative discrepancy score indicates self-overrating and a positive score indicates self-underrating in comparison to peers' perspective. It may be noted in the majority of means below, that self-overestimation is more typical than the converse. This pattern is reversed, of course, for the three behaviorally "negative" scales in which higher scores describe less desirable behavior: Hostility, Self-Effacement, and Anxiety. For these three latter variables positively signed discrepancy indicated self-underestimation of the negative characteristic.

II. **Results of Hypotheses**

In all there were a total of 47 dependent variables examined. Twenty-one of these variables achieved, at a minimum, the .10 level of significance. Hypotheses related to the four coping styles received minimal and inconsistent support. Hypotheses pertaining to the main effects of MCS "defensiveness" faired slightly better.

Tables 7, 8, 9, and 10 will be alluded to frequently in this section so each is briefly described here. Table 7 shows Pearson's r of both predictor variables, defensiveness and trait anxiety, with all HIRS variables. Table 8 provides the same information for all GIRS variables. Table 9 incorporates the significant (p < .05 and p marginally significant < .10) results from Tables 7 and 8, while additionally providing the results of the multiple regression analysis in which the MCS X B-MAS Interaction was entered into the regression equation for each of the dependent variables. Variables revealing a significant MCS X B-MAS interaction, in the absence of significant main effects, were also included in Table 9. The change in the multiple correlation coefficient, and the significance of the change in R^2, from the combined to the interactive MCS/B-MAS effects may be noted. Table 10 presents the four MCS X B-MAS cell means for Table 9's significant interactions; providing evidence relevant to hypotheses predicting differences of each of the four coping groups. As described in the method section, coping group membership was determined by performing median splits on the MCS and B-MAS

TABLE 7

Pearson Product Moment Correlations of Marlowe-Crowne Scale (MCS)
and Bendig Manifest Anxiety Scale (B-MAS) with
HIRS Dependent Measures (N = 78)

	MCS	MAS
	Defensiveness	Anxiety
Dependent Variables		
Third Week		
ARS (peer)	.01	-.05
ARS (self)	.12	.07
ARS (P/S Discrep)	-.13	-.15
ARO (peer)	-.08	-.19
ARO (Self)	.10	-.04
ARO (P/S Discrep)	-.18 #	-.12
Seventh Week		
ARS (peer)	.00	-.06
ARS (self	.00	.03
ARS (P/S Discrep)	-.09	-.11
ARO (peer)	-.03	-.18
ARO (self)	.10	-.13
ARO (P/S Discrep)	-.13	.00
Third Week		
ARS (Rater's Range)	-.27 +	.12
ARO (Rater's Range)	-.27 +	.19
Seventh Week		
ARS (Rater's Range)	-.10	.10
ARO (Rater's Range)	-.10	.13

+ p < .01.   * p < .05.   # p < .10
MCS correlations = one-tailed tests
B-MAS Correlations = two-tailed tests

TABLE 8

Pearson Product Moment Correlations of Marlowe-Crowne Scale (MCS)
and the Manifest Anxiety Scale (MAS) with
BIRS Dependent Measures

	MCS Defensiveness	MAS Anxiety
Variables		
Participation (peer)	-.01	-.11
Participation (self)	-.01	-.04
P/S Discrepancy	-.01	-.10
Intimacy (peer)	-.13	.11
Intimacy (self)	-.17 #	.20
P/S Discrepancy	.07	-.13
Insight (peer)	-.12	-.03
Insight (self)	-.08	-.04
P/S Discrepancy	-.03	.01
Anger Acknowl. (peer)	-.06	.05
Anger Acknowl. (self)	.24 *	-.17
P/S Discrepancy	-.31 +	.22 *
Feedback Interest (peer)	-.12	.05
Feedback Interest (self)	.13	-.13
P/S Discrepancy	-.22 *	.08
Caring (peer)	-.05	-.01
Caring (self)	-.05	-.10
P/S Discrepancy	.00	.11
Group Investment (peer)	.03	.03
Group Investment (self)	.12	-.02
P/S Discrepancy	-.10	.06
Hostility (peer)	.09	.08
Hostility (self)	.17 #	.21
P/S Discrepancy	-.10	-.16
Self-Effacement (peer)	.04	.23 *
Self-Effacement (self)	.02	.31 +
P/S Discrepancy	.01	-.14
Anxiety (peer)	.17 #	.24 *
Anxiety (self)	-.05	.33 +
P/S Discrepancy	.23 *	-.14
Liking (peer)	.05	-.12

+ p < .01.   * p < .05.   # p < .10
MCS correlations = one-tailed tests
B-MAS correlations = two-tailed tests

TABLE 9

Multiple Correlation Analysis of Additive and Interactive Effects
of MCS and B-MAS on Selected HIRS and GIRS Variables

	Pearson r		Multiple Correlation		
	MCS	MAS	MCS	MAS	Interaction
HIRS Variables					
ARO (peer) 3rd	-.08	-.19	.08	.23 *	.26
ARO (peer) 7th	-.03	-.18	.03	.28 *	.35 *
ARO (disc) 3rd a	-.18	-.12	.18	.25	.25
ARS (range) 3rd	-.27	-.12	.27	.27 *	.29
ARO (range) 3rd	-.27	.19	.27 *	.30	.31
ARS (range) 7th	-.10	.10	.10	.12	.24 #
GIRS Variables					
Intimacy (self)	-.17	.20	.17 #	.24	.24
Insight (peer)	-.12	-.03	.12	.14	.24 *
Anger Ackn. (self)	.24	-.17	.24 *	.26	.26
Anger Ackn. (disc)	-.31	.22	.31 +	.34	.35
Feedback Int. (disc)	-.22	.08	.22 *	.22	.25
Hostility (peer	.09	.08	.09	.13	.26 *
Hostility (self)	.17	.21	.17	.32 *	.33
Hostility (disc)	-.10	-.16	.10	.22 #	.24
Self-Efface. (peer)	.04	.23	.04	.25 *	.25
Self-Efface. (self)	.02	.31	.02	.33 +	.35
Anxiety (peer)	.17	.24	.17	.34 +	.39 #
Anxiety (self)	-.05	.33	.05	.33 +	.33
Anxiety (disc)	.23	-.14	.23 *	.25	.36 *
Like	.05	-.12	.05	.12	.39 *

+ = p < .01   * = p < .05   # = p < .10
a disc = discrepancy

TABLE 10

Coping Group Cell Means and Ranks for Dependent Variables
With Significant MC X B-MAS Interactions

		Coping Groups		
	REP#	DHA	HA	LA
Variable				
HIRS				
ARO 7th (peer)	27.95	24.28	27.46	26.16
	(1)	(4)	(2)	(3)
ARS 7th (range) #	16.17	18.11	18.16	18.06
	(4)	(2)	(1)	(3)
GIRS				
Insight (peer)	3.31	2.70	3.34	3.05
	(2)	(4)	(1)	(3)
Anxiety (peer) #	2.38	3.11	2.31	2.44
	(3)	(1)	(4)	(2)
Anxiety (disc)	.46	.46	.03	.32
	(1)	(1)	(4)	(3)
Hostility (peer)	2.39	2.45	2.09	2.12
	(2)	(1)	(4)	(3)
Liking (peer)	4.03	3.51	4.01	3.74
	(1)	(4)	(2)	(3)

All Interactions significant at p < .05 or unless # = p < .10

REP = Repressors; DHA = Defensive High-Anxious;
HA = High-Anxious; LA = Low-Anxious

data. (See Appendix D for MCS and B-MAS descriptive statistics for

each coping group).

Peer-Ratings

Hypothesis 1a:

There will be an interaction between defensiveness and anxiety
with regard to peer-ratings of interpersonal behavior, such that
Repressors, among the four groups will receive the least favorable
peer evaluations.   By contrast, the Low-Anxious group will receive
the most favorable peer evaluations. Between these two groups, the
Defensive High-Anxious will be rated less positively than the
High-Anxious group.   In summary, LA > HA > DHA > REP.

Of nineteen peer-rated HIRS and GIRS dependent variables only

five revealed significant and two marginally significant ($p < .10$)

MCS X B-MAS interactions. As shown in Table 9, these variables

were: ARO Week 7, ARS range Week 7, Insight, Hostility, Anxiety

(peer's and discrepancy), and Liking. Table 10's, cell means also

show that hypothesis 1a was disconfirmed for each of above

variables.   On none of the five relevant variables were the

Repressors rated least favorably, or the Low-Anxious rated most

favorably, as had been predicted. Table 10 shows that in each case

the Defensive High-Anxious group received the least favorable

ratings.   In summary they were rated as least accepting of others,

least insightful, most anxious, most hostile, and least liked.   By

a very small and statistically nonsignificant margin, the Repressors

received the highest ratings on other-acceptance (ARO 7th) and Like

scales.   Somewhat difficult to integrate with these findings, but

more in line with hypothesis 1a and 1b, was the result that

Repressors were rated second highest on Hostility, just below the Defensive High-Anxious Group.

In summary, there was no support for the prediction that Repressors would be rated as least competent and the Low-Anxious as most competent. There was, however, relatively strong evidence supporting a view of the Defensive High-Anxious as demonstrating poorer interpersonal functioning, as rated by peers.

Hypothesis 1b:

When the simple main effects of MCS defensiveness are considered individually, higher MCS scores will be associated with less favorable peer evaluations.

In terms of statistical significance, this prediction was not supported by the results of this study. However, if one examines trends across all peer-ratings a pattern of results is apparent. Combining the HIRS and GIRS, of the fifteen peer-ratings, in eleven instances there was an inverse correlational link between MCS and (peer-rated) effective interpersonal functioning. In these trends, in other words, MCS did weakly but generally predict less favorable peer evaluations. All of these correlations were quite weak, however, and none exceeded -.17.

Self-Ratings

Hypothesis 2a:

There will be an interaction between the defensiveness and anxiety variables such that the Repressors will rate themselves most favorably, when compared with the other three groups, across all interpersonal variables. No specific predictions are made in relation to the remaining three groups.

Hypothesis 2a received no support. There were no significant nor marginally significant (p < .10) interactions of the two predictor variables in relation to any of the self-rated variables from either the HIRS or GIRS.

Hypothesis 2b:

When the simple main effects of MCS defensiveness are considered individually, higher MCS scores will be associated with higher self-evaluations on all interpersonal variables.

Of fourteen GIRS and HIRS self-rating linkages with defensiveness only only Anger Acknowledgement (.24 p, < .05) reached a statistically significant level of correlation and two others reached marginal levels of association, Hostility (.17 p < .10) and Intimacy (-.17, p < .10).

Of these three, only Anger Acknowledgement (AA) was in the hypothesized "positive" or "self-enhancing" direction. A person alloting self a higher rating on AA is saying, "If I were ever angry, I would certainly admit it" (see Appendix C for items). In other words, they are denying that they would consciously suppress this affect.

The Hostility and Intimacy results are counter to expectation. The high MCS scorer is somewhat more likely to perceive self as "angry" and "critical" and as unwilling to disclose "intimate or

personal" information. Neither of these findings was predictable

from a review of the MCS literature.

In terms of non-significant trends across all self-ratings:

MCS linked with all four HIRS variables (3rd and 7th weeks) with the

expected positive correlations (.08 to .12); GIRS positive/negative

sign trends were inconsistent, however, forming no apparent

patterns.

Peer-Rating and Self-Rating Discrepancy

Hypothesis 3a:

The independent variables will interact such that Repressors, when compared with the other three groups, will be found to have the largest peer-rating/self-rating discrepancy scores. The Low-Anxious group will have the smallest degree of discrepancy, followed by High-Anxious, and Defensive High-Anxious. In summary, on magnitude of discrepancy: Rep > DHA > HA > LA. Since a majority of members tend to be self-overraters the "peer minus self" formula is expected to produce (in sum) negatively signed discrepancies for all groups (Flores, 1986).

A significant MCS X B-MAS interaction was found for only one

of fourteen GIRS and HIRS discrepancy scores. As shown in Table 9,

this interaction was present on Anxiety (disc)., R2 change, p < .05.

As seen in Table 10, all four coping groups had "positively" signed

discrepancy means, indicating underrating of self on this variable.

Hypothesis 3a, which predicted the greatest amount of

self-underrating on Anxiety to be shown by Repressors and the least

by the Low-Anxious, was not supported. The Repressors and

Defensive High-Anxious both reached equally high levels of

discrepancy, with the High-Anxious group showing the smallest

discrepancy, and the Low-Anxious mean discrepancy magnitude was closer to that of the the two high MCS groups.

Hypothesis 3b:

When the simple main effect of MCS defensiveness are considered independently, higher MCS scores will be associated with larger peer/self discrepancy scores on all variables.

For two of fourteen peer/self discrepancy ratings there were significant main effects due to MCS defensiveness. One of these results involved Anxiety, which was discussed under hypothesis 3a—nothing more need be added except that this is the result predicted. The other MCS main effect concerned Anger Acknowledgement (AA), $-.31$, $p < .05$. Also in accord with hypothesis 3b, the results indicate that higher MCS scorers tend to overrate their willingness to admit to negative affects.

Rater's Range Scores

Hypothesis 4a:

The independent variables will interact such that Repressors will use the narrowest range of ratings in evaluating peers. Low-Anxious Members will use the largest range. The remaining two groups will fall between these two, with the DHA group showing a narrower range than HA. In summary, the result on rater's range will be as follows: Rep < DHA < HA < LA.

Of four possible cases, one marginally significant interaction emerged in relation to the rater's range score for 7th week self-acceptance ratings (see Table 9). For this variable Hypothesis 4a was partially supported in that Repressors

used the narrowest range of scores in evaluating their peers

self-acceptance (ARS), see Table 10. Ranges for the other three

groups were about equal.

Hypothesis 4b:

When the simple main effects of MCS defensiveness are
considered individually, higher MCS scores will be associated with
narrower rater's range scores.

This hypothesis received rather strong support. Of the four

HIRS range scores examined in this study all showed negative

correlational links, of from -.10 to -.27, with the MCS (see Table

7). In brief, the higher the level of MCS defensiveness the

smaller the range of scores the group member was likely to allot.

The third week ARS and ARO range scores both attained -.27 (p < .05)

linkages, and the two 7th week ranges linked nonsignificantly, -.10.

The 7th week range score correlations were likely truncated by the

fact that a majority of members tend to allot somewhat higher

ratings at this later stage of their groups.

Anxiety (B-MAS) Predictor Variable

Because the Anxiety predictor variable was not a focus, in and

of itself, of this study no hypotheses were formulated. However,

there were some noteworthy linkages between this variable and the

HIRS and GIRS dependent variables. All tests of significance were

two-tailed.

Peer-Ratings

Anxiety (B-MAS) linked with marginal significance with four of fifteen GIRS and HIRS peer-ratings. To summarize results from Tables 7 and 8, these variables were: other-acceptance (ARO) 3rd and 7th weeks, -.19 and -.18 respectively; Self-Effacement, -.23; and Anxiety, -.24. In each case the trait anxiety measure predicts less effective group functioning, as perceived by peers.

Self-Ratings

Tables 7 and 8 show that of the fourteen GIRS and HIRS self-ratings correlations with Anxiety (B-MAS), four reached statistical significance, and one was marginally significant. These variables were: Intimacy (.20), Anger Acknowledgement (-.17), Hostility (.21), Self-Effacement (.31), and Anxiety (.33). Except for Intimacy's correlation, higher B-MAS predicts greater self-criticalness in assessing within group behavior.

Peer/Self Discrepancies

For only two of the total 14 discrepancy variables was a significant or near significant (p < .10) correlations found with B-MAS "anxiety". The two variables were Anger Acknowledgement (.22) and Hostility (-.16). The positive AA link, indicates that higher B-MAS scorers, relative to peer's evaluations, tend to underrate their willingness to reveal negative affects. The negative

Hostility link suggests that higher B-MAS predicts a slightly exaggerated view of one's expressions of "anger" and "criticalness of others", relative to how peers perceived the higher B-MAS member with regard to these behaviors.

Range

All four correlations between range and the B-MAS were nonsignificantly positive (.10 to .19). Thus, self-reported anxiety predicts a slight tendency to allot a wider range of scores.

DISCUSSION

The present study investigated the combined ability of two personality measures to predict the interpersonal behavior of members of small groups. The predictor measures were MCS for defensiveness and B-MAS for trait anxiety. Dependent variables were the subscales of two interpersonal behavior perception measures completed by each group member on other group members, self included.

Following-up and extending previous research, a primary aim was to clarify the interactive and, less centrally, main effects of the predictor variables. Given the presence of significant interactions, an ultimate focus was on hypothesized differences between the four "coping groups" formed by the 2 X 2 matrix division of subjects on the predictor variables. Overall the results were mixed and some instances counter to expectation. Some interesting findings did emerge, however.

The discussion is divided into two sections. First, issues concerning aspects of the measures employed will be addressed. This will be followed by a discussion of the central results of the study and their relationship to prior findings.

I. <u>Variables Employed in Study: Psychometric Considerations</u>

A. Marlowe-Crowne Scale (MCS)

The sample mean score of 12.73 for the MCS -- the measure of defensiveness -- was in the lower ranges of means reported for college populations. In his literature review, Evans (1982) found that in 84 studies over 80% of sample means fell between 12 - 17. The standard deviation for the MCS in this sample was 4.9 and is commensurate with other studies as, again, reviewed by Evans.

As earlier mentioned, the .00 correlation between MCS and sex is in keeping with other studies in the literature (see Evans, 1982 review). Because of this, it was considered appropriate to perform analyses on the pooled data of males and females.

B. Bendig Manifest Anxiety Scale (B-MAS)

The mean for the B-MAS was 8.76, with a standard deviation of 3.87. As previously reported, the MCS and B-MAS correlated to a small but significant degree, -.28, $p < .01$. It is thus apparent that the two measures tapped distinct behavioral domains.

The correlation between B-MAS and sex was .23 ($p < .05$), indicating that females tended to score slightly higher on this scale. Given the rather small amount (5%) of B-MAS variation accountable to sex, data from males and females were pooled and analyzed jointly.

II. Major Findings

A central purpose of this study was to investigate differences between the hypothesized "coping groups". A precondition for

comparing the four cell means for each particular dependent variable was a significant MCS X B-MAS interaction. When a significant interaction was not present, then only main effects could be examined. Hypotheses relating to differential interpersonal competence for the coping groups dealt with a) peer-ratings, b) self-ratings, c) peer/self discrepancy scores, and d) rater's range scores.

A brief review of the hypotheses may be useful here. The Repressor and Low-Anxious groups were posited as marking the poles on a continuum of interpersonal competence. The Repressors were anticipated to be rated by peers as less effective in the group, while the Low-Anxious were expected to demonstrate the highest levels of peer-rated interpersonal effectiveness. It was additionally hypothesized that Repressors would tend to rate themselves more positively than the three other groups across a variety of variables and that their self-overratings would result in the highest degree of peer/self discrepancy. The Low-Anxious were expected to accurately perceive their own effective behavior with the result of comparatively lower peer/self discrepancy scores. Finally, with regard to magnitude of rater's range, the more guarded or defensive Repressors were expected to use the narrowest range when rating peers' conduct and the more disclosing Low-Anxious were expected to use the widest range.

The two remaining groups, High-Anxious (HA) and Defensive High-Anxious (DHA), were expected to perform at a point intermediate to the Repressors (REP) and Low-Anxious (LA). Due to the

defensiveness variable's anticipated salience the DHA were expected to perform closer to the REP, and the HA closer to the LA. Thus for all dependent variables the order of results will be LA > HA > DHA > REP with respect to more effective and less defensive group performance. Logically following from the above, subhypotheses predicted that MCS defensiveness would, independent of level of anxiety, predict negative peer-ratings and peer/self discrepancies indicating self-overrating.

Overview of Findings Related to Coping Groups

Among the relatively small number of significant results involving MCS X B-MAS interactions, there was little support for the predictions that individuals classified LA would be rated most favorably and those classified REP would be classified most negatively. Only in association with the derived variable "rater's range" for Self-Acceptance (ARS 7th) did the Repressors even marginally show the hypothesized greatest constriction in span of scores alloted to others (see Table 10). While the Repressors did use the most constricted range of all coping groups on ARS 7th, the Low-Anxious did not have the broadest range, as had been hypothesized. Rather, apart from the Repressors, the remaining groups had approximately equal ranges. More will be said about rater's range when additional findings are discussed below.

While Repressors did not distinguish themselves as less competent, there was notable support for viewing the Defensive

High-Anxious (DHA) as functioning the least effectively of the four groups. Of the seven interactions achieving significance (or marginal significance), further examination of cell means revealed DHA to be viewed by peers as lowest in: a) Other-Acceptance (ARO 7th), b) Insight, c) Like; and highest in d) Anxiety, and f) Hostility. The poor peer-ratings shown by the DHA group were actually not unexpected as this group had been predicted to function most poorly in comparison to all but the REP group. Finally, both DHA and REP showed equally high peer/self discrepancies for Anxiety, with results further indicating that both groups were inclined to self-underrating, relative to peers perceptions, on this variable. These findings will be explicated below.

The coping group findings related to Anxiety and Hostility are of special interest in view the relevant evidence and theory put forward by other researchers. The Anxiety findings will be discussed first.

GIRS Anxiety as Rated by Self and Peers

Weinberger et al. (1979) and Asendorpf et al. (1982) had predicted and subsequently found significant differences between Repressors and Low-Anxious on various measures of anxiety. It is important to recall that, pre-experimentally, members of each group claimed low trait anxiety, a sin qua non of membership in either group. In each study an anxiety-provoking word association task was administered while both physiological and behavioral anxiety was monitored. On measures of verbal interference and physiological

arousal, Weinberger et al. found that the Repressors evidenced of significantly _higher_ levels of distress than Low-Anxious. While confirming Weinberger et als'. physiological results, Asendorpf et al. additionally rated subjects facial anxiety and here, too, found Repressors, compared to Low-Anxious, to evidence significantly higher anxiety. DHA and HA subjects both showed facial anxiety intermediate to, and not significantly different from, the REP and LA.

.

Within the present study, peer-ratings may be thought of as an approximation of facial anxiety; comparable in that both relate to overtly observable signs of anxiety. However, the present findings were not as hypothesized. Peers perceived the Defensive High-Anxious (DHA) group, and not the REP, to be the most anxious. The other groups were clustered closer together on Anxiety, with the LA group, also counter to predictions, coming out marginally highest of the three (Table 10). In relation to peer/self discrepancy on Anxiety, the Repressors did show the expectedly strong tendency toward self-underrating, but not more so than DHA. Both groups were only slightly more discrepant than the LA. Paradoxically, the High-Anxious group (that is, the low MCS and high B-MAS) showed the smallest discrepancy, while at the same time being viewed by peers as _lowest_ (marginally) on Anxiety. What may most clearly be concluded from the present findings is that the Defensive High-Anxious members were the only coping group to appear distinctly more anxious to their peers, and DHA members also tended to underrate the intensity of this affect.

Weinberger et al. had compared the pre- and post-experimental anxiety self-reports of their three coping groups he examined. The anxiety inducing phrase-association task was viewed as producing the following self-report changes: Repressors scores declined, High-Anxious scores increased, while Low-Anxious were unchanged. It was concluded that Repressors increase their defensiveness in the face of threat, whereas the High-Anxious respond to there internal arousal by intensified awareness and admission of trait anxiety. The Low-Anxious maintained a stable view of themselves vis-a-vie trait anxiety.

Relative to Weinberger's et als'. findings it is notable that there was no interaction effect on GIRS self-ratings of Anxiety. Rather, there was a simple linear relationship between pregroup measured trait anxiety and within group self-rated anxiety (.33). There was, thus, no evidence that these anxiety ratings varied as a function of MCS defensiveness. Hence, in the 8th week of the groups, Repressors and Low-Anxious reported lower anxiety while High-Anxious and Defensive High-Anxious reported higher anxiety. It seems reasonable to conclude that the group experience did not differentially influence the present coping groups' subjective reports of anxiety.

It should be noted, however, that Weinberger et al. reported pre and post differences using the _same_ anxiety measure, whereas two different measures were compared in the present case. Noted earlier, an additional reason for not replicating the findings of Weinberger et al. is that their coping groups were selected from

much more extreme ranges of both the MCS defensiveness and trait
anxiety measures than was the present case (see Appendix D).
Finally it may be possible that Weinberger's differences did not
emerge in this study because the group experience was not a
sufficiently anxiety-provoking stimulus, or not sufficiently
stressful toward the end of the groups when self-rated anxiety was
assessed.

GIRS Hostility as Rated by Self and Peers

The results for Hostility were also interesting. It may be
recalled that the Hostility scale asks the rater to evaluate the
extent to which the rated member "reacts angrily toward others" or
is "critical or disapproving toward others". Although the MCS
defensiveness and peer-rated Hostility correlated only .09, there
was a significant MCS X B-ANX interaction leading to a scrutiny of
cell means. Both the Repressors and the Defensive High-Anxious
were rated higher in Hostility than the Low- Anxious and the
High-Anxious groups. The High-Anxious group was rated the lowest,
with the LA group marginally higher. This result had been predicted
in hypothesis 1b under the general "interpersonal ineffectiveness"
assumption regarding all higher MCS members. Despite this
prediction, the greater Hostility of the two high MCS groups appears
paradoxical in light of a good deal of evidence (Millham, 1974;
Fishman, 1965; Palmer and Altrocci, 1968; Heatherington and Wray,
1964; Conn and Crowne, 1964) that such persons are strongly

motivated to please others, avoid social disapproval, and inhibit their own expressions of aggression.

The present picture is made more complex by the finding that higher MCS defensiveness members also rated _themselves_ marginally higher in Hostility (r = .17) and significantly higher on Anger Acknowledgement (r = .24). In itself the Anger Acknowledgement (AA) result is not surprising; theoretically one would expect the "approval motivated" high MCS individual to deny a conscious intent to withhold negative feelings. It seems extremely improbable, however, that the Hostility scale items could be construed as self-enhancing (see Appendix C). This would seem to point to the conclusion that the higher AA self-ratings of the Repressors and Defensive High-Anxious may accurately represent their perception that they frequently _have_ revealed negative feelings toward other group members.

Thus, there is convergence between self and peer-ratings in the depiction of the higher MCS members (particularly those who are anxious) as more Hostile than low MCS members. As noted, the literature depicts the higher MCS person as taking pains to avoid the expression of anger or disapproval; even when provoked, as was the case in a study conducted by Conn and Crowne (1964). How might the present results be explained? One clear difference between this and all other MCS studies bearing on "aggression" is the length of time over which subjects interacted. The GIRS, which includes the Hostility scale, was completed after members had been in contact for a minimum of 36 hours. With this duration of contact,

the higher MCS members may have been unable to suppress the negative affects they struggle to contain.

This "build-up and eventual release" hypothesis suggested here has not been directly tested by other studies, but grounds for speculation has been provided by Conn and Crowne's finding (1964) that it was only high MCS subjects who failed to show a decrease in systolic blood pressure after direct expressions of anger had been provoked and elicited. Related to this, the present findings may indicate that once hostile behavior has been evoked, the high MCS group member admits it via their self-rating.

The results under discussion relate to eighth week GIRS ratings. As the other interpersonal measure, HIRS, contained an "affiliativeness" dimension (ARO, acceptance v.s. rejection of others) and one would expect confirming data related to "hostility" from this measure, particularly ARO 7th. The correlations for both peer and self-ratings for the MCS and ARO 7th ratings were small, -.03 and .10, respectively. Peers rated higher MCS members negligibly lower, as expected, on ARO 7th; and higher MCS was associated with slightly higher ARO self-ratings. Thus, the MCS and self-rated Hostility positive linkage was not replicated for ARO.

However, a significant MCS/B-MAS interaction on peer's ARO 7th ratings allowed for examination of coping group cell means for peer-ratings. The pattern of findings was perplexing. While as noted, Repressors were rated high on Hostility, they were also rated highest in Other-Acceptance 7th, while the Defensive High-Anxious were viewed more consistently; highest on Hostility and

Lowest on other-acceptance. The peer-rating results for Repressors are difficult to explain.

Thus the findings are somewhat mixed or contradictory on the Hostility/MCS connection. It is possible that the different circumstances of the two measure's administration might have had some impact on the self-rating results. That is, subjects were assured that the GIRS (containing the Hostility Scale) data would not be shared with fellow members, whereas with HIRS (ARS & ARO) they were aware that all ratings would be shared and discussed with their groups. A tendency to defensive self-overrating may have been more powerfully evoke for the higher MCS members when they knew that ratings would be shared. This hypothesis would need to be examined in future research.

In summary what may be concluded is that at higher values on both predictor variables (MCS and B-ANX) there tends to be an increase in peer's ratings of hostility or aggression as shown on both GIRS and HIRS ratings. The self-rating results were more equivocal with only the GIRS scale suggesting that both high MCS and B-ANX jointly predict higher Hostility self-ratings.

Main Effects for MCS Defensiveness

Not withstanding our discussion thus far, when all dependent measures are considered, there was only minimal evidence for hypothesized coping group differences. There was slightly stronger support for the hypothesis that the MCS defensiveness measure,

independent of level of trait anxiety, has some power in predicting a decrement in group performance. For heuristic purposes (maintaining continuity) these hypotheses may be thought of as describing results of the form: LA + HA in comparison to REP + DHA. There were significant or marginally significant defensiveness main effects for ten of the variables. Of these, one related to peer-ratings, three to self-ratings, four to peer/self discrepancies, and two to rater's range.

Thus, higher MCS defensiveness wealy but significantly associated with higher peer-rated Anxiety; higher self-ratings on Anger Acknowledgement and, as discussed above, on Hostility; and lower self-rated Intimacy. Higher defensiveness was also linked to self-overrating on Anger Acknowledgement and Other Acceptance (ARO 3rd) and self-underrating on Anxiety. Finally, increased defensiveness predicted, rather strongly relative to the other correlations, narrower Week 3 ranges of ratings for both Self-Acceptance and Other-Acceptance ("rater's range" refers to the span of scores the individual allots when rating self and others).

Nonsignificant correlational trends augmented the picture of the defensive members being viewed by peers as slightly less effective interpersonally; revealing negative linkages with Other-Acceptance (ARO) at weeks three and seven, Participation, Intimacy, Insight, Anger Acknowledgement, Feedback Interest, Caring; and positive linkages with peer assessments of Hostility, Self-Criticism, and Anxiety. Thus, hypothesis 1b generally received consistent, albeit correlationally weak, support.

With regard to self-ratings, hypothesis 2b had predicted
self-enhancing self-evaluations to accompany higher MCS scores.
This was the case of eight of fourteen linkages, if both significant
results and nonsignificant trends are included. For the more
behaviorally global ARO and ARS ratings, higher self-ratings and MCS
were positively associated (at a very low level) for each variable
at both the 3rd and 7th week administrations.

The findings were less consistent and more complex in relation
to self-ratings on the behaviorally-specific GIRS miniscales. As
predicted, MCS was positively linked with Anger Acknowledgement
(significantly) and nonsignificantly with Feedback Interest and
Group Investment. The surprising and marginally significant
positive association of MCS with self-rated Hostility has been
discussed above.

Also unexpected was the marginally significant negative link
with Intimacy. The higher MCS member, compared with low MCS
members, tends to perceive self as less willing to "disclose
intimate or personal information". It should be noted that within
the interpersonal learning groups of this study, "here-and-now"
self-disclosure was consistently portrayed as potentially of value
for individuals and the group as a whole. Given that high MCS
persons have been shown to respond or conform to perceived
situational demands (Strickland, 1965; Willingham and Strickland,
1965), one might expect a positive association between MCS and
self-rated Intimacy. That the reverse was found, suggests that in
relation to self-disclosure something within the small group setting

led high MCS individuals to deviate from their more usual self-overrating pattern.

One possible explanation is that after eight weeks of group experience and feedback from group peers, a shift in their self-perception occurred; that they more accurately perceived their own smaller amount of self-disclosure (note that peers tended to rate higher MCS members lower [r = -13]), albeit nonsignificantly, on Intimacy). Another possibility is that from their own perspective, higher MCS members simply did not view self-disclosure as a "positive" behavior, and so rated themselves lower. If the GIRS, containing the Intimacy Scale, had been administered at the beginning as well as the end of the group, both possibilities could have been examined. In Summary, hypothesis 2b regarding MCS members' self-enhancing tendency received modest support.

The peer/self discrepancy data provide another means of approaching the issue of "perceptual distortion" expected to accompany higher MCS defensiveness. As we have seen above MCS generally predicts slightly higher self-ratings, and slightly lower peer-ratings on favorably phrased measures. Thus, the discrepancy findings were not surprising. The overall evidence related to peer/self discrepancy supports hypothesis 3b, albeit with relatively modest correlations (all r's < -.32). When the four significant and the more numerous nonsignificant findings are jointly considered, higher MCS defensiveness was associated with overly positive self-descriptions (comparative self-overrating) for eleven of fourteen variables. As noted previously, over-rating and

MCS were most strongly, and significantly, linked for the following variables: Anxiety, Feedback Interest, Anger Acknowledgement, and Week three ARO.

The Anxiety discrepancy, as has been discussed above, corresponds well to the prior research on which this study is based in which the the two high MCS coping groups, REP and DHA, were depicted as particularly prone to distort awareness of their own level of psychophysiological arousal (Weinberger et al., 1979; Asendorpf et al., 1983). The present data cannot address the issue of "actual" physiological arousal, but they indicate that, in relation to anxiety, MCS tends to predict an incongruence between subjective experience and external evaluations.

MCS and Rater's Range

"Range", it may be recalled (see Method section) , refers to the spread of scores individuals used in rating peers and self. In this study range was computed for HIRS variables Self-Acceptance (ARS 3rd and 7th) and Other-Acceptance (ARO 3rd and 7th); thus four range scores were computed. The relationship between MCS defensiveness and Rater's Range was briefly touched on in the section dealing with coping group differences. To review, there was a significant MC X MAS interaction for one of these four range measures. Hence, for Week 7 ARS, of the four coping groups, only the Repressors differed: alloting the narrowest range of scores. Additional analysis reveals that more constricted ARS 7 range scores were associated with higher self-ratings on this same variable (r = -.22, p < .05). Further, lower ARS 7th range was correlated .21 with self-overrating (peer/self discrepancy) for ARS 7th. Combining this evidence, it seems that for this variable the Repressors (high MCS and low B-MAS) tended to use higher scores in rating both their own and peers' behavior.

While only one of four range variables revealed an interaction effect, there was also a significant (r = -.27, p < .01) MCS defensiveness main effect for two of the three remaining range variables: Week 3 ARS and ARO. The MCS-range correlation was negatively signed in all four instances; in each cases MCS was associated with with narrower range.

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As observed with ARS 7th, discussed above, for both Week 3 and 7 narrower range also predicted higher self-ratings on each variable, (r's = -.11 and -.49, respectively). This evidence suggests that persons scoring higher on MCS tended to give relatively inflated ARO ratings to all and but especially especially to their self.

The finding that higher MCS links with smaller range, and that smaller range also links with higher ratings of self and peers, fits nicely with the empirically supported view that the higher MCS individual is less inclined toward taking interpersonal risks. They strive to gain acceptance and avoid disapproval from others through pleasing behavior and compliance with perceived situational demands (Jacobson, Berger, and Millham, 1970; Berger, 1971; Millham, 1974).

If the conscious or unconscious motivation of the high MCS members was to be favorably perceived by others, to what extent were they successful in accomplishing this? The answer from the present date appears to be complex. Taking the GIRS "Like" scale as a global measure of peer acceptance, it may be noted that the MCS/Like correlation was practically nil- -.05. As we have seen, however, the Liking/MCS link was highly effected by the members' level of trait anxiety. The Defensive High-Anxious members received significantly lower Liking ratings than all other groups, while the Repressors were highest by a small margin. Add to this the finding that ARS 7th data indicate that among the four coping groups the Repressors used the narrowest range. Also of relevance is the

finding that narrower range linked inversely with higher Liking

scores for all four range measures (-.05, -.27, -.10, and -.16).

In sum, of the two "defensive" groups, the Repressors apparently

showed the greatest caution in evaluating others and, perhaps

consequently, did receive more peer approval.

One implication for future research that can be derived from

the foregoing discussion is that if the high MCS predicts

approval-seeking (or censure avoiding) behavior, the success of such

efforts would appear to be moderated by level of trait anxiety.

What we have concluded here about the higher MCS individuals,

particularly those claiming low trait anxiety, seems quite similar

to Hurley's (1986, p. 226) description of those who allot a

constricted range of scores:

" [Who] seem mainly oriented toward avoiding interpersonal tensions

through a nonassertive and overly deferential manner, while

inwardly harboring an inflated view of self."

It would appear that rater's range and MCS are to some degree

tapping the same construct, and this construct seems related to a

certain defensive avoidance of interpersonal risk and disapproval.

Research analyzing their areas of convergence and divergence seems

indicated.

B-MAS Trait Anxiety and Interpersonal Measures

The relationship between the trait anxiety measure (B-MAS),

independent of MCS, and the interpersonal measures was not a major

focus of this study, but several general findings appear worthy of
comment. Considering data from both the GIRS and HIRS, trait
anxiety predicted slightly _less_ favorable peer-evaluations over the
majority of variables. With HIRS, persons scoring higher on the
B-MAS were viewed as less Other-Accepting (ARO) at both the 3rd and
7th week administrations (r = -.19 & -.18, not significant,
two-tailed). Thus, these persons tended to be viewed by peers as
showing less of the following than low B-MAS members: warmth,
helpfulness, gentleness, and acceptance of others. On the
Self-Acceptance (ARS) dimension of the HIRS, there was also a weak
trend for peers to rate higher anxiety (B-MAS) members lower.

The peer-based data from the GIRS miniscales tended be
consistent with HIRS results. As a weak general trend, B-MAS
predicted less effective functioning, from the perspective of both
peers and self. One of the B-MAS's higher self-based linkages was
with Hostility (r = .21, not significant). It is notable, then that
both MCS defensiveness and B-MAS Anxiety positively predicted the
self-perception of "angry" and "critical" responding toward peers.

Not surprisingly, higher B-MAS was most strongly, and
significantly, associated with higher peer-rated Anxiety and
Self-Effacement and also with self-rated Anxiety and
Self-Effacement. Counter to the general trend toward poorer
interpersonal functioning, high B-MAS members were rated by peers as
marginally (r = .11) more willing to self-disclose (Intimacy) and,
interestingly, high B-MAS members also rated _themselves_
nonsignificantly (r = .20) higher on Intimacy or self-disclosure.

Higher B-MAS members were also slightly more inclined to give a wider range of scores when rating others and self. This may be seen as reflecting a greater willingness to take risks or/and as reflecting incautiousness and poorer interpersonal skills-- as the lower peer-based ratings suggest.

In sum, higher trait anxiety, like higher MCS defensiveness predicted poorer peer-judged within-group performance. However, unlike MCS which is linked with more positive self-evaluations, B-MAS predicts a tendency toward negative self-evaluations.

III. <u>Summary:</u>

Because the "coping groups" of this study differed
considerably, in terms of inclusion criteria, from those of previous
studies, all conclusions regarding coping groups must be considered
with some caution. For example, most of Repressors of this study
are much less extreme on the two predictor variables in comparison
with the Repressors of Weinberger et al. (1979) and Asendorpf et al.
(1983). In those prior works small subgroups were selected from
sample populations of somewhat over 200; and placed into groups
based on their extreme high or low Marlowe-Crowne and trait anxiety
scores. In this study, all 78 group members were included in the
analysis and coping groups were formed by dividing at the median on
both predictor variables (see Appendix D). While it is unfortunate
that the present number of subjects did not allow for more analogous
coping groups, this study does put in sharper focus the relationship
of dependent and independent variables over the broad range of a
sample-- rather than simply the extreme scorers.

Mindful of the foregoing cautions, important findings were as
follows. Counter to hypotheses based on previous investigations,
the Repressors were <u>not</u> found to be the least interpersonally
effective of the four groups. On several peer-based ratings the
Repressors were, in fact, marginally (nonsignificantly) higher than
the three remaining groups. Interestingly, it was the Defensive
High-Anxious group that seemed to function most poorly. They were
rated lowest by peers on Other-Acceptance, Insight, and Like, and
highest on Hostility and Anxiety. Actually, the Defensive

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High-Anxious groups' poor performance was not unexpected in that they were predicted be rated higher than two of these three other groups (Repressors excluded).

The prediction that the Low-Anxious group would be rated most favorably by peers was entirely unsupported although they were never lowest among the four groups. The High-Anxious (low MCS) group tended to a nonsignificicant degree to receive more positive peer-ratings than the Low-Anxious group.

Only on one of the four "rater's range" measures did the Repressors confirm the hypothesized greatest constriction in scores alloted to others. However, their ratings of self and others tended to be generally higher than those given by the three other coping groups. On two additional range measures, there was a significant main effect of MCS defensiveness. These findings are congruent with the body of Marlowe-Crowne literature that portrays high MCS individuals as interpersonally cautious and seeking to avoid criticism or disapproval. In sum, the results related to range indicate that high MCS individuals who also score high on trait anxiety may not show the level of cautiousness which more clearly characterizes the Repressors. The MCS and range findings suggest that the two measures may tap the same or similar constructs. Future empirical examination of the relationship between rater's range and the Marlowe-Crowne scale is obviously indicated.

As hypothesized, over a broad range of interpersonal variables (including significant results and nonsignificant trends) MCS tended to mildly predict poorer peer-rated group performance. Also as

expected, MCS generally linked with higher self-ratings; resulting in peer/self discrepancies indicating relative self-overrating by higher MCS members.

The literature on the coping groups, and the larger Marlowe-Crowne literature, has focused particular attention on behavioral differences in anxiety and hostility between high and low MCS scorers (Strickland, 1977). The MCS has been discussed as a predictor of conscious or unconscious suppression of both affects. It was thus not surprising to find MCS main effects and coping group differences in relation to anxiety and hostility.

On the Hostility miniscale, both high MCS groups were rated high by peers and, surprisingly, MCS and self-rated Hostility were also positively and significantly correlated. These findings suggest that while high MCS individuals may seek to avoid negative interactions with peers, this was less successful by the eighth week of the groups life when the GIRS was administered. The author knows of no prior studies concerning level of MCS and changes in behavior over extended interpersonal contact. The present findings seem to suggest the value of such endeavors.

In relation to peer-rated Anxiety, only those high MCS members who had also scored high on B-MAS trait anxiety were viewed as significantly more anxious. The germinal studies on the coping groups had found the Repressors to demonstrate the highest levels of anxiety across both behavioral and physiological dimensions. In the present investigation all groups, with the exception of the

Defensive High-Anxious, were rated approximately the same by peers on Anxiety.

In future research employing trait measures of Anxiety, it may be important to consider that among those who claim higher Anxiety, some may appear overtly anxious while others will appear less so. The MCS scale seems to predict the differential response. The difference may, of course, be conditioned by the interpersonal circumstances, in this instance, relatively extended and and emotionally intimate contact.

In relation to peer/self-rating discrepancy on Anxiety, MCS significantly predicted greater self-underrating. When the the four coping groups were examined, the High-Anxious (low MCS) group showed the closest degree of congruence between self and peer perceptions of Anxiety, and was marginally different from the remaining three groups, which, did not differ significantly. The label "incongruent" which has been applied to the Repressors vis-a-vie differences between self-report and other measures of anxiety. The present results indicate that the "incongruent" label fits the the Low-Anxious and Defensive High-Anxious as well as it does the Repressors.

While the present results gave minimal support to coping group hypotheses related to interpersonal behavior found in previous research efforts, findings related to these groups were sufficiently interesting and provocative to strongly indicate the value of continued research.

APPENDICES

APPENDIX A

COURSE DESCRIPTION

SMALL GROUPS FOR ENHANCED INTERPERSONAL AWARENESS: PSY 400

This course focuses on better identifying your ways of relating to self and others.
This is approached by working within small groups (usually of 6 to 9 persons) that
meet for 90-minutes twice each week plus 12-hour long meetings near the terms 3rd
and 7th weekends. We endeavor to build an atmosphere of concern and respect for
each member's personhood while also attempting to respond both constructively and
honestly to each participient's behaviors within a here-and-now context. Our text-
book, Egan's Interpersonal Living, provides a general orientation and also describes
the basic skills essential for effective participation. Each member is required
to maintain a detailed, organized, and up-to-date account of her/his interactions,
feelings, and thoughts about self and each other group member. This work consti-
tutes the principal basis of course grades. Weekly meetings of the entire class,
textbook based quizzes, and other assignments provide important tools for enhancing
the individual's awareness of both consistencies and discrepancies between self-
impressions and how others perceive and react to him/her.

Each group is led by one or two trained "facilitator(s)." Selected from former class
members for their strong interest in, and good potential for, relating constructively
to others, these individual's had at least one term of preparation for this role.
Occasionally, but less often, groups are led by graduate students in clinical psy-
chology or related fields. The instructor (Hurley) monitors each group's current
status, potential problems, and progress. Over two-thirds of all enrollees have
rated their experience in this course at closer to exceptionally good than to average,
as compared with their other MSU courses inside and outside of the Department of
Psychology on a scale where exceptionally bad = 1, below average = 3, average = 5,
above average = 7, and exceptionally good = 9. It has been offered here for each
term of the regular academic year for 15 years.

Because group facilitators' class schedules often remain unsettled until the new
term starts, scheduling poses a special problem. Our small groups' actual meeting
times usually differ from the times stated (except for Wednesday meetings of the entire
class) in MSU's Schedule of Courses. Small Group meeting times are planned in our
first class meetings to fit member's other commitments, while maximizing the interval
between these weekly sessions. Students are strongly advised to attend the term's
initial scheduled class meeting to insure their placement in a suitable group. Attendance
at all class meetings is required and any absence not explicitly approved by the
instructor is likely to adversely influence the grade.

This course is not designed as a personal counseling and/or psychotherapy experience.
Groups for those purposes are often available at MSU's Student Counseling Center.
Our goal is to enhance your self-knowledge, so unlike some "Encounter Groups", we
attempt to cultivate a sense of caring and concern for each person, rather than
providing a stage for thoughtless "confrontations." While genuinely negative outcomes
seem very rare, group members will inevitably experience some conflicts and disagreements
that may be accompanied by anxieties and feelings of discomfort or unhappiness.
Temporary ego-bruises tend to be viewed as either challenging or damaging and persons
with little reserve strength for coping with those experiences seem best advised
to enroll in more impersonal courses.

Space in PSY 400 S-1 is generally available to juniors and seniors, irrespective
of major, and to advanced PSY sophomores, although the Instructor's (John Hurley, 355-4615
or 106 Olds Hall) permission is required. Preenrollment is recommended, but may not
be essential.

APPENDIX B

MARLOWE-CROWNE SCALE (MCS)

and

BENDIG MANIFEST ANXIETY SCALE (B-MAS)

(MCS items have been circled)

Name_____

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. Encircle T or F in left margin.

(T) F 1. Before voting I thoroughly investigate the qualifications of all the candidates.

(T) F 2. I never hesitate to go out of my way to help someone in trouble.

T F 3. I work under a great deal of tension.

T (F) 4. It is sometimes hard for me to go on with my work if I am not encouraged.

(T) F 5. I have never intensely disliked anyone.

T F 6. I find it hard to keep my mind on a task or job.

T F 7. I am certainly lacking in self-confidence.

T (F) 8. On occasion I have had doubts about my ability to succeed in life.

T (F) 9. I sometimes feel resentful when I don't get my way.

T F 10. I am happy most of the time.

(T) F 11. I am always careful about my manner of dress.

(T) F 12. My table manners at home are as good as when I eat out in a restaurant.

T F 13. I certainly feel useless at times.

T (F) 14. If I could get into a movie without paying for it and be sure that I was not seen, I probably would do it.

T F 15. I frequently find myself worrying about something.

T F 16. I have periods of such great restlessness that I cannot sit long in a chair.

T (F) 17. On a few occasions, I have given up doing something because I thought too little of my ability.

T (F) 18. I like to gossip at times.

T F 19. I believe I am no more nervous than most others.

T F 20. Life is a strain for me much of the time.

T (F) 21. There have been times when I felt like rebelling against people in authority even though I know they were right.

T F 22. I am usually calm and not easily upset.

(T) F 23. No matter who I'm talking to, I'm always a good listener.

T (F) 24. I can remember "playing sick" to get out of something.

T F 25. I am more sensitive than most other people.

T (F) 26. There have been occasions when I took advantage of someone.

T F 27. I cannot keep my mind on one thing.

(T) F 28. I'm always willing to admit it when I make a mistake.

T F 29. I feel anxiety about something or somebody almost all the time.

Ⓣ F 30. I always try to practice what I preach.

T F 31. I am inclined to take things hard.

Ⓣ F 32. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.

T Ⓕ 33. I sometimes try to get even rather than forgive and forget.

T F 34. I am not unusually self-conscious.

Ⓣ F 35. When I don't know something I don't at all mind admitting it.

Ⓣ F 36. I am always courteous, even to people who are disagreeable.

T Ⓕ 37. At times I have really insisted on having things my own way.

T Ⓕ 38. There have been occasions when I felt like smashing things.

T F 39. I have sometimes felt that difficulties were piling up so high that I could not overcome them.

Ⓣ F 40. I would never think of letting someone else be punished for my wrongdoings.

T F 41. At times I think I am no good at all.

Ⓣ F 42. I never resent being asked to return a favor.

T F 43. I am a high-strung person.

Ⓣ F 44. I have never been irked when people expressed ideas very different from my own.

Ⓣ F 45. I never take a long trip without checking the safety of my car.

T Ⓕ 46. There have been times when I was quite jealous of the good fortune of others.

Ⓣ F 47. I have almost never felt the urge to tell someone off.

T F 48. I shrink from facing a crisis or difficulty.

T Ⓕ 49. I am sometimes irritated by people who ask favors of me.

Ⓣ F 50. I have never felt that I was punished without cause.

T F 51. I sometimes feel that I am about to go to pieces.

T Ⓕ 52. I sometimes think when people have a misfortune they only got what they deserved.

Ⓣ F 53. I never deliberately said something that hurt someone's feelings.

APPENDIX C

GROUP INTERPERSONAL RATING SCALES (GIRS)

(Rating form and item sets comprising scales)

1	2	3	4	5
Almost Never Characteristic	Only Occasionally Characteristic	Sometimes Characteristic	Often Characteristic	Almost Always Characteristic

For each statement below write in the number (1, 2, 3, 4 or 5) indicating how well the description characterizes the within-group behavior of the person you are rating. Consider each item one at a time, rating all members before moving to the next item. To make it easier to change your mind about a rating, please use a pencil.

Participates actively in the group.

Is tense or anxious in the group.

Discloses intimate or personal thoughts, feelings or experiences.

Takes the group seriously.

Makes an effort to try to understand how own behavior affects, or is experienced by, others.

Critical or disapproving of others, in either subtle or obvious ways.

Acts apologetic about own behavior or way of being in the group.

Offers others emotional support and acceptance.

If angry, would not let others know about it until later, if at all.

Communicates an insightful understanding of the reasons behind own feelings and own reactions toward others.

Is relaxed in the group.

Reveals personal feelings and thoughts that could be uncomfortable or anxiety producing to talk about.

Seems self-accepting--does not discount self or put self down.

Sits quietly, participates little.

Reacts angrily, in either subtle or obvious ways.

Shows an interest in hearing perceptions about, or reactions to, own ways of interacting in the group.

If feeling irritated with someone, would soon let that person know.

Personally uninvested in, or indifferent toward, the group.

Communicates a clear or insightful understanding of self--knows self well.

Brings up personal issues or feelings that would probably be difficult for anyone to bring up.

Is nervous or edgy in the group.

Expresses caring and concern.

I like this person.

I have found this person annoying or difficult to be with.

GIRS Scales

PARTICIPATION

Participates actively in the group.

Sits quietly, participates little.

INTIMACY

Discloses intimate or personal thoughts, feelings or experiences.

Reveal personal feelings of thought that could be uncomfortable
or anxiety producing to talk about.

Brings up personal issues or feelings that would probably be
difficult for anyone to bring up.

INSIGHT

Communicates a clear or insightful understanding of self--knows
self well.

Communicates a clear or Insightful understanding of own feelings
and own reactions toward others.

ANGER ACKNOWLEDGEMENT

If angry, would not let others know about it until later,
if at all.

If feeling irritated with someone, would soon let that person
know.

FEEDBACK INTEREST

Makes an effort to try to understand how own behavior affects or
is experienced by others.

Shows an interest in hearing perceptions about, or reactions to,
own ways of interacting in the group.

CARING

Offers others emotional support and acceptance.

Expresses caring and concern.

GROUP INVESTMENT

Takes the group seriously.

Personally uninvested in, or indifferent toward, the group.

HOSTILITY

Critical or disapproving of others, in either subtle or obvious ways.

Reacts angrily, in either subtle or obvious ways.

SELF-EFFACEMENT

Acts apologetic about own behavior.

Seems self-accepting--does not discount self or put self down.

ANXIETY

Is tense or anxious in the group.

Is relaxed in the group.

Is nervous or edgy in the group.

LIKING

I like this person.

I have found this person annoying or difficult to be with.

APPENDIX D

MCS AND B-MAS MEANS AND STANDARD DEVIATIONS, AND SEX

COMPOSITION OF THE FOUR COPING GROUPS

TABLE D-1

MCS and B-MAS Means and Standard Deviations, and
Sex Composition of the Four
Coping Groups (N = 78) *

	MCS		B-MAS		SEX	
	Mean	S.D.	Mean	S.D.	#M	#F
Repressors	17.22	3.37	5.09	2.09	11	12
Defensive High-Anxious	15.42	2.41	11.90	2.81	9	10
High-Anxious	8.42	2.89	12.05	2.07	5	14
Low-Anxious	8.47	2.29	6.53	1.77	12	5

* Divided by median split:
  MCS scores 1 through 12 = Low MCS; 13 through 26 = High MCS
  B-MAS scores 0 through 8 = Low B-MAS; 9 through 20 = High B-MAS

APPENDIX E

CORRELATIONS BETWEEN GIRS VARIABLES

Table E-1

Correlations Between GIRS Variables: Self-Ratings
and Peer-Ratings (N = 78) *

		PEER-RATINGS										
		PAR	INT	INS	AA	FBI	CAR	GA	HOS	SE	ANX	LIK
	Particip.	72	63	60	74	52	38	53	30	-34	-38	38
S E L F - R A T I N G S	Intimacy	31	70	48	66	55	32	50	22	-04	02	34
	Insight	27	22	41	49	69	57	63	-17	-43	-51	64
	Anger Ack.	43	01	30	48	38	16	37	44	-44	-18	29
	Feedback Int.	14	32	25	19	34	64	74	-29	-14	-32	61
	Caring	24	08	18	01	14	67	63	-53	-14	-47	68
	Group Attract.	39	03	10	30	13	28	58	-30	-22	-31	74
	Hostility	05	08	-03	24	-10	43	-13	52	-11	24	-45
	Self-Efface.	-35	08	-28	-48	-05	-23	-37	10	68	53	-28
	Anxiety	-29	15	-32	-28	-25	-36	-15	18	51	60	-43

* Redundancies in the matrix have been eliminated.
  Right of diagonal = correlations between scales based on peer-ratings.
  Left of diagonal = correlations between scales based on self-ratings.
  Diagonal = correlations between self and peer-ratings on same-named scales.

APPENDIX F

CORRELATIONS BETWEEN HIRS VARIABLES

Table F-1

Correlations Between HIRS Variables (N = 78) *

	A R S 3 P	A R S 3 S	A R O 3 P	A R O 3 S	A R S 7 P	A R S 7 S	A R O 7 P	A R O 7 S	A R S 3 R	A R O 3 R	A R S 7 R	A R O 7 R
ARS 3P +												
ARS 3S ++	63											
ARO 3P	22	-01										
ARO 3S	-07	15	50									
ARS 7P	80	49	29	-04								
ARS 7S	64	52	16	12	67							
ARO 7P	14	-04	70	34	40	22						
ARO 7S	-19	-14	47	67	-03	19	50					
ARS 3R +++	13	-11	-08	-40	18	-02	-07	-38				
ARO 3R	02	-10	-36	-50	01	-10	-31	-46	62			
ARS 7R	-05	-08	-04	-14	-06	-22	-17	-29	54	41		
ARO 7R	08	08	-25	-31	-03	-21	-33	-55	40	46	63	

*   Redundancies in the matrix have been eliminated
+   P = peer-rating
++   S = self-rating
+++ R = range score

APPENDIX G

RAW DATA TABLE

SAMPLE OF VARIABLE ABBREVIATIONS USED IN RAW DATA TABLE * +

MCS	= Marlowe-Crowne Scale
BANX	= Bendig Manifest Anxiety Scale
ARS3P	= ARS, week three, peer-rating
ARO7S	= ARO, week seven, self-rating
ARO7R	= ARO, week seven, rater's range
PAR	= Participation, peer-rating
AA	= Anger Acknowledgment, peer-rating
PAR3S	= Participation, self-rating
ANX3S	= Anxiety, self-rating

* Discrepancy scores are not shown but may be recalculated from the data.

+ For "SEX" variable, 0 = male and 1 = female

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