APPROACH AND DEPRIVATION AFFILIATION AS A FUNCTION OF AFFILIATIVE INVOLVEMENT AND AFFILIATIVE AROUSAL

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ABSTRACT

APPROACH AND DEPRIVATION AFFILIATION AS A FUNCTION OF AFFILIATIVE INVOLVEMENT AND AFFILIATIVE AROUSAL

By

Ginette B. Langer

The present study was designed to explore the effects on n affiliation, as expressed in TAT fantasy material, of both pre-existing and experimentally aroused needs. Two components of n affiliation were examined; an approach component which involves enjoyment of the affiliative process and a deprivation component, involving a fear of rejection and loss.

It was hypothesized that Ss involved in an exclusive dating relationship would score higher in approach affiliation than those Ss not involved. It was also hypothesized that the steady dating Ss would have lower deprivation affiliation than single Ss.

A second hypothesis predicted that Ss in a deprivation arousal condition would score higher in deprivation affiliation than those Ss in an approach arousal. Further,

those Ss in the deprivation arousal would score lower in approach affiliation than Ss in the approach arousal. Sexual differences were also examined.

The deprivation arousal consisted of a sociometric procedure whereby Ss rated other group members on such characteristics as attractiveness, dominance, etc., on the basis of their initial impression of each person. The approach arousal involved group work on a crafts type activity where a relaxed and friendly atmosphere was encouraged. Ss were 69 undergraduates, 37 females and 32 males. Groups of from 6-11 Ss, consisting of couples or non-couples, were given the experimental arousal and then were asked to write the Thematic Apperception Test stories, with appropriate pictures for the fantasy being examined. Stories were coded for approach and deprivation components separately.

Statistical analyses revealed that the approach and deprivation components were independent of each other. Analyses failed to support any of the hypotheses. No differences were found on approach and deprivation affiliation between couple and non-couple Ss. The affiliative arousals failed to produce differences in the fantasy material.

Three factors were proposed to account for the lack of differences:

(a) The experimental arousals were not strong enough to arouse the appropriate motives.

(b) Some Ss in the couples groups might be motivated to be in an exclusive relationship by deprivation concerns, i.e. by a fear of rejection and separation.

(c) Some Ss in the non-couples group might be satisfied dating many individuals and motivated by approach affiliation.

Approved: Robert A. Zucker

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Chapter I

INTRODUCTION

The desire or need to affiliate with other individuals is an integral part of our lives. However, it is only less than twenty years ago that researchers first began to define and measure affiliation need (Shipley and Veroff, 1952) through the use of the Thematic Apperception Test. Research revolving around affiliation has generally taken two directions. The first direction deals primarily with the types of situations under which people choose to affiliate and the dynamics accounting for the behavior, (Schacter, 1959; Gerard and Rabbie, 1961; Zimbardo and Formica, 1966). The second type of research deals more with the measure and definition of internal motivation (Shipley and Veroff, 1952; Atkinson, Heyns and Veroff, 1954, 1958; De Charms 1957; Zucker and Davis, 1969), the variables affecting this motivation and the situations in which this internal motivation is demonstrated (Heyns et al., 1958; Rosenfeld and Franklin, 1966; Hardy, 1957). However, surprisingly few studies (Shipley and Veroff,

1952; Lansing and Heyns, 1959) have related affiliative motivation to real life affiliative conditions. Such studies help validate the measure and further understand the individuals in such real situations.

In an attempt to partially fill this gap in research, the present study has as its purpose the assessment of affiliation motivation in individuals who are either involved in an extensive affiliative relationship with a member of the opposite sex or not involved in such a relationship. Further, the differential effects of having two components of affiliation motivation aroused were assessed through the use of the Thematic Apperception Test.

Before reviewing the literature on affiliation need, it will be useful to examine the development of a definition of affiliation motivation and the scoring method for assessing it.

Thematic Apperception Methods of Scoring Need Affiliation

In the last twenty years several scoring methods have been proposed for rating need affiliation in TAT stories, which differ in terms of the definition of need affiliation. In the first such study (Shipley and Veroff,

1952), affiliative imagery was viewed as a statement of concern over separation, rejection by, or loss of another person. Affiliative need was viewed therefore, as primarily a threat or avoidance component.

Heyns, Veroff and Atkinson (1954, 1958) attempted to broaden the definition of need affiliation by scoring any evidence of concern over "establishing or maintaining a positive affective relationship with another person." Therefore imagery that indicated friendship activities such as conversations, parties, etc., as well as the fear of loss or rejection were included in the scoring.

It can be argued that in this attempt to broaden the definition of need affiliation, the overall score gives no indication of the motivational elements that composed the affiliative need. A high score could result from either concern for positive affective relationships or from imagery that indicates a fear of rejection. Several investigators have offered solutions to this problem, accepting the broader definition of Heyns, Atkinson and Veroff.

One alternative that has been proposed (DeCharms, 1958) has been to classify the stories as primarily positive (goal-oriented) or primarily negative (threat-oriented).

Goal oriented stories revolve around friendship and companionship imagery such as parties, bull sessions, etc. The threat-oriented stories would indicate a fear of separation or affiliative goals which have been thwarted. Included here is concern with loneliness, rejection, quarrels, and physical separation.

Using a somewhat different approach, several investigators (Hardy, 1957; Byrne, 1962; Byrne, McDonald and Mikawa, 1963) have advocated a two-factor theory of affiliative motivation, suggesting that a clearer insight into the motivation could be arrived at by dividing affiliation scores into high, medium and low groups. Those with high n affiliation are highly motivated toward affiliative goals. These individuals are similar to those classified by DeCharms (1957) as goal-oriented. They are not concerned over rejection and loss. Persons with medium n affiliation are ambivalent in their motivation and behavior. They strongly want to affiliate but they fear rejection. The low affiliative individual is not particularly concerned with or is indifferent toward maintaining affiliative relationships. In all these cases the total motivation score is arrived at by using the Heyns, Atkinson, and Veroff (1958) manual.

Further variations in the scoring of affiliative motives has been proposed by Zucker and Davis (1969). Here the scoring is similar to DeCharms (1957) method, but breaks down the approach and deprivation affiliation into separate components rather than scoring stories as either one or the other. This schema in particular, more adequately describes the ambivalent individual, that is, a person can be high on both components of affiliation or he can be low on both, or he can be high on one component and low on the other. Approach affiliation is scored when companionate activity and enjoyment is evident in the affiliative process. Deprivation affiliation implies a fear of rejection and loss-affiliative behavior for some personal rather than interpersonal need (e.g. affiliation to overcome shame, feeling unloved, etc.). Each individual has a separate score for each type of affiliation. A further change from the DeCharms scoring is that a greater emphasis is placed on the goal of the affiliative relation, rather than on the outcome (positive or negative) of the behavioral sequence.

Another review, by Mehrabian and Ksionsky (1970) essentially reinforces the notion of a two-factor theory but differentiated four kinds of affiliative types. One

type expects interpersonal interactions to be positively reinforcing. A second type expects interactions to be negatively reinforcing. Those who are ambivalent expect both positive and negative reinforcements from affiliation. A last type is one which is neutral; the person expects neither positive nor negative reinforcements from interpersonal interactions.

Research using the Shipley and Veroff Scoring Technique

In the first investigation (Shipley and Veroff, 1952), it was found that subjects rejected from a fraternity had significantly higher n affiliation scores than a comparable group of subjects accepted into a fraternity. Further, subjects within a fraternity subjected to an arousal situation of a sociometric rating, scored higher than the subjects in the less threatened control group.

Another study (Burdick and Burnes, 1958) using the same scoring technique and conceptualization of n affiliation, found that subjects with high n affiliation changed their opinions to agree more with an experimenter when they liked him and to disagree more with the experimenter when

they disliked him, than did subjects whose n affiliation scores were low.

McKeachie, Lin, Milholland and Isaacson (1966) looked at the relationship between affiliative cues, need affiliation and achievement in college. It was found that men who had scored highly on n affiliation, received relatively better grades in classes conducted by a warm and friendly teacher (high affiliative cues), whereas men scoring low in n affiliation got relatively better grades in classroom situations characterized by low affiliative cues.

The few studies done using this method show evidence that this scoring system is indeed tapping something which either affects behavior or is the outcome of a situation. However, it is possible that these few studies have only indicated one type of affiliative motivation, that of a concern for loss and rejection, while not revealing other motivational factors involved in the need for affiliation.

Research Using the Heyns, Atkinson and Veroff Scoring Technique

The greatest number of studies investigating n affiliation have been conducted using this scoring

technique (i.e., where both positive and negative motives for affiliating have been combined). In one experiment (Atkinson, Heyns and Veroff, 1954), it was found that subjects exposed to a sociometric procedure scored higher in n affiliation than a non-exposed control group. The arousal group did not differ from the control group on four categories scored: unsuccessful instrumental activity, negative anticipatory goal state, personal obstacle, and negative affective state. A difficulty with this study, however, is that besides the procedure used, the population in the two groups differed, the subjects in the control condition being in an introductory psychology course and the subjects in the experimental condition being in a fraternity. Differences found could be attributed to either the procedure or the populations.

Lansing and Heyns (1959) demonstrated that n affiliation scores are positively correlated with the use of the local telephone and letter writing. Need affiliation was not correlated with social long distance calls. In a perceptual study (Atkinson and Walker, 1956), subjects high in n affiliation, selected human faces from non-human figures more frequently than those low in n affiliation. Results were also higher among an aroused group of subjects

who were first subjected to a sociometric procedure. These studies, like those studies using the Shipley and Veroff (1952) technique, demonstrated that this scoring technique is effective in measuring degrees of the phenomena of n affiliation. However, it is not clear whether a concern for positive affective relationships or a fear of rejection and loss are responsible for the results.

In one of the few studies (Rosenfeld and Franklin, 1966) using women as subjects, subjects were assigned to one of four conditions presenting various degrees of arousal. This was followed by the administration of the TAT, scored for affiliative need. Subjects receiving no sociometric feedback and subjects receiving negative feedback had significantly higher ratings on n affiliation than did control subjects who did not partake in the sociometric procedure. Subjects who received positive sociometric feedback did not differ from those in the control group. In a separate analysis, scores for n affiliation were broken down into positive and negative components, which coincides with the Heyns et al. (1958) codes for negative and positive anticipatory goal state (Ga- and Ga+), instrumental activity (I), affective state (G), and personal block (Bp). Results indicated that the

sociometric procedure with either negative or no feedback, increased the positive but not the negative n affiliation categories. The authors concluded that both the approach and avoidant components of n affiliation lead to a search for positive affective relationships.

This finding is surprising in view of the fact that Shipley and Veroff (1952), in finding that n affiliation was higher in the group of subjects given a sociometric rating, defined and measured affiliation in terms of the negative components of n affiliation. The problem here, however, is that an effective measure of n affiliation should discriminate between the approach and avoidance dispositions that lead to the desire for affective relationships. A possible explanation for the difficulties is that the pictures used in this study were perhaps not conducive to imagery concerning avoidant components of n affiliation.

In an investigation by Reitman (1960) relating affiliation and achievement, no support was found for the contention that performance on an arithmetic measure should correlate highly with n affiliation under relaxed affiliative conditions. This finding is unexpected in view of the McKeachie et al. (1966) study where n

affiliation and affiliative cues were related to achievement.

One study (Byrne, 1961) attempted to assess the relationship between n affiliation arousal and anxiety. In the arousal condition, which consisted of being watched and rated, subjects high in n affiliation had higher self-rated anxiety than subjects low in n affiliation. Also, for subjects high in n affiliation, the difference between experimental and control groups approached significance on the anxiety measure. These findings reveal that subjects high in n affiliation have more anxiety in situations where their acceptance might be threatened. One might speculate that those subjects higher in the avoidant component of need affiliation would more strongly indicate higher anxiety than those lower on the avoidance component. Unfortunately the Heyns et al. scoring procedure does not reveal this information.

Other studies have related n affiliation to the attraction to similar or dissimilar strangers. Byrne (1961) found no differences in attraction to a stranger, described as holding similar attitudes to the subjects, as a function of subjects' affiliative scores. However, subjects with low n affiliation rated an attitudinally dissimilar stranger

higher than subjects high in n affiliation. In a later study Byrne (1962) demonstrated that medium n affiliation subjects reacted more positively to similar strangers and more negatively to dissimilar ones than did either high or low n affiliation subjects. No differences were found between the two latter groups in interpersonal attraction. The author has explained these results in terms of Hardy's (1957) two-factor theory; those individuals with medium n affiliation are considered to have strongly ambivalent, both positive and negative, motives in relation to affiliation. Thus an attitudinally similar stranger who indicates potential affiliative success would be more rewarding and an attitudinally dissimilar stranger who represents a potential affiliative failure, would be more threatening for those in the medium group than for either those with high or low n affiliation.

Dember (1964) used this scoring technique to assess the relation between affiliation and birth order. First-born subjects were found to have higher scores than later born subjects.

Another variable that has been investigated in its relation to n affiliation has been conformity. Findings here have been equivocal. Hardy (1957) found significant

relationships when he studied n affiliation and conformity and attitude change under conditions of no social support for previously held opinions or with support of only one individual in the group. Results indicated that subjects with medium n affiliation conformed under both conditions but changed their attitudes (privately held opinion) only in the no-support condition. Those with high n affiliation conformed and changed their attitudes in the no support condition but not when supported by one individual. Subjects measured as having low n affiliation were least affected by the manipulation and changed most under conditions of support, possibly responding to the argument of the sole supporter. The medium subjects were interpreted as being ambivalently motivated towards affiliation in line with Hardy's two-factor theory.

McGhee and Teevan (1967) also found relations between conformity and n affiliation using a perceptual task of conformity. Those with high n affiliation conformed significantly more frequently than those with low affiliation. The explanation behind these studies is that the individual with high n affiliation will conform in order to be able to establish affective relationships and to not

be rejected for being different. Other studies, however, did not support the aforementioned ones.

Samelson's (1958) study showed no relationship between n affiliation and degree of conformity under conditions of full conflict and under conditions where the subject was led to believe that he might be superior than the other subjects at the particular task on hand. Another study (Kaplan, 1962) also found no relationships between affiliation and conformity in an investigation using adolescents.

Though the studies which demonstrated significant results indicate that there is probably some relationship between conformity and n affiliation, there is evidently something amiss since results are not consistent. Perhaps the difficulty here is again that the approach and the avoidance/deprivation tendencies of affiliation are differentially related to conformity. Although subjects classified as having medium affiliation in Hardy's (1957) study are assumed to have both the approach and avoidance feelings for affiliation, a more adequate separation of the two components might clarify the conflicting results.

It is clear from the review of the research on n affiliation using the Heyns et al. (1958) concept and

scoring method for affiliation, that results are not always clear and sometimes contradictory. Further, the lack of separation of approach and deprivation components leaves interpretation of the findings open to questioning. Though n affiliation has been shown to be related to a number of diverse variables, a more thorough and unambiguous understanding of the need for affiliation could result from a breakdown of the scoring for the two identified components of affiliation.

Research Using the DeCharms Scoring Technique

As previously mentioned, DeCharms (1957) developed a procedure for scoring n affiliation, based on the Heyns et al. (1958) manual, which differentiated the threat and goal dispositions in the motivation. In his particular study DeCharms reasoned that persons who were high in affiliative imagery would perceive working for a group as an activity leading to acceptance from the group, therefore, being inclined to cooperate rather than compete. Further, an individual who has had previously found acceptance in interpersonal situations, may have discovered that cooperation leads to acceptance. The previously

rejected person, however, may so desire acceptance that the anticipation of future rejection leads to a more competitive-aggressive response. For the latter individual, succeeding through competition might indicate potential acceptance. Thus DeCharms hypothesized that under conditions that lead to anticipation of rejection, subjects highly threat-oriented would be more productive on a competitive task than would low threat oriented subjects. This hypothesis was confirmed. Secondly, it was hypothesized that under conditions leading to the expectation of rejection, high threat oriented subjects would be less productive on a cooperative task than would low threat oriented subjects. Data for this hypothesis was in the predicted direction but just fell short of significance. Though results were not significant the data also suggests that with cooperative instructions with no rejection arousal, productivity was greater with high rather than low goal-oriented subjects.

A second study (Fishman, 1966), using the DeCharms method of differentiating between threat and goal oriented affiliation, related affiliation to positive and negative affiliative acts as rated by peers and observers in a small group interaction of females. Positive acts were considered

to be initiating small talk, telling jokes, etc.; negative acts included criticizing, dominating, rejecting others, etc. Results showed that there was a significant correlation between overall n affiliation score and percent of positive acts. Findings also indicated that the goal oriented motivation was almost identically correlated with the positive affiliative behavior as was the overall n affiliation. Further, the goal oriented motivation had a much stronger relationship with the affiliative behavior than did the threat oriented motivation, showing support for Fishman's contention that the positive goal oriented components contain the main predictive value of the n affiliation measure.

Apparently there are some conflicting conclusions in the two preceding studies, with the DeCharms (1957) study indicating more predictive value in the threat oriented component, and Fishman (1966) demonstrating superior predictive value in the goal-oriented component. One possible explanation for the divergent findings is that the DeCharms study was concerned with the productivity on tasks rather than more direct affiliative behavior. Fishman, on the other hand, related affiliative codes to actual affiliative behavior. However, given that each of

the components has been shown to have some predictive value, it would be best to maintain both components in order to clarify the predictive value for each component in a variety of situations.

Research Using Zucker and Davis Scoring Technique

In a study by Zucker (1970), using the most recent modification of n affiliation scoring, affiliation was examined in its relation to drinking behavior in adolescents. In the population of high school students, it was found that heavy drinking of alcohol was positively related to deprivation affiliation and negatively to approach affiliation. Those with high deprivation needs apparently use alcohol as a substitute for affiliative relationships. It was further shown that deprivation affiliation was most clearly related to frequency of consumption and total intake of alcohol over time. Approach affiliation, however, was most strongly negatively correlated to maximum quantity of alcohol consumed. Furthermore, support that the approach and deprivation components are assessing two separate aspects of affiliation, was demonstrated by the virtually zero correlation between the two coding schemes.

In another study (Rokeach and Berman, 1970), using college students, affiliation was investigated in its relationship to items on the Rokeach Value Survey. Approach affiliation was significantly correlated positively with true friendship, belief in a world at peace, a world of beauty and being helpful and polite. It was negatively correlated with self-esteem. Deprivation affiliation correlated negatively with happiness, contentness, loving, affection, and tenderness. Again, deprivation and approach affiliation scores were independent of each other, the two having nonsignificant correlations.

Statement of the Problem

In view of the past research involving n affiliation several gaps and issues can be identified which will be dealt with in the present study. First, with the possible exception of the Shipley and Veroff (1952) study or the Lansing and Heyns (1959) communications study, the research investigating n affiliation has not concerned itself with everyday affiliative behavior of habits. Specifically, groups who varied in their pre-existing amount of approach and deprivation affiliation motivations have not been

examined. Clearly, if the scoring of n affiliation is to prove valuable, it should be capable of assessing individual differences in the experimental situation. The present study examined these individual differences in situations where the motives were heightened by experimental arousal.

Further, one of the difficulties in the conflicting results in prior research has probably been the lack of clear differentiation between approach and deprivation components of n affiliation. Since individuals could be either high or low in one or both of these components, the Zucker and Davis (1969) revision and modification of the Heyns et al. (1958) manual was used, rather than the DeCharms (1957) procedure which applies a global judgment to each story.

Results have also been confusing when subjects have been aroused through the use of sociometric ratings. After sociometric arousal Heyns et al. (1954) found increases in the overall n affiliation, Rosenfeld and Franklin (1966) found increases in the overall affiliation measure and in the positive component of n affiliation, and Shipley and Veroff (1952) found increases in his overall measure which is primarily the deprivation component. Therefore this study again examined the effects of arousal of certain

affiliative components through the use of a sociometric procedure, in an attempt to clarify the results through the use of the Zucker and Davis (1969) revision.

Finally since past research has either used only males (Shipley and Veroff, 1952; Heyns, Atkinson and Veroff, 1954) or only females (Rosenfeld and Franklin, 1966; Fishman, 1966), the present study used both males and females as subjects, so that possible sex differences could be explored.

To summarize, the present research examines the degree of arousal of both approach and deprivation components of affiliation, using groups of subjects with different pre-existing needs, by placing them in experimentally arousing situations. Affiliation scores should be a function of both individual differences and the experimental condition. In terms of the experimental design, two conditions were formed, with one condition consisting of subjects who were currently extensively dating a member of the opposite sex and participated in the experiment as a couple, and a second condition consisting of subjects who were not presently involved or dating exclusively and thus came to the experiment alone. The assumption was made that these two groups differ in the degree to which their

affiliative needs were satisfied. Further, the two groups were either subjected to approach or deprivation arousal conditions. Arousal of the approach component was also included since prior studies have not attempted such an arousal. This experiment thus had a 2 x 2 x 2 factorial design, in order to study the effect, on the approach and deprivation components of n affiliation, of two conditions of affiliative involvement, two arousal states, and sex differences.

The following hypotheses were tested:

1-A. Subjects coming as couples are lower in deprivation affiliation than non-coupled subjects.

This hypothesis follows from the Shipley and Veroff (1952) findings where those accepted into a fraternity scored lower in affiliation than those rejected. It is reasoned that subjects who are involved with a member of the opposite sex are having some of their fears of rejection and separation at least temporarily alleviated.

B. Subjects coming as couples are higher in approach affiliation than non-coupled subjects.

Though no prior research bears directly on this hypothesis, it is reasoned that coupled subjects are presently being rewarded in their relationships for approach tendencies of affiliation and thus will score highly. Non-coupled subjects are not similarly being rewarded and therefore will show less approach affiliative imagery.

2-A. Subjects in the deprivation arousal condition are higher in deprivation affiliation than subjects in the approach arousal condition.

This hypothesis follows directly from the Shipley and Veroff (1952) findings that sociometric arousal increases need affiliation. Further, subjects in the approach arousal condition have been given cues which do not support deprivation imagery.

B. Subjects in the approach arousal condition are higher in approach affiliation than subjects in the deprivation arousal condition.

There is some evidence (Rosenfeld and Franklin, 1966) that sociometric arousal increases the approach component of affiliation. The scoring technique used, however, is more

similar to the DeCharms (1958) technique than to the present scoring procedure. However, appropriate approach affiliative cues in the experimental situation should change the fantasy material and internal motivation of approach affiliation, more than cues (deprivational arousal) contrary to approach needs.

Predictions for the male-female differences were not made. This part of the study was viewed as exploratory.

Chapter II

METHOD

Subjects

A total of 69 subjects out of 80 intended subjects were used in the study. Twenty unattached males and 20 unattached females were recruited from the introductory psychology class. Five male subjects did not show at the experiment bringing the total unattached male subjects down to 15. Further, 10 males and 10 females were recruited along with an opposite sex friend for each, with the restriction that all subjects would be college students. Three couples did not show up for the experiment bringing the total of coupled subjects to 17 males and 17 females.

Procedure

Early in the term students in the introductory psychology class were asked to fill out information sheets for a psychology experiment. They were told the following:

> We are interested in studying various patterns in the dating relationships of college students. I have here a questionnaire which will help us understand these patterns. I will hand them out now and you can leave them on the table as you leave. The questionnaire is completely optional and in no way affects your work or grade in the course.

Those reading the instructions and handing out the questionnaires were graduate assistants for the course. The experimenter for the study was not present during this time. Included in the questionnaire were questions on age, sex, dating relationships, etc. (See Appendix A.)

From this information unattached males and females (those stating they were not dating one person exclusively) were randomly selected for the non-couples groups. In addition, the attached males and females were randomly selected from those students who claimed they were dating one person exclusively, and asked to bring their girl/boy friend to the experiment. All subjects were contacted by phone and were requested to participate in an experiment on group functioning.

Couples and non-couples were run in separate groups. The couples groups consisted of from three to five couples (i.e. 6-10 subjects). The non-couples groups had from seven to eleven subjects in each group. Thus, a total of

eight groups were formed, four with couples and four with non-couples.

The two types of groups were randomly assigned to either one of two arousal conditions. Thus two groups were run for each arousal condition for both couples and non-couples groups.

In the approach arousal condition, subjects worked together on a project. They were read the following instructions:

> You will be participating in a study on group processes. The first part of the study is concerned with people enjoying themselves at some activity. Specifically, we are just interested in observing a group of people who do not know each other (for couples read couples who do not know each other), come together, work at an activity, and hopefully enjoy themselves. As you probably noticed, I have on the table several jars of film-glas, wires, tape, etc. Some of you might have used this before. For the next 25 minutes or so I would like you to use these materials to make anything you like, flowers, weird shapes, a mobile perhaps. As you'll see all you have to do is fold the wires to make a closed figure, dip it in and soon it will dry. Try to work as a group, but don't worry what you produce. Do you have any questions?

Subjects were then allowed to work as described for 25 minutes.

In the deprivation arousal condition, subjects were given a questionnaire with which to rate other group members. They were read the following instructions:

> You will be participating in a study of group processes. Psychologists have found that on the basis of little information, people can frequently make very sensitive and accurate judgments about each other. Judgments of people on first contact have a great influence therefore on how relationships develop. In this study we will be looking at the initial impressions you have of other group members. On these sheets of paper that I am about to hand to you, you will find questions concerning your reactions to others in the group. Though it might appear difficult, try to judge as best you can. I will ask each of you in turn to stand up and tell the group your name so that the group can write down the name of the person whom they are describing. In other words, one person will stand up, tell us his or her name, and you will then answer questions about your initial impression of this person. Then the next person will stand and the procedure will be repeated. You will be given 2-3 minutes to rate your impressions of each individual. The results of your ratings will be confidential. Do you have any questions?

The questionnaire (see Appendix B) was distributed and the procedure was followed as described above.

After the time allotted for the arousal condition, all groups were read the following instructions:

> Another way to understand group behavior is to get some idea about imagination since imagination is related to what people talk about. In order to get some idea about this, I am going

> to ask you to make up some stories as one form of the imaginative process. In the pamphlet I am about to hand to you, you will find pictures and questions which you may use as guidelines for the stories. Each story should take about five minutes. Further instructions will be in the pamphlets.

Pamphlets with instructions, four TATs and questions were distributed to the subjects. (See Appendix C.) The order of the four TAT pictures were randomized for all subjects. At the end of each five-minute period the experimenter let the subjects know.

Subjects were told that they would receive a letter about the experiment after the study was over. Letters were sent to all subjects. (See Appendix D.)

Coding Procedures

The TAT stories were coded (See Appendix E) by two individuals working independently and without knowledge of the status of the subject within the experimental design. Inter-rater reliability was calculated separately on approach and deprivation imagery across all four stories (i.e. 69 Ss, 4 stories/S = 276 stories). Reliabilities were computed for the presence of the imagery as well as for presence plus absence (i.e. taking into account

agreement on absence of the imagery). Reliability for presence was calculated in the following manner:

$$2 \times \frac{\text{\# of agreements on presence of imagery}}{\text{\# scored present by Rater A + \# scored present by Rater B}}$$

Reliability for presence and absence was calculated by the following formula:

$$\frac{\text{\# of agreements on presence + \# of agreements on absence}}{\text{Total \# of stories scored}}$$

These figures are given in Table 1 for approach scores and Table 2 for deprivation scores. They show that reliability between the two raters for approach affiliation imagery is high as expected. Reliability for presence of deprivation imagery for both males and females is lower than desirable.

Reliabilities for the sub-categories were also calculated. When raters differed in the initial coding of the imagery, in terms of the two components of approach and deprivation, the sub-categories were considered in agreement if the same sub-category was scored. Inter-rater reliabilities were calculated for presence and for presence plus absence using the above mentioned formulas. Results are presented in Tables 1 and 2. The data shows high

TABLE 1.--Inter-rater reliability on TAT protocols scored for approach affiliation-percent agreement.

Category	Female Protocols		Male Protocols	
	Presence	Presence plus Absence	Presence	Presence plus Absence
App Im- (Approach Imagery)	90	90	90	93
N- (Need)	86	95	92	98
I+ - (Instrumental Activity Successful)	85	92	84	94
I? - (Instrumental Activity Doubtful)	89	99	92	99
I- - (Instrumental Activity Unsuccessful)	0	97	100	100
Ga+ - (Anticipatory Goal State-positive)	80	99	—[a]	100
Ga- - (Anticipatory Goal State-negative)	0	99	—[a]	100
Bw- (Environmental Block)	80	99	83	100
Bp- (Personal Block)	80	99	100	100
G+ - (Affective State-Positive)	87	96	83	97
G- - (Affective State-Negative)	67	99	80	99
Th- (Thema)	79	95	70	95

[a]No instances of this sub-category were present.

TABLE 2.--Inter-rater reliability on TAT protocols scored for deprivation affiliation-percent agreement.

Category	Female Protocols		Male Protocols	
	Presence	Presence plus Absence	Presence	Presence plus Absence
Dep Im- (Deprivation Imagery)	72	90	74	93
N- (Need)	82	97	92	99
I+ - (Instrumental Activity-Successful)	100	100	100	100
I? - (Instrumental Activity-Doubtful)	80	98	89	99
I- - (Instrumental Activity-Unsuccessful)	0	99	89	99
Ga+ - (Anticipatory Goal State-positive)	75	99	0	99
Ga- - (Anticipatory Goal State-negative)	100	100	—[a]	100
Bw- (Environmental Block)	75	97	83	99
Bp- (Personal Block)	80	99	80	99
G+ - (Affective State-positive)	100	100	100	100
G- - (Affective State-negative)	85	97	83	99
Th- (Thema)	91	99	67	98

[a]No instances of this sub-category were present.

reliabilities for all sub-categories scored at least twice by each rater.

To assess whether the low inter-rater reliability on presence of deprivation affiliation was due to a consistent pattern of underscoring or overscoring by one of the raters a Pearson-product moment correlation was also computed, for total scores for approach and deprivation, on males and females. Included were the sub-categories used by Heyns et al. (1958), that is, for approach total: App Im, N, I+, Bw, Ga+, G+, and Th. Results are depicted in Table 3. For males it appears that low interreliability was possibly due to a consistent pattern of under/over scoring, as shown by the high correlation. For females, the lower reliability for deprivation affiliation totals does not point to a consistent scoring difficulty.

To correct the discrepancies, a third rater coded all stories where there were differences in the initial imagery coded. When this occurred, the sub-categories of the third coder was used, together with those of the rater with whom there was agreement on the presence of the imagery. Thus, in the final coding of the TAT data, scores were summed across both coders for four stories for each subject, except where the third coder's scores were substituted and these scores were used for the data analysis.

TABLE 3.--Pearson Product-Moment Correlations on total affiliation scores between two coders.

Total Score	r
Approach Male	.84
Approach Female	.80
Deprivation Male	.81
Deprivation Female	.57

Chapter III

RESULTS

A. Determining TAT Sub-categories for Inclusion in Analysis

A correlation matrix was obtained on all categories of TAT scored, as well as several total scores, so as to determine appropriate categories for inclusion in the totals used for the analyses. Four rough criteria were employed to determine suitability for inclusion. These criteria were as follows: 1) The sub-category must be significantly and positively related to other categories under that component and to the total scores calculated. 2) Categories used must be the same for both sexes so as to make comparison possible. 3) The categories were included in past research (Thompson, 1972) yet not negatively correlated with the other categories. 4) The frequency of the presence of the category was used to resolve differences (i.e. a low correlation for a previously included category, might be attributed to the infrequency of occurrence as a category, and would be included).

Results are depicted in Table 4 for males and in Table 5 for female subjects. Inspection of the data demonstrates that inter-correlations between the approach and deprivation scores are extremely low, indicating the two coding schema are independent of each other. (Also see Zucker, 1970.)

On the basis of the above mentioned criteria, the following sub-categories were selected for inclusion in the approach affiliation total: App Im, N, I+, Ga+, Bw, G+, and Th. A quick look at the matrix table indicates that App Im, N, I+, G+, and Th, should be included on the bases of high positive correlations with total scores and with each other. The category Bw was selected because of significant positive correlations for males and near significance for females. This follows the pattern set by the Heyns et al. (1958) group. Ga+ was similarly included because of prior research (Heyns et al. 1958; Thompson, 1972). Low correlations are attributed to the infrequent occurrence. Both I- and G-, though positively correlated for females, were not included so as to keep the analyses between males and females comparable. Further, the occurrence of these categories were low and they have not been included elsewhere.

TABLE 4.--Correlation Matrix of Approach and Deprivation Affiliation Coding Categories for Males (N = 32)

	1	2	3	4	5	6	7	8
Approach Affiliation Codes								
1. Im								
2. N	63**							
3. I+	79**	58**						
4. I-	19	00	-08					
5. I?	23	17	04	-15				
6. Ga+	No imagery of this type present							
7. Ga-	No imagery of this type present							
8. Bw	28	11	05	12	-16			
9. Bp	10	13	02	-05	-08			75**
10. G+	64**	14	56**	-14	05			13
11. G-	10	13	-19	56**	-08			34**
12. Th	46	22	49**	-08	01			01
Deprivation Affiliation Codes								
13. Im	02	-17	-12	16	09			-03
14. N	-06	-11	-20	-03	14			-24
15. I+	-13	-25	-07	-10	-14			12
16. I-	-12	-16	-22	27	32			-18
17. I?	05	00	05	16	01			-13
18. Ga+	10	28	13	-05	-08			-06
19. Ga-	No imagery of this type present							
20. Bw	-09	00	-09	-14	05			-16
21. Bp	01	-04	-07	06	-17			-13
22. G+	-23	-19	-27	-08	26			-09
23. G-	-04	-24	-11	-15	-10			19
24. Th	-02	-16	04	-08	01			13
Total Scores								
25. Tot. App-Heyns	94**	66**	87**	01	11			31
26. Tot. Dep-Heyns	-08	-18	-17	-02	10			-09
27. All Categ.-App	96**	67**	83**	11	20			35*
28. All Categ.-Dep	-07	-20	-18	02	09			-10
29. All Neg. Categ.-Dep	-02	-22	-13	13	07			-04

TABLE 4.--Cont.

	9	10	11	12	13	14	15	16
Approach Affiliation Codes								
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.	-12							
11.	-03	-12						
12.	-12	56**	09					
Deprivation Affiliation Codes								
13.	-17	13	-17	-20				
14.	-12	-01	-12	-20	71**			
15.	-06	06	-06	03	47**	31		
16.	-09	-17	-09	-32	38*	43**	-16	
17.	-06	07	-07	-24	38**	43**	-11	09
18.	-03	00	-03	30	08	18	-05	-09
19.	No imagery of this type present							
20.	-08	-07	-08	-30	49**	75**	17	39*
21.	-07	10	-07	25	26	18	-12	-11
22.	-05	-18	-05	-17	12	25	36	21
23.	-09	30	-09	-13	59**	34*	39*	08
24.	-06	32	-06	03	47**	32	63**	01
Total Scores								
25.	13	74**	04	61**	-06	-16	-08	-25
26.	-14	07	-15	-19	88**	88**	62**	35*
27.	17	69**	14	58**	-06	-16	-10	-19
28.	-16	10	-16	-22	92**	88**	47**	43**
29.	-16	20	-16	-20	95**	71**	34*	43**

TABLE 4.--Cont.

	17	18	19	20	21	22	23	24
Approach Affiliation Codes								
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
Deprivation Affiliation Codes								
13.								
14.								
15.								
16.								
17.								
18.	-07							
19.								
20.	43**	-08						
21.	28	53**		-17				
22.	-09	-04		-12	-09			
23.	14	-09		37*	-17	-12		
24.	30	-06		17	-11	36*	40*	
Total Scores								
25.	00	16		-14	01	-27	-01	08
26.	42*	10		66**	10	36*	50**	62**
27.	01	14		-15	-01	-25	-04	06
28.	55**	10		66**	20	26	56**	56**
29.	63**	07		51**	28	11	61**	61**

TABLE 4.--Cont.

	25	26	27	28	29
Approach Affiliation Codes					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
Deprivation Affiliation Codes					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
Total Scores					
25.					
26.	-14				
27.	99**	-13			
28.	-14	97**	-14		
29.	-07	85**	-07	94**	

Note--For convenience, decimal points have been omitted from all correlations.

*p < .05

**p < .01

TABLE 5.--Correlation Matrix of Approach and Deprivation Affiliation Coding Categories for Females (N = 37)

	1	2	3	4	5	6	7	8
Approach Affiliation Codes								
1. Im								
2. N	49**							
3. I+	76**	38*						
4. I-	34*	21	21					
5. I?	06	-18	-17	-15				
6. Ga+	18	04	18	42**	-16			
7. Ga-	03	06	-01	-05	-08	-05		
8. Bw	13	29	04	41*	-18	00	40*	
9. Bp	36*	-05	39*	18	-01	37*	-05	-05
10. G+	55	07	39*	50**	-04	26	06	10
11. G-	42**	30	32*	58**	-13	33*	-05	37*
12. Th	56**	48**	65**	10	-12	09	-15	02
Deprivation Affiliation Codes								
13. Im	-21	-26	-08	-13	14	-16	-16	-01
14. N	03	01	21	-06	03	-09	-11	-12
15. I+	-19	-23	-23	-07	23	-07	-03	-10
16. I-	-35*	-18	-19	-07	-11	23	-04	-10
17. I?	-01	-19	04	-15	02	-15	-07	14
18. Ga+	00	-16	09	-04	-02	-14	-07	16
19. Ga-	-14	06	-01	-05	-08	-05	-02	-08
20. Bw	-20	-17	-04	-04	-11	07	-10	-01
21. Bp	06	-13	15	-09	18	-09	-05	19
22. G+	No imagery of this type present							
23. G-	-13	-39	-02	-12	24	-04	-12	-06
24. Th	03	06	03	08	-14	-12	-06	07
Total Scores								
25. Tot. App-Heyns	90**	63**	83**	44**	-13	27	05	26
26. Tot. Dep-Heyns	-14	-19	01	-08	03	-13	-14	00
27. All Categ.-App	91**	59**	81**	49**	-01	32*	05	27
28. All Categ.-Dep	-16	-28	01	-12	08	-12	-15	01
29. All Neg. Categ.-Dep	-17	-29	-02	-14	09	-13	-15	04

TABLE 5.--Cont.

	9	10	11	12	13	14	15	16
Approach Affiliation Codes								
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.	07							
11.	36*	42**						
12.	19	29	29					
Deprivation Affiliation Codes								
13.	-05	-27	-27	-15				
14.	-18	-08	-18	24	47**			
15.	-06	-21	-06	-19	21	19		
16.	-06	-11	-06	-13	10	-06	-05	
17.	-13	-01	-13	-13	60**	05	-02	-10
18.	-12	-06	-12	-05	44**	39*	14	-10
19.	-05	-16	-05	-15	07	-11	-04	-04
20.	-04	-10	-16	-09	66**	38*	12	-04
21.	16	-12	-08	04	38*	33	-06	-06
22.	No imagery of this type present							
23.	19	-17	-19	-23	76**	18	-03	23
24.	-11	-08	-11	10	30	24	15	-08
Total Scores								
25.	28	63**	51**	73**	-26	07	-29	-25
26.	-08	-20	-24	-03	85**	68**	33*	00
27.	36*	64**	58**	70**	-25	04	-25	-26
28.	02	-21	-25	-12	92**	55**	20	09
29.	12	-24	-25	-17	93**	32*	08	18

TABLE 5.--Cont.

	17	18	19	20	21	22	23	24
Approach Affiliation Codes								
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
Deprivation Affiliation Codes								
13.								
14.								
15.								
16.								
17.								
18.	28							
19.	-08	-07						
20.	39*	61**	-10					
21.	26	59**	-05	16				
22.	No imagery of this type present							
23.	47**	36*	17	51**	49**			
24.	11	37*	-06	45*	-11		24	
Total Scores								
25.	-06	-03	-11	-15	02		-23	03
26.	43**	70**	-05	83**	36*		59**	56**
27.	-06	-05	-12	-17	04		19	00
28.	59**	66**	05	77**	50**		80**	45**
29.	68**	47**	15	62**	43**		89**	40*

TABLE 5.--Cont.

	25	26	27	28	29
Approach Affiliation Codes					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
Deprivation Affiliation Codes					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
Total Scores					
25.					
26.	-16				
27.	98**	-17			
28.	-19	93**	-19		
29.	-23	78**	-21	94**	

Note--For convenience, decimal points have been omitted from all correlations.

*p < .05

**p < .01

For the total Deprivation score, all sub-categories were selected for inclusion. For sub-categories Dep Im, N, I?, Bw, G-, and Th, selections were based on high positive correlations with total scores computed and with each other. For I+, and I-, there were high significant correlations for males with the total score. Lower correlations for females can be attributed to a low frequency of occurrence and the fact that scores did not differ significantly from zero. Again, comparability between male and female scores is required. Category Bp is similarly included because of high positive correlations for females.

For three sub-categories Ga+, Ga-, and G+, a somewhat more arbitrary decision for inclusion was made based on past selection (Thompson, 1972) of these categories. The occurrence of the categories is infrequent (except for Ga+, for females) and scores do not differ significantly from zero. Total scores were computed by scoring plus one for all sub-categories scored present.

B. Main Analyses

Overall, the hypotheses were analyzed by a 2x2x2 analysis of variance for unequal cell frequencies

(unweighted means analysis) conducted separately on the approach and deprivation total scores. Other tests were performed to clarify the results.

To check that the analyses met the assumption of homogeneity of variance, Hartley's test for homogeneity of variance was performed on the approach and deprivation data. Both analyses showed no significant differences in the variances, so the analysis of variance can be considered appropriate for the data.

The analysis of deprivation scores is given in Table 6. Hypothesis 1a, that predicted that individuals involved as a couple would score lower in deprivation affiliation than non-coupled subjects, is depicted in the affiliative involvement main effect of this analyses. Results failed to support the hypotheses ($F = .37$, N.S.).

The arousal main effect of this analysis, which evaluated hypotheses 2a, that those exposed to a deprivation arousal would score higher in deprivation affiliation than those in the approach arousal, was also not significant ($F = 1.13$, N.S.).

The analysis of variance on approach affiliation scores is presented in Table 7. Hypothesis 1b, predicted that those subjects coming as a couple would score higher

TABLE 6.--Analysis of variance on Deprivation Affiliation Scores.

Source	df	MS	F
A. Affiliative Involvement (Couple vs. Alone)	1	9.13	.37
B. Arousal (App vs. Dep)	1	28.21	1.13
C. Sex	1	3.53	.14
AB	1	13.71	.55
AC	1	9.89	.40
BC	1	47.12	1.89
ABC	1	58.23	2.34
Error	61	24.88	

TABLE 7.--Analysis of variance on Approach Affiliation Scores.

Source	df	MS	F
A. Affiliative Involvement (Couple vs. Alone)	1	3.63	.09
B. Arousal (App vs. Dep)	1	.11	.002
C. Sex	1	106.76	2.60
AB	1	57.43	1.40
AC	1	.27	.01
BC	1	52.63	1.28
ABC	1	4.22	.10
Error	61	41.00	

than non-coupled subjects, on approach affiliation scores. This hypothesis can be examined by the main effect analyses of affiliative involvement, which does not support the prediction ($F = .09$, N.S.). Hypothesis 2b, also tested by the same analysis, is also not confirmed by the data as depicted in the arousal main effect ($F = .002$, N.S.). Thus, those subjects exposed to the approach arousal did not score significantly higher in approach affiliation scores than those subjects in the deprivation arousal condition.

The scoring used for this study differed from those used in most past research (Heyns et al., 1954; Rosenfeld and Franklin, 1966) in terms of the separation of the two components to obtain the total scores. To clarify the possibility that differences in results might have been obtained only due to differences in scoring, a Combined Total Score was obtained by adding across Approach Total-Heyns scores and Deprivation Total-Heyns which had been computed for the correlation matrix. In cases where one story was rated both approach and deprivation, only the total for the imagery with the greater number of categories scored present, was included. This eliminated a possible inflated score. Another analysis

of variance for unequal cells was conducted on the Combined Total Score obtained. Results are depicted in Table 8. Results were not significant but a trend is indicated by a main effect sex difference ($F = 3.00$, $p < .10$). Examination of means in Table 9 shows that females have a generally higher combined approach and deprivation score than males.

TABLE 8.--Analysis of variance on Combined Total Score.

Source	df	MS	F
A. Affiliative Involvement (Couple vs. Alone)	1	1.19	.03
B. Arousal (App vs. Dep)	1	4.60	.10
C. Sex	1	137.49	3.00*
AB	1	18.41	.40
AC	1	13.23	.29
BC	1	13.35	.29
ABC	1	37.93	.83
Error	61	45.90	

$p < .10$, two-tailed test.

TABLE 9.--Mean scores of combined total score.

Females

		Affiliative Involvement	
		Couple	Alone
Arousal	App	11.62	13.00
	Dep	15.56	11.89

Males

		Affiliative Involvement	
		Couple	Alone
Arousal	App	10.25	10.43
	Dep	9.44	10.50

Chapter IV

DISCUSSION

The results show that none of the hypotheses were supported by the data. In all such cases, there is uncertainty as to whether the hypotheses themselves are incorrect or invalid or whether the experimental design and manipulation as such, failed to properly assess an otherwise accurate prediction. One can only speculate and suggest refinements and new research. This in essence is what follows in the discussion, organized in terms of each of the independent variables.

Affiliative Involvement

Before looking at the underlying assumptions of the hypotheses regarding affiliative involvement, let us look at the difficulties within the experimental design. Firstly, there is the possibility that the criteria for selecting couples were not stringent enough. The reasoning behind the basic hypotheses was that individuals

involved in a dating relationship were being reinforced for approach affiliation and having some of their fears of rejection and separation (deprivation affiliation) alleviated. Perhaps the time required for this process to occur is lengthier than anticipated. In this study, for example, 47% of the couples had dated each other for less than six months, 29% for less than three months. A look at the mean scores for approach and deprivation affiliation for those dating more than six months as compared to those dating less than six months shows, however, a surprising similarlity in scores. One t test was conducted to compare the males in approach affiliation scores (where mean scores differed somewhat more). The analyses showed a t = .61, N.S. (i.e., there was no difference in approach affiliation as a function of length of dating). The period of time dating does not appear to be a factor affecting the results of this study but the measure is still confounded by the experimental arousal manipulation.

At this point it becomes necessary to examine the assumptions behind the hypotheses. Hypothesis 1a stated that subjects coming as a couple would be lower in deprivation affiliation than non-coupled subjects. It was reasoned that the couples were having their fears of

rejection and separation alleviated while those not dating exclusively were not. There are two possible alternative explanations that might be operating. Firstly, those dating one person exclusively at age 18 or 19 might be doing so out of a fear that they cannot make friends easily. There could be a great concern that the relationship would not last through four years of college (most of the subjects were freshman), and a fear of the consequent loneliness. These are of course deprivation concerns. Further, coming to an experimental situation as a couple could bring out fears that the relationship would be negatively evaluated. This conjecture gets some support from the fact that many subjects did raise such concerns when first asked to bring their boy/girl friend to the experiment.

Conversely, many of those subjects not dating exclusively could feel quite comfortable in their present situation. Some of these subjects could be dating many people and may not be experiencing loneliness or a fear of rejection. Unfortunately, no information was gathered as to the dating patterns of those not involved exclusively with one individual. A more appropriate hypotheses might be that those dating infrequently would score higher on

deprivation affiliation than those who date on a regular basis.

The second hypothesis concerned with affiliative involvement stated that coupled subjects would score higher in approach affiliation than non-coupled subjects, the assumption being that couples were being rewarded for approach affiliation motives. However, in retrospect, there is another way of viewing the situation. When an individual is involved in a romantic attachment to another there is often the tendency to get wrapped up with this one person to the exclusion of other friends. If this is the case, one might expect a decrease in approach affiliation scores when the TAT picture is conducive to imagery such as parties, visits, bull sessions, etc. Those not dating exclusively might be more apt to respond to such imagery and stimuli. One could speculate, however, that this might change for couples after being married for some time. This is the argument put forth by Aronson (1970). He proposes that someone close to a person is not as effective as a source of rewards as a stranger, so a married individual might turn more and more to others for affiliative rewards.

It is still possible that dating one person changes one's internal motivation vis à vis approach and deprivation affiliation but the direction and the degree of change might very well be a function of one's satisfaction with one's previous situation. At any rate, this seems to be a more complex issue than was at first thought.

This leads us to another consideration. The subjects in this study were almost exclusively freshmen and sophomores, where the pressures of finding a suitable mate for marriage are probably not nearly as great as say among seniors or those who are even older. It is possible, therefore, that if this study had used an older group of subjects, that the reasoning would have been more applicable and the hypotheses might have turned out as predicted. In other words, for an older group of subjects, the social pressures of finding a mate might result in higher deprivation affiliation for those persons who have not found an appropriate partner.

Affiliative Arousal

Difficulties with these hypotheses might have arisen because the approach and/or deprivation arousals

were not powerful enough. No independent measures were obtained of the success of the arousal conditions. In the deprivation arousal condition two factors might have been operating that decreased the potency of the manipulation. Firstly, the sociometric was given on initial impressions only; that is, the subjects knew that there was little basis for an accurate judgment of themselves. This fact could prevent the deprivation feelings, such as a fear of rejection, from developing. Using better acquainted subjects would give more meaning to a sociometric test and give rise to more deprivation imagery.

A second factor accounting for the lack of supportive results was the experimenter's subjective impression that the situation was not threatening to the subjects. The experimenter had reservations about making the experiment too anxiety-provoking and this might have been conveyed to the subjects.

Difficulties with the approach arousal are less clear-cut. The arousal was somewhat task oriented and might not have set the appropriate approach cues. Further, this was a first attempt at arousing the approach affiliative motive.

The first hypothesis concerning arousal predicted that subjects in the deprivation arousal condition would score higher in deprivation affiliation than those subjects in the approach arousal. The lack of results contradicts Shipley and Veroff (1952) findings that with males, sociometric arousal will increase n affiliation. An ineffectively aroused group could certainly account for this discrepancy. Shipley and Veroff subjects were previously acquainted, and perhaps were therefore more sensitive to a sociometric procedure.

The previous research using females has not yet found that sociometric arousal induces deprivation imagery. The only past study (Rosenfeld and Franklin, 1966) that used a sociometric arousal on females, found that the arousal only increased the approach or positive components of affiliation.

This leads us to the second hypothesis that stated that subjects in the approach arousal would score higher in approach affiliation than those in the deprivation arousal condition. Fishman's (1966) findings, that the goal-oriented motivation (equivalent to approach affiliation) was highly correlated with positive affiliative behavior, is contrary to this study's non-significant

results. Again, an ineffective approach arousal might be responsible for this contradiction.

However, another factor might be operating as well. Rosenfeld and Franklin (1966), as already stated, found that a sociometric arousal with females increases the positive (approach) component of affiliation. If this is an accurate assessment of the effects of sociometric arousal on both males and females, then the effects of the two experimental arousals in this study should cancel each other out. In other words, if both a sociometric procedure and a successful approach arousal manipulation increase approach imagery, no significant differences should be found in our two experimental arousal groups.

The results of the present study also contradict the Atkinson, Heyns, and Veroff (1954) study where it was found that subjects exposed to a sociometric procedure scored higher in n affiliation than a non-exposed control group. The analyses of the data of the present study for the Combined Total Score was an attempt to investigate the possibility that contradictory results could be attributed to differences in scoring. This possibility can be eliminated, however, with the lack of results found in the analysis of the Combined Total Score. However, in the

Atkinson, Heyns, and Veroff (1954) study there was a difference in the two populations used, that sheds doubts on their results. Subjects in that study who were exposed to a sociometric arousal were all members of a fraternity, an affiliative organization. It is quite possible that those in a fraternity are more sensitive to sociometric arousal or even that they differed in n affiliation from the control group initially, given that fraternity men are a select group of individuals that seek out a permanent affiliative involvement of a particular kind. Relevant, also though, is the fact that the fraternity men knew each other well and the ratings were important, while in the present study, the subjects did not know each other previously.

Sex and Affiliative Imagery

Differences between the sexes in their imaginal responses to affiliative involvement and arousal are still left unclarified by the present work. There is a trend, indicated by the analyses of the Combined Total Score, that females score higher on n affiliation than males. This might be a function of higher motivation for

affiliation for females or a general tendency to produce more imagery. Past research has not been helpful in clarifying the issue. In a review of the literature on sex differences in TAT imagery, Murstein (1963) found that males, both adults and children, tend to express more sex imagery while women express more nurturance and affiliation. However, there were many problems between studies due to the use of different cards, instructions, populations, and scoring systems. Murstein concluded that differences between the sexes depend upon the conditions of the experiment; that is, what is need arousing for one sex is not necessarily arousing for the other. The conditions under which males and females differ in n affiliation remains to be clarified.

Murstein (1963) also suggested that women may involve themselves more in the TAT testing situation than men, which could imply in the present study that the higher n affiliation for women was a result of the testing situation rather than the need. Some support for this is presented in a study by Veroff (1961), where the percent of loss of subjects due to inadequate protocols was calculated. Men had a higher percentage of inadequate verbal protocols than women across educational levels.

Past research on affiliation and sociometric arousal using just males or just females led to different results. Rosenfeld and Franklin (1966), using females, indicated higher approach motivation after sociometric arousal. The research using males (Shipley and Veroff, 1952) found in contrast that n affiliation, defined primarily as a deprivation motive, increases with sociometric arousal. It is difficult to conclude whether this indicates a sex difference or a difference in the experimental design. This area remains ambiguous and would require more research to clarify the differences and similarities in male and female affiliative motivation.

In summary, there have been several avenues that have been explored to explain the results. However, the strength of the manipulation of affiliative involvement and affiliative arousal, stands out as a crucial factor effecting the results of the study.

For the affiliative arousals, the deprivation arousal in particular appears to have been ineffective. A previously acquainted group would be more sensitive and anxious during a sociometric procedure. What the experimenter is arousing and measuring using the sociometric procedure remains unclarified.

For affiliative involvement, the issue raised of a person's satisfaction with his condition is a vital one and can be explored by either some sort of independent measure or by using an older population. An older group of subjects, where the social pressures of finding a suitable mate would be greater, would produce different affiliative imagery.

The overall issue is further muddled by the use of various schema in the literature which makes comparison between studies more difficult. Difficulties in the present study were also aggravated by the lower reliability for deprivation affiliation.

Chapter V

SUMMARY

The present study was designed to explore the effects on n affiliation, as expressed in TAT fantasy material, of both pre-existing and experimentally aroused needs. Two components of n affiliation were examined; an approach component which involves enjoyment of the affiliative process and a deprivation component, involving a fear of rejection and loss.

It was hypothesized that Ss involved in an exclusive dating relationship would score higher in approach affiliation than those Ss not involved. It was also hypothesized that the steady dating Ss would have lower deprivation affiliation than single Ss.

A second hypothesis predicted that Ss in a deprivation arousal condition would score higher in deprivation affiliation than those Ss in an approach arousal. Further, those Ss in the deprivation arousal would score lower in approach affiliation than Ss in the approach arousal. Sexual differences were also examined.

The deprivation arousal consisted of a sociometric procedure whereby Ss rated other group members on such characteristics as attractiveness, dominance, etc., on the basis of their initial impression of each person. The approach arousal involved group work on a crafts type activity where a relaxed and friendly atmosphere was encouraged. Ss were 69 undergraduates, 37 females and 32 males. Groups of from 6-11 Ss, consisting of couples or non-couples, were given the experimental arousal and then were asked to write the Thematic Apperception Test stories, with appropriate pictures for the fantasy being examined. Stories were coded for approach and deprivation components separately.

Statistical analyses revealed that the approach and deprivation components were independent of each other. Analyses failed to support any of the hypotheses. No differences were found on approach and deprivation affiliation between couple and non-couple Ss. The affiliative arousals failed to produce differences in the fantasy material.

Three factors were proposed to account for the lack of difference:

(a) The experimental arousals were not strong enough to arouse the appropriate motives.

(b) Some Ss in the couples groups might be motivated to be in an exclusive relationship by deprivation concerns, i.e. by a fear of rejection and separation.

(c) Some Ss in the non-couples group might be satisfied dating many individuals and motivated by approach affiliation.

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APPENDICES

APPENDIX A

DATING PATTERNS INVENTORY

Name:_____ Sex:_____

Age:_____ Student number:_____

Local address:_____

Phone:_____

Marital status: Please circle one: single
married
divorced
separated

If you are single, are you presently dating one person almost exclusively? yes no

If you answered yes to the above question please also answer the following:

How long have you known your boy/girl friend? Please circle
under three months
3-6 months
6 months-year
year or more

How long have you been dating him/her and no one else?
under three months
3-6 months
6 months-year
one year or more
I am still dating other people

Do you have any plans for marriage? yes no

Are you presently a) pinned? yes no
b) engaged? yes no

Is your boy friend/girl friend a student at MSU? yes no

Please indicate what year he or she is in at school _____

How old is your boyfriend/girlfriend?_____

APPENDIX B

INITIAL IMPRESSIONS IN GROUPS

Name_____ Please fill in

Please rate this person on each of the following traits. Assume that numbers 1 and 6 are opposites and that 3 and 4 are average. Circle the response that you feel is most appropriate.

1.	Friendly	1	2	3	4	5	6	Unfriendly
2.	Dependent	1	2	3	4	5	6	Independent
3.	Outgoing	1	2	3	4	5	6	Shy
4.	Loud	1	2	3	4	5	6	Quiet
5.	Attractive	1	2	3	4	5	6	Unattractive
6.	Submissive	1	2	3	4	5	6	Domineering
7.	Out-doors type	1	2	3	4	5	6	In-doors type
8.	Leader	1	2	3	4	5	6	Follower
9.	Intelligent	1	2	3	4	5	6	Unintelligent

above as compared to other college students

10.	Weak	1	2	3	4	5	6	Strong
11.	Ambitious	1	2	3	4	5	6	Unambitious
12.	Popular	1	2	3	4	5	6	Unpopular
13.	Insensitive	1	2	3	4	5	6	Sensitive

14. If you had to work on a group project for a class would you like this person to be part of that group?

would like person in group	1	2	3	4	5	6	would not like person in group

15. Would you like to get to know this person better?

very much like to know this person better	1	2	3	4	5	6	would not like to know this person better

APPENDIX C

THEMATIC APPERCEPTION TEST BOOKLET:

INSTRUCTIONS AND PICTURES

NAME_____
(Please Print)

Instructions for Storytelling

On the following pages you are to write out some brief stories that you make up on your own. There are no right or wrong answers. This is designed to give you an opportunity to be as fanciful as you wish, to imagine a situation quickly and write out a brief story about it.

In order to help you get started, there are a series of pictures that you can look at and build your stories around. When you have finished reading these instructions, you should look at the first picture briefly, then turn the page again and write a story suggested by the picture.

To help you cover all the elements of a story plot in the time allowed, you will find four questions spaced out over the page. They are:

1. What is happening: Who are the people?
2. What has led up to this situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?

Your overall time for each story is about five minutes. There is no strict time limit, but don't write much over five minutes. I'll announce when five minutes are up.

Spend about 5 minutes on this story.

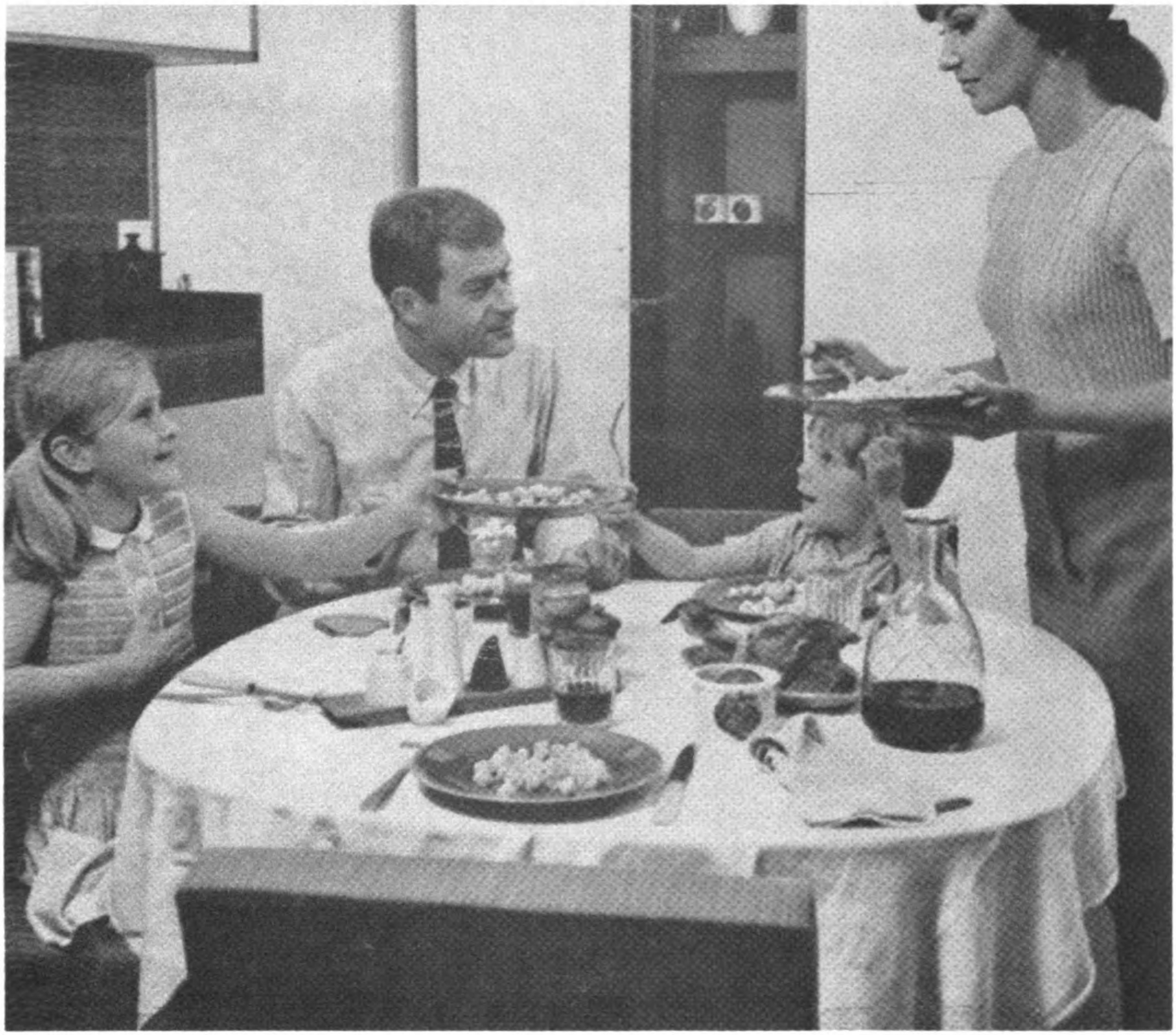
1. What is happening? Who are the people?

2. What has led up to this situation? That is, what has happened in the past?

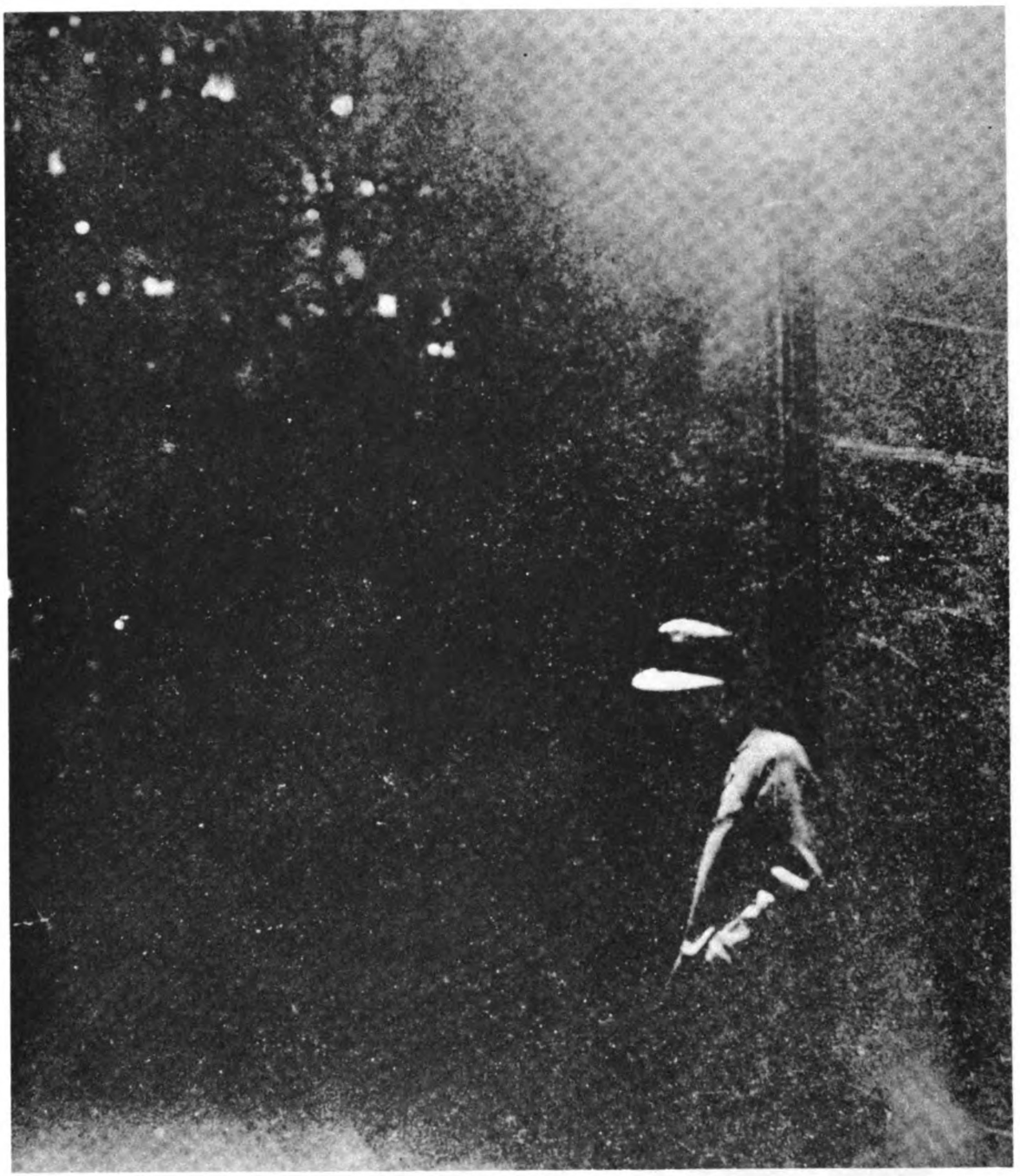
3. What is being thought? What is wanted? By whom?

4. What will happen? What will be done?

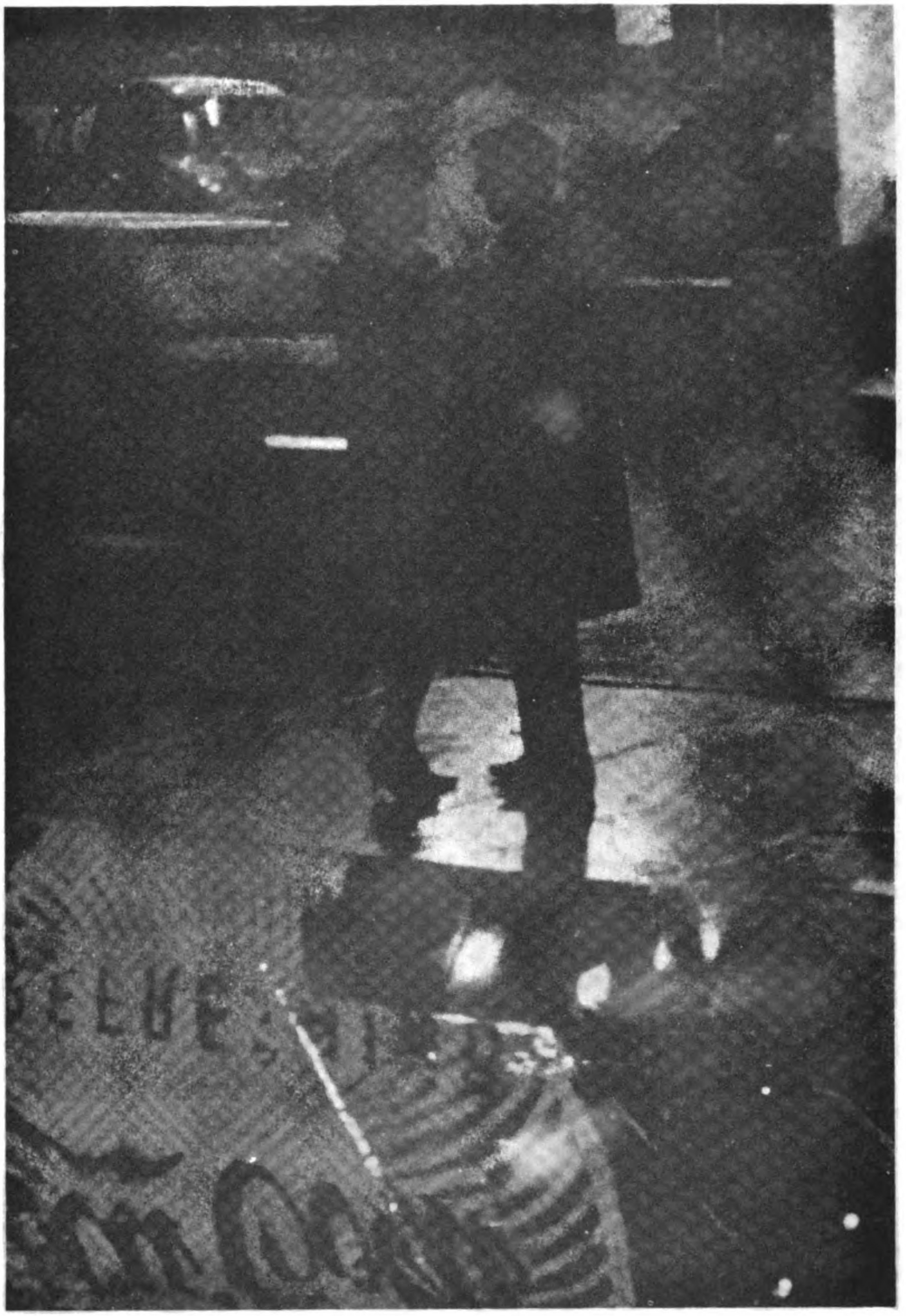
Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.

APPENDIX D

EXPLANATION LETTER TO SUBJECTS PARTICIPATING IN RESEARCH

MICHIGAN STATE UNIVERSITY, East Lansing, Michigan 48823
Department of Psychology - Olds Hall

Dear

Last quarter you participated in a psychology experiment entitled group functioning; in order to make this more useful to you in your own studies, I would like to explain what the study was designed to investigate.

The study was conducted to examine why people affiliate or what reasons people have for wanting to associate with others. Obviously, people have different reasons at distinct times in their lives and during different situations, etc. at any one point in their lives. Therefore, we artificially set up different circumstances and tried to assess through stories why people would want to be together with others.

For example, some of you came to the experiment with a friend, while others came alone. In some groups, an attempt was made to have a pleasant and good time. For some of you, it was a more stressful situation where you were called upon to judge others and to be judged yourself. It is hoped that these situations repeated in some way experiences that all of us have had in being with others.

As yet the data has still to be analyzed and therefore I cannot inform you of the results of the experiment. If you have further questions, you can contact me through the Psychology Department. (Leave a note in the mailbox in Room 109, Olds Hall.)

I would like to thank you again for participating in the study.

Sincerely,

G. Balsam

APPENDIX E

SUMMARY OF SCORING PROCEDURES FOR N AFFILIATION

A. Approach Affiliation

Approach Affiliation Imagery (App Aff Im)--"refers to themes of likeing to be with others, enjoying the communicative process, finding relationships with others reinforcing, themes of companionate activity, and of unambivalent grief over separation or loss." (Zucker and Davis, p. 2)

Sub-categories are scored only once the imagery is scored.

Need (N)--scored when there is the direct expression of some desire as in "he wants to," or when the desire centers around a motivation state that has previously been identified as approach.

Instrumental Activity (I+, I?, I-)--"Overt acts or thoughts of a problem solving nature by one or more of the characters in the story directed toward establishing or maintaining interpersonal relationship characterized by

friends" (Heyns et al., p. 11), "mutual liking, or interest or colloborative fun" (Zucker and Davis, p. 4).

I+, I?, I- are scored according to the final outcome of the activity, that is, whether it is "successful, doubtful, or unsuccessful." Scored only once per story.

Anticipatory Goal States (Ga+, Ga-)--"This category is scored when someone in the story anticipates goal attainment or frustration and deprivation" (Heyns et al., p. 214).

Blocks-Personal and Environment (Bp, Bw)--"Categories Bp and Bw are scored when goal directed activity is hindered or blocked in some way" (Heyns et al., p. 2151).

Bw is scored when environmental factors contribute to the blocking of the affiliative goals.

Bp is scored when the person concerned with the affiliative process disrupts an ongoing relation due to his actions or attributes.

Affective States-Positive and Negative (G+, G-)--G+ is scored "when someone in the story experiences the joys and satisfactions of affiliation."

G- is scored "when a painful separation is experienced" (Heyns et al., p. 216).

Thema (Th)--Scored when the entire story is concerned with the approach affiliative themes without any other behavioral sequences.

B. Deprivation Affiliation

Deprivation Affiliation Imagery (Dep Aff Im)--Scored when there is evidence of concern over "establishing maintaining, or restoring a positive affective relationship with another, where the primary goal (either directly stated or implied) is with avoidance of noxious nonaffiliative states such as loneliness, shame, feeling unlike that arise out of interpersonal relationships themselves, or as a result of broken, or disrupted, or inadequate relationships" (Zucker and Davis, p. 9).

For all sub-categories all refer to Approach Affiliation section.

Need (N)--expression of a desire to affiliate when the story has been established as deprivation imagery-"he hopes." There is some sense of urgency in these statements.

Instrumental Activity (I+, I?, I-)--Acts of a problem-solving nature especially when the primary goal is concern over avoidance of nonaffiliative states.

Blocks-Personal and Environment (Bp, Bw)--Bw--same as approach affiliation.

Bp--more likely to occur under deprivation imagery since it involves the possibility of a "personal defect or lack (that) must be overcome before the affiliative goal is established or reinstated" (Zucker and Davis, p. 13).

Anticipatory Goal States (Ga+, Ga-)--See Approach Affiliation.

Affective States (G+, G-)--See Approach Affiliation.

Thema (Th)--When the affiliative imagery encompasses the whole story "where the primary goal is avoidance of noxious nonaffiliative states such as loneliness, feeling unliked, misunderstood, unaccepted, etc. then thema is scored" (Zucker and Davis, p. 15).