

APPROACH AND DEPRIVATION
AFFILIATION AS FUNCTIONS OF
TASK AND STATUS VARIABLES

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ABSTRACT

APPROACH AND DEPRIVATION AFFILIATION AS FUNCTIONS OF TASK AND STATUS VARIABLES

By

Patricia E. Thompson

The assessment of affiliation motivation was studied with emphasis on the development of a two-factor theory composed of Approach Affiliation--enjoyment of warm, companionate, communicative processes, and Deprivation Affiliation--avoidance of noxious, non-affiliative states such as loneliness, shame and feeling unliked. Specific aims were to observe the behavior of the same individuals across an array of situations in which the interpersonal salience of the goal and the expectations about collaboration were systematically manipulated to elicit differential affiliative responses from individuals who varied along the dimensions of Approach and Deprivation Affiliation.

The Zucker-Davis (1969) coding scheme, specifically designed to differentiate the two components, was used to score the TAT stories of 51 college women. Each S participated in two experimental situations--a

task-oriented condition in which the overt demand was to learn to use a calculator, and a person-oriented condition which was a modified Asch conformity situation. There were two parts in each task to permit the introduction of confederates who varied along the status dimension as either a peer or authority target affiliate. In addition, an Order variable was studied to determine the influence of having an initial interaction with a peer or authority figure and the subsequent carry-over effect.

It was hypothesized that across both task conditions, high Approach Affiliation Ss and high Deprivation Affiliation Ss would show more affiliative behavior than similar low scoring Ss.

In regard to the Status variable, it was hypothesized that across both task conditions, high Approach Affiliation Ss would make more affiliative responses in the peer condition than in the authority condition. For the high Deprivation Affiliation Ss, it was predicted that across both task conditions, the authority condition would elicit more affiliative behavior than the peer condition.

For the Order manipulation, it was predicted that across both task conditions, high Approach Affiliation Ss assigned to Order I--peer condition followed by authority condition--would make more affiliative responses than similar Ss assigned to Order II--authority condition

first, peer condition second. For the high Deprivation Affiliation Ss, the reverse results were predicted.

A correlation matrix of the TAT coding results showed that the Approach and Deprivation Affiliation components were independent of each other. In general, the analyses of variance failed to support the hypotheses. The Order and Status variables proved to be important factors in eliciting differential affiliative behavior, but demonstrated only spotty interaction with the affiliation variables and generally did not attain conventional levels of statistical significance. Carry-over effects seemed to play a role in the suppression or facilitation of affiliative response via authority first or peer first conditions, respectively.

There was some evidence that the high Approach Affiliation Ss were more affiliative than the low Approach Affiliation Ss. The low Deprivation Affiliation Ss seemed to exhibit greater differential status responsivity than the high Deprivation Affiliation Ss. Of the two experimental situations, the task-oriented calculator condition elicited more discrimination among the Ss than did the person-oriented conformity condition which resulted in extremely scanty differential outcomes.

Explanations for the weak differential effects focused on the proposed insensitivity of the selected

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dependent variables and the possibility that the Approach and Deprivation Affiliation coding characteristics may not have been relevant to the interpersonal demands of the task conditions.

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CHAPTER I

INTRODUCTION

Research in the area of affiliation motivation may be described as struggling through that stage peculiar to the advancement of knowledge in which empiricism has not kept pace with theoretical growth. While there is much tentative conceptualization, there is a delay in the development of the assessment techniques necessary to define operationally, test, and clarify the theoretical issues. More specifically, the diversity of findings in this field implies that the unidimensional concept of affiliation motivation, which has been the construct on which most of the measuring instruments are based, is inadequate. Although a two-factor theory has been suggested as a useful framework for the explanation and integration of many experimental reports, further progress has been limited by the lack of an assessment method which would test this. It is, therefore, the general purpose of the present study to explore a two-factor theory of affiliation motivation by utilizing a coding scheme specifically

designed for the purpose of differentiating the two motivational factors of Approach Affiliation (i.e., enjoyment of warm, companionate, communicative processes) and Deprivation Affiliation (i.e., fear of loneliness, rejection and separation) in TAT fantasies.

When the components of an individual's internal affiliative motivational system have been defined and measured, it is possible to examine their interaction with external stimulus variables such as the characteristics of the target affiliate or the nature of the situation. If an understanding of affiliative behavior is to be achieved, the various combinations of such interactions must be studied systematically. The present study has the specific aims of observing the behavior of the same individuals across an array of situations in which the interpersonal salience of the goal and the expectations about collaboration are systematically manipulated to elicit differential affiliative responses from individuals who vary along the dimensions of Approach Affiliation and Deprivation Affiliation.

Review of the Literature

Development of Affiliation Motivation Assessment

Although there are many different measures of affiliation motivation, the TAT has clearly dominated research as a useful instrument for obtaining data

reflecting the internal affiliative needs of an individual. Since it is the focus of the present study as well, an understanding of the evolution of TAT scoring systems and the definitions of affiliative motivation which are associated with each system is crucial.

In an extension of McClelland's (1948; 1949) studies on methods of measuring motivational states such as hunger and achievement, Shipley and Veroff (1952) assessed the aspect of affiliative imagery characterized by statements of concern over loneliness, rejection, loss and separation. The positive aspects were not isolated because their incidence did not permit statistical treatment.

Heyns, Veroff and Atkinson (1958) broadened the definition of need affiliation to include concern over establishing, maintaining or restoring a positive affective relationship with another person. They, thus, emphasized an approach factor as well as a threat or avoidance factor. The disadvantage of this system, however, is that while their manual codes both kinds of imagery, the end result is a global score which deludes the investigator back into a uni-dimensional conceptualization of affiliation. The inability to separate the effects of the various components may be one reason for the conflicting findings of the many studies which utilized this coding scheme.

An approach to a two-factor theory of affiliation motivation is implied in the practice of several researchers (Hardy, 1957; Byrne, McDonald and Mikawa, 1963) who used the Heyns et al. scoring system and then divided their subjects into groups of high, medium and low n-affiliators. Those persons scoring high in n Affiliation were conceived to be positively motivated towards affiliation. Those persons with moderate scores were seen as ambivalently and anxiously motivated toward affiliation through fear of rejection as well as attraction to more positive goals. Persons who scored low on n Affiliation were viewed as unmotivated or indifferent to affiliative arousal.

On a theoretical level, Mehrabian and Ksionzky (1970) discussed a two-dimensional framework for describing affiliative characteristics. They suggested a reinforcement model in which the extent to which a person expects his relationships to be positively reinforcing is partially independent of the extent to which he expects them to be negatively reinforcing. This results in four possible kinds of affiliators: (1) ambivalent--expects interactions with others to be both positively and negatively reinforcing, (2) positive--expects interactions to be reinforcing in primarily a positive way, (3) negative--expects interactions to be primarily negatively

reinforcing, and (4) neutral--expects interactions to have only small degrees of either positive or negative reinforcing quality.

On an empirical level, de Charms (1957) attempted to utilize a two-factor theory by classifying TAT stories as primarily positive, goal-oriented and hopeful of affiliation or primarily negative, threat-oriented and fearful of rejection. The disadvantage of this coding scheme is the application of a single global judgment to a given story without a differentiation into the various components.

Zucker and Davis (1969) developed a coding method which seems to offer a satisfactory means of assessing a two-factor theory of affiliative imagery separately for each story. Approach Affiliation is scored when the story contains themes expressing the hope for active, enjoyable, collaborative engagement in affiliative relationships with others and themes expressing sadness over their termination. Deprivation Affiliation is scored when the story shows evidence of concern over establishing, maintaining or restoring a positive affective relationship where the primary goal is with avoidance of noxious, nonaffiliative states such as loneliness, shame and feeling unliked. This system differs from the de Charms' scoring method, therefore, by awarding two scores to each story rather than one global judgment. It also places a greater

emphasis on the goal of the affiliative relationship rather than focusing on the outcome of the behavioral sequence alone. The major advantage of this coding system is a more specific description of the motivational components which interact to produce affiliative responses.

Research Using the Shipley and Veroff (1952) Scoring System

In their attempt to devise a method of measuring affiliation motivation, Shipley and Veroff (1952) conducted two studies designed to differentiate between aroused and control affiliative states. In the first experiment it was found that college fraternity men who wrote TAT stories following arousal by a sociometric procedure showed significantly more n Affiliation than a control group of fraternity men who wrote stories following a food preference test. In the second study, the results showed that subjects rejected from fraternities had significantly higher n Affiliation scores than a comparable group of subjects accepted by fraternities. Although the original aim was to include positive aspects of affiliative imagery, the investigators found that the basic imagery centered about separation from objects of affiliation and use of this scoring system resulted in primarily a statement of deprivation.

Other studies using this early version of scoring showed that it was tapping primarily the negative aspects

of n Affiliation. De Revera (1957), in his study on the prediction of anxiety in aviation students, found that n Affiliation scores reflected an individual's sensitivity to criticism, rejection, and negative evaluation. The results of Burdick and Burnes' (1958) experiment showed that subjects high in n Affiliation manifested the most attitude change to a situation in which expected change depended upon a "liking" of a speaker who had induced dislike and fear.

McKeachie, Lin, Milholland and Isaacson (1966) found that men high in n Affiliation made relatively better grades in classes characterized by a high level of affiliative cues such as having a warm, friendly teacher. It is difficult to determine the factors responsible for this outcome--enjoyment of the positive, warm interaction or the reduction in the possible threat of criticism from an authority figure. Subjects who were low in n Affiliation did better in classes low in affiliative cues. The unidimensional nature of the coding method does not permit clarification of the underlying factors.

Research Using the Heyns, Atkinson and Veroff (1958) Scoring Technique

As will be seen, the bulk of research in affiliation motivation has utilized this scoring system which is based on a broadened definition of n Affiliation but still produces a global end score. In their original study,

Atkinson, Heyns and Veroff (1954) attempted to refine the procedure used by Shipley and Veroff (1952) by comparing a group of fraternity men subjected to a sociometric arousal procedure with a group of men in a college classroom who performed an anagrams task. While the groups were not strictly comparable, the aroused group scored significantly higher on n Affiliation than the control group. These investigators suggested that the Shipley and Veroff study resulted in an emphasis on deprivation components because the pictures used already favored this type of imagery and thus would be in immediate conjunction with the sociometric rejection situation. Further, the Shipley and Veroff control condition (a fraternity group) was already slightly positively motivated which would have reduced the difference in positive imagery. The Atkinson group felt their control condition had less affiliative cues and thus they could pick up any true differences. When they rescored the Shipley and Veroff data using their new scoring method, they did, indeed, find that the overall difference between the control and aroused conditions was much less than when separation imagery alone was the basis for comparison. The global score, however, prevents the delineation of the components' values.

Atkinson and Walker (1956) obtained TAT stories from male undergraduates and then asked them to select the

clearest figures in a series of human-non-human figure tachistoscopic presentations. Subjects high in n Affiliation selected faces significantly more frequently than subjects low in n Affiliation. It would be useful to know whether a threat component or a positive reinforcement component was the basis for the differential perception.

In his study on conformity and attitude change, Hardy (1957) was led to postulate a two-factor theory to account for his results. College males varying in affiliation motivation were subjected to a group influence situation where their previously measured attitude toward divorce was unanimously opposed or opposed with the exception of one supporter. The subject's public reaction (conformity) and private response (attitude change) were measured. The overall results showed that the high need group, conceived to be positively motivated toward affiliation, conformed and changed in attitude under conditions of no support, but not under support conditions. The low need group, which was least affected, changed more under conditions of support than no support, but was considered as responding more to the content of the influence situation than to its social structure. The group with medium-need scores, interpreted to be ambivalently and anxiously motivated toward social acceptance, conformed under both conditions, but changed in attitude only in the no-support situation.

Samelson (1958) employed the n Affiliation scale with an Asch-type conformity situation in which there was a condition of full conflict with a majority and a condition of reduced conflict in which the subject was allowed to infer that he was superior to the other participants. He found that n Affiliation was not significantly related to conformity but did interact with n Achievement in a consistent way across the two conditions. The nature of the interaction is not clear since the approach and avoidant affiliative factors were not separated. Samelson suggests that the nonsignificant relation between affiliation and conformity may have been attributable to the fact that the affiliative measure did not differentiate well among the Ss. He says that the choice of pictures used to elicit n Affiliation stories was very poor. It would seem that a finer scoring system would have also helped in assessing individual differences.

McGhee and Teevan (1967) studied the relationship of conformity behavior and need for affiliation in male high school students. Results showed that high n Affiliation Ss conformed significantly more than low n Affiliation Ss. These investigators explain the contradiction of their results with that of Samelson (1958) by focusing on the importance of the affiliative relationships among the Ss in any specific group. A high need person might remain consistently independent in the face of opposing judgments

if he disliked or did not know the other Ss. A low need individual might have a high affiliative need arousal if he is in a group of friends or persons he admires.

Lansing and Heyns (1959) studied the relationship of n Affiliation and four types of communication. They found significant positive correlations with local telephone calling and letter writing, a low but non-significant correlation with visiting, and no correlation with social long distance telephone calling. Although this study is encouraging for its study of real-life everyday phenomena, a breakdown of the reasons for the affiliative behavior such whether for enjoyment or to avoid loneliness would be useful.

Byrne (1961a) examined the relationship of anxiety and affiliative need. He compared an experimental group of male and female Ss who were aware of being observed and rated for popularity while completing a paper-and-pencil test with a similar control group which received only the test procedure. The experimental conditions and affiliative need interacted to influence self-ratings of anxiety. In the experimental group, Ss high in n Affiliation rated themselves significantly more anxious than did those Ss low in n Affiliation. In the control group affiliative need was unrelated to the anxiety ratings. Byrne noted that the scoring system used identified those individuals who were made anxious by an affiliation threat.

He questioned whether these same high n Affiliation Ss would respond with greater pleasure to the promise of an affiliative reward than would Ss low in n Affiliation. He also noted that the use of sociometric ratings for arousal may produce imagery motivated primarily by fear of rejection which gets confounded with that motivated primarily by hope of affiliation.

In his study of interpersonal attraction as a function of affiliation need and attitude similarity, Byrne (1961b) found that a stranger with attitudes similar to those of the subject was rated equally positively by individuals high and low in affiliative need. A stranger with attitudes dissimilar to those of S was rated significantly more negatively, however, by individuals high in n Affiliation than by those low in n Affiliation. In a similar later study, Byrne (1962) divided male and female subjects into high, medium and low affiliators. He found that medium n Affiliation subjects reacted more positively to similar strangers and more negatively to dissimilar strangers than did high or low affiliation subjects. He reiterated the need for a two-factor theory and an appropriate coding scheme to differentiate the two aspects in fantasy productions. The medium need individual in his study, for example, was interpreted as being in great conflict about affiliation by experiencing a high expectation

of success but also a high fear of rejection. He, thus, reacts strongly both ways.

In an attempt to establish a two-factor theory operationally, Byrne, McDonald and Mikawa (1963) scored TAT stories according to the Heyns system and divided the Ss into high, medium and low scorers. Next, the stories were rescored using a set of criteria which defined positive and negative affect categories. Subjects were characterized into four types according to the ratio of their positive to negative affect stories. These types correspond to Mehrabian and Ksionzky's (1970) four kinds of affiliators and are as follows: an approach type being the positive affiliator, an avoidance type being the negative affiliator, a mixed type being the ambivalent affiliator, and an unmotivated type being the neutral affiliator. It was found that high n Affiliation individuals produce stories predominating in approach motivation, medium n Affiliators produce stories with a mixture of approach and avoidance motivation and low n Affiliators produce stories predominating in avoidance motivation. These investigators noted that rather than simply an indication of lack of motivation, low scores actually seemed to characterize individuals with avoidance motives. A further study related scores on Murray's Affiliation Questionnaire to thematic apperception measures of n Affiliation. The highest Questionnaire scores were obtained by

the approach group and the lowest by the avoidance group. The mixed and unmotivated groups each obtained scores midway between the two extreme groups. Byrne et al. suggested that the unmotivated group's ranking may have been due to a modal affiliative tendency of the population with deviations representing strong drives to approach or avoid.

Dember (1964) used the Heyns scoring method to study the relation between birth order and need for affiliation. He found that firstborn and single children had significantly higher n Affiliation scores than laterborn subjects. The data showed clearly for female ss but were not significant for males. This may have been due to the small N of the male group, a weak statistical test, or the lack of a two-factor assessment technique which might have noted conflict in the males' expression of affiliative need.

Rosenfeld and Franklin (1966) assigned college women to one of four conditions--sociometrically aroused with no feedback, sociometrically aroused with negative feedback, sociometrically aroused with positive feedback, or a condition with no arousal. Following this procedure, the TAT was administered and scored for n Affiliation. Subjects in the no feedback and negative feedback conditions had significantly higher n Affiliation scores than did the control subjects. Since the group who received positive feedback did not differ from the control group,

it was suggested that social acceptance may have given relief of existing avoidance motivation and satisfaction of existing approach motivation. When the global scores of the negative feedback group were analyzed for positive and negative components, it was found that rejection increased the "positive" but not the "negative" categories of affiliative fantasy. This outcome is consistent with the theory that both approach and avoidance factors of n Affiliation act as motivation for the formation of positive affective relationships.

Research Using the de Charms (1957) Scoring System

De Charms (1957) modified Heyns' (1954) scoring technique so that TAT stories containing affiliation imagery could be globally classified as either positive, goal-oriented and hopeful of affiliation, or, negative, threat-oriented and fearful of rejection. In his experiment, he administered the TAT and then assigned his male undergraduate subjects to a sociometric rating condition designed to arouse fear of rejection. Task instructions were then given which emphasized either cooperation, in which higher levels of performance reflected more affiliative behavior, or competition, in which higher levels of performance reflected less affiliative behavior. It was found that Ss who were high in threat-oriented affiliation motivation were more productive in a competitive

condition than Ss who had low threat scores. Under cooperation instructions, those Ss with high negative n Affiliation scores were lower in productivity than those with low negative scores. Though not statistically significant ($p < .10$) the data also showed that Ss who were high in goal-oriented n Affiliation motivation tended to be more productive in a cooperative task condition with no arousal than Ss low in goal-oriented n Affiliation. De Charms' results indicate that the correlates of negative n Affiliation are, indeed, different from those of positive n Affiliation although in his experimental situation, the latter were weakly manifested.

Fishman (1966) used the de Charms (1957) two-factor method of assessment in his study of need and expectancy as determinants of affiliative behavior in small groups. He used sociometric ratings of likeability and friendliness to measure the subjects' expectancy of positive rewards from others. The behavior of the female subjects in a small group interaction was then rated for positive and negative affiliative acts. When the overall n Affiliation score was divided into approach and avoidance subscores, it was found that the approach component contributed almost exclusively to the predictive validity of the total n Affiliation score. This is the opposite of de Charms' (1957) finding that the negative component was most influential and suggests that situational factors

may shift the relative importance of the two factors. The de Charms study was designed to arouse fear of rejection in a task situation and thus it is not too surprising that the threat component should be predominant. Of interest also, is that the Fishman design used measures of actual affiliative behavior in a neutral setting as opposed to de Charm's task performance measures. The former may be purer measures of affiliative need strength and generalized affiliative expectancy.

Research Using the Zucker and Davis (1969) Scoring System

A two-factor theory of affiliation was tested by Zucker (1970) in a study examining the motivational factors underlying the drinking patterns of adolescents. Data was collected on the drinking indices of male high school students and correlated with TAT Approach Affiliation and Deprivation Affiliation measures. As predicted, Approach affiliative motivation was found to be most strongly negatively related to maximum quantity of alcohol consumed. Deprivation affiliative motivation was most strongly positively related to frequency of consumption and to total alcoholic intake over time. These correlations support a deprivation affiliation theory of heavy drinking behavior quite well if drinking is viewed as a way of relieving loneliness and feelings of rejection. Individuals who tended to drink moderately to avoid the

states of intoxication which would decrease the pleasure of genuine intimacy with others scored high in Approach Affiliation which emphasizes enjoyment of warm interaction. Inspection of the intercorrelations between the two coding schemes showed virtually zero order relationships between the two kinds of affiliative themes and was further support for the validity of a two-factor construct.

Rokeach and Berman (1970) found that in male college ss, Approach Affiliation correlated positively with the values of true friendship, belief in a world at peace, a world of beauty and being polite and helpful, as measured by the Rokeach Value Survey. It correlated negatively with self-esteem. This seems consistent with the definition of Approach Affiliation as a desire for genuine, warm interaction, an orientation toward behavior which facilitates pleasant relationships, and sadness over their termination. Deprivation Affiliation correlated negatively with the values of happiness, contentedness, affection, and tenderness. If Deprivation Affiliation motivation arises out of a need to make up for lacks in oneself and to avoid loneliness and separation, these correlations fit quite well. The correlations between Approach Affiliation and Deprivation Affiliation were non-significant, again showing that these are independent factors.

Statement of the Problem

Research in the area of affiliation motivation has progressed from a limited unidimensional conceptualization of affiliative behavior as being motivated by concerns over loneliness, rejection and separation to the recognition that there may be several theoretically distinct sets of needs which combine to produce affiliative responses. Differentiation of these interacting components has been difficult because the coding systems commonly used in assessment of n Affiliation fantasy material have resulted in global scores. Information regarding the characteristics of various types of affiliative groups has, thus, been restricted to the gross measures of high, medium and low degree of overall n Aff. Though some investigators have hypothesized approach and avoidance components to describe the behavior of these groups and to explain conflicting findings, it would be useful to employ a scoring method which would empirically define these factors initially and which could then be used to relate them to behavior. The present study seeks this refinement by utilizing the Zucker-Davis (1969) TAT coding system which differentiates between two aspects of affiliative relationships--emphasis on the desire for warm enjoyable companionship, termed Approach Affiliation, and emphasis on loneliness, fear of separation and lacks in oneself, known as Deprivation Affiliation.

After the internal needs and expectations of an individual's motivational system have been more specifically defined, his behavior in regard to varying situational parameters can be examined. Since most studies have not used repeated measures and thus have exposed individuals to only one experimental condition, there is a great paucity of data regarding intra-subject consistency across an array of situations. It is thus difficult to determine how the various components of an individual's affiliation motivation act or shift in importance when he is faced with different task conditions, conformity situations, varying status of the target affiliate, and other factors which change the salience of the person with whom the individual is interacting. The present study examines these aspects by observing the same individuals in settings where the interpersonal salience of the target affiliate is manipulated in two ways.

The first is by varying the task situations to elicit (1) help-seeking or (2) conformity behavior. These two conditions are designed to generate different expectations about the collaborative nature of the interpersonal relationship; that is, a task-oriented situation where the focus is on obtaining a non-interpersonal resource such as help in solving a problem, and a person-oriented, Asch-type conformity situation where the focus is on the social characteristics of the interaction such as seeking

approval or acceptance. If individuals differ in Approach Affiliation and Deprivation Affiliation characteristics which are relevant to the interpersonal demands of these two situations, there should be individual differences within each task condition in affiliative behavior as well.

The second set of experimental manipulations establishes the target affiliate as either a (1) peer or (2) authority figure. Research in the area of attitude similarity (Byrne, 1961b; Byrne, 1961c; Byrne, 1962) suggests that very minimal information obtained by an individual about attitude similarity can be used as a basis for assessing the reinforcing quality of another individual. Since status similarity is an index of attitude similarity, it generally follows that it is a direct correlate of attraction and affiliative behavior. The characteristics associated with Deprivation Affiliation and Approach Affiliation suggest, however, that varying the status of the target affiliate may elicit differential responses in individuals who are high or low in these two affiliative needs. Thus, another purpose of this study is to explore the validity of a global concept of similarity-attraction and determine if there is, rather, an interaction with the motivational states of the individual. The relationship between the individual's TAT measures of Approach Affiliation and Deprivation

Affiliation and his affiliative responses in the four combinations of experimental settings can then be utilized to clarify facets of affiliative behavior.

Following consideration of the studies revealing a greater complexity of affiliation motivation in men than in women, (Dember, 1964; Kagan, 1964; Zucker, Manosevitz, and Lanyon, 1968) and noting the large sample size required for the present design, it was decided that only female subjects would be used in order to obtain the clearest indications of change across conditions.

The following hypotheses were tested:

Hypothesis 1:

Across both task conditions, high Approach Affiliation subjects will show more affiliative behavior than low Approach Affiliation subjects.

This hypothesis is suggested from the assumption that an individual who scores high in App Aff on the TAT desires warm companionate activity and likes the communicative process. His fantasies reflect enjoyment in affiliative relationships and feelings of sadness over their termination. In the task-oriented condition this means that high App Aff Ss will seek more help with shorter latencies than will low App Aff Ss. In the person-oriented condition, high App Aff Ss will make more incorrect conformity responses in attempts to establish and maintain positive affective relationships than will low App Aff Ss.

The conformity situation presents cause for an alternative hypothesis, namely, that high App Aff Ss might make less affiliative, conformity responses than low App Aff Ss. The assumption is that these individuals have had a history of positive reinforcement from others and may have a fairly high level of self-confidence. They could, thus, become very suspicious at the blatant discrepancies of judgment occurring in the group interaction and might hold fast to their own perceptions of reality. The original hypothesis, however, seems to link the fantasy evidence of enjoyment of affiliative relationships and a desire to establish and maintain same more directly to actual behavior in accomplishing these goals and is considered to be a stronger, overall prediction than the alternative hypothesis.

Hypothesis 2:

Across both task conditions, high Deprivation Affiliation subjects will show more affiliative behavior than low Deprivation Affiliation subjects.

The basis for this hypothesis is that a person who scores high in Dep Aff demonstrates a high level of concern over loneliness, rejection, separation, and social censure. Interpersonal relationships are used to make up for some felt lack in one's self rather than for enjoyment of the interaction. Thus, in the task-oriented condition, high Dep Aff Ss should make more affiliative

responses than low Dep Aff Ss for the purpose of avoiding loneliness and separation.

It seems useful to discuss an alternative hypothesis that in this task-oriented condition, Ss high in Dep Aff might make less affiliative responses since asking for help could be perceived as exposing themselves to shame and inadequacy. However, since this experimental condition was specifically designed so that the S must ask for help to perform the task correctly, it was felt that the feelings of inadequacy involved in asking for help immediately to insure performing better would be less potent than the shameful feelings which might follow upon a poor final performance resulting from not having asked for assistance. This line of reasoning combined with the assumption of S's need to avoid loneliness provide support for the originally stated hypothesis.

In the person-oriented conformity condition, it seems clear that the only way that high Dep Aff Ss could avoid rejection, shame and separation would be to change their overt judgments to coincide with the group's consensus. High Dep Aff Ss would, therefore, produce more incorrect conformity responses than low Dep Aff S in an attempt to maintain the positive affective relationship and avoid rejection.

Hypothesis 3a:

Across both task conditions, high Approach Affiliation subjects will make more affiliative responses in the peer status condition than in the authority status condition.

Support for this hypothesis comes from the studies which show that status similarity is an index of attitude similarity and, as such, is a direct correlate of attraction. Thus, the perceived reinforcing value of similar peers would be greater than that of dissimilar authorities and would influence one's motivation to produce affiliative responses to establish and maintain warm interaction.

An alternative hypothesis would predict that there will be no status effects for the high App Aff Ss since both the peer and authority figures could ostensibly satisfy the need for companionate activity. This seems outweighed by the numerous findings which show increased attraction and thus increased affiliative behavior as a result of perceived attitude similarity.

Hypothesis 3b:

Across both task conditions, high Deprivation Affiliation subjects will make more affiliative responses in the authority status condition than in the peer status condition.

This hypothesis is made on the basis that high Dep Aff Ss are motivated by a need for approval and a

fear of social censure. Since an authority figure might be perceived as more critical, judgmental and superior than a peer figure, these Ss should respond in ways to reduce criticism and increase social acceptance and approval. In the task-oriented situation this means that these Ss will manifest more help-seeking behavior from an authority than from a peer in order to avoid the painful criticism of a poor performance which would be inevitable if they did not request further immediate instruction. In the conformity situation, these individuals can easily avoid negative evaluation and possible rejection by changing their responses. In this situation where "reality" judgments are in question, the opinions of experts or authorities would seem to assume great validity. Thus, affiliative conformity responses would be greater in the authority condition than in the peer condition.

Hypothesis 4a:

Across both task conditions, high Approach Affiliation subjects assigned to experimental Order I--peer condition followed by authority condition--will make more affiliative responses than similar Ss assigned to experimental Order II--authority condition first, peer condition second.

This hypothesis is an extension of the assumption discussed in Hypothesis 3a that high App Aff Ss will show more affiliative behavior with peers than authorities. In the first part of Order I there would, thus, be an active pattern of behavior which would be slowly

extinguished if the authority figure is, indeed perceived as less reinforcing. In contrast, the characteristics of Order II suggest that affiliative behavior will have to be slowly initiated after a less-reinforcing experience has occurred with the authority confederate resulting in a lower net amount of affiliative behavior compared to Order I.

Hypothesis 4b:

Across both task conditions, high Deprivation Affiliation subjects assigned to experimental Order I--peer first, authority second--will make less affiliative responses than similar Ss assigned to experimental Order II--authority condition followed by peer condition.

This hypothesis is based on the predicted differential status responsivity discussed in Hypothesis 3b. High Dep Aff Ss are viewed to be motivated by a high need for approval which is intensified by the initial presence of an authority figure. When the second status condition is introduced, there may be a carry-over effect to the peer due to such factors as transference or expectations that the authority will return to judge the Ss performance. This facilitative effect on affiliative response tendency would not be operable in Order I where the less influential peer would be seen first followed by the more significant authority figure.

CHAPTER II

METHOD

Subjects

The subject group consisted of 51 women chosen from the summer school population of an eastern university. The mean age of the group was 19.76 years, with a standard deviation of 1.95. Most were undergraduates, primarily from colleges in the East. The remainder were evenly distributed between graduate students and just graduated college seniors.

Certain investigators (Maher and Rapucci, unpublished study, 1964) have indicated that volunteers for psychological experiments demonstrate higher dependency scores on personality measures than non-volunteers. Because dependency and affiliation motivation are closely associated (Zucker, 1966; Mehrabian and Ksionzky, 1970) it is important to note the procedures which were employed in this study to avoid the selection of a biased sample. The names of potential ss were randomly chosen from registration and dormitory lists. Each S was then

contacted by two Es, one concerned with personality testing, the other with the experimental situations, in an effort to dissociate the connection between the two procedures of the study. The contacts were made approximately a week apart with the initial contact usually being for personality testing. In the soliciting for the personality testing procedure, Ss were asked to participate in the collection of normative data on college-age women. For the behavioral procedure, Ss were told the study dealt with the "learning of intellectual and motor skills." Approximately 70 percent of those contacted were included in the final sample. The remainder were above the age limitation of 25 years, refused to participate, or were unable to complete both phases of the study because of scheduling difficulties.

Procedure

Personality Testing Situation

Personality measure. The instrument used for personality assessment was an experimental form of the Thematic Apperception Test (TAT). Two of the six cards used were from Murray's standard set of TAT stimuli (1943)--cards 3GF, and 8GF. The remaining four cards were selected from a set used by Veroff (1957) to assess n Achievement, n Affiliation, and n Power in a national sample survey. They show, respectively, a male-female

adult couple interaction, a group of four women in discussion, an older girl and older woman in a kitchen setting, and an adult woman sitting with a young girl.

Administration. All of the personality testing was done in groups. The picture stimuli were presented in slide form by individuals who were not otherwise connected with the experiment. Each slide was exposed for 20 seconds and the Ss then had four minutes to write the accompanying story. Standard TAT instructions were given regarding the basic outline of the stories. They are as follows:

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

The TAT was given within a two-week period prior to the behavioral experiment. In a few cases the testing followed the behavior assessment by as much as a week. All of the personality testing took place in a different setting from that of the behavioral situation.

Coding of the TAT. The Zucker-Davis Scoring Manual for Approach Affiliation and Deprivation Affiliation (1969) was used to code the imagery obtained from the TAT stories. The coding scheme uses the same subcategories of need (N),

Instrumental Activity (I), Anticipatory Goal State (Ga), Obstacles or Blocks-Personal (Bp) and Environmental (Bw), Affective States (G), and Thema (Th) as utilized in standard motive scoring of the TAT (see Atkinson, 1958). However, the revision of the n Affiliation coding manual used in this study is an attempt to return to the original conception of need affiliation as concern over loneliness, separation and rejection (Shipley and Veroff, 1952) so that a separate code for deprivation affiliative imagery has been introduced to encompass these concerns. Positive affiliative activities of a warm companionate type (Heyns, Veroff and Atkinson, 1958) are included under the coding of approach affiliative imagery. See Appendix B for a brief summary of the coding definitions employed.

All stories were scored by one coder who had previously established adequate to high inter-coder reliability with another expert rater.¹ The original coding reliability levels established are shown in Table 1. Inter-rater reliability was calculated separately on Approach and Deprivation imagery for the presence as well as for the presence plus absence of imagery. Reliability for presence was computed according to the following equation:

$$\% \text{ Agreement} = \frac{2 \times \# \text{ of Agreements on Presence}}{\# \text{ scored present by Rater A} + \# \text{ scored present by Rater B}} \times 100$$

¹William N. Davis did this coding.

TABLE 1

Inter-Coder Reliability Estimates (Percent Agreement)
for Approach and Deprivation Affiliation Codes
Based on 103 Stories by Women

Category	Deprivation Affiliation		Approach Affiliation	
	Presence ^a	Presence plus Absence ^b	Presence ^a	Presence plus Absence ^b
Im	97	98	95	97
N	98	96	80	99
I+	98	99	88	96
I?	84	97	73	97
I-	86	99	100	100
Ga+	0	99	80	98
Ga-	29	95	No observ.	100
Bw	90	83	67	98
Bp	80	99	100	100
G+	80	99	92	99
G-	89	97	0	99
Thema	80	99	80	99

^aAgreement counted only when presence of a particular content code was found by both coders.

^bAgreement counted when both coders agreed on either presence of a particular content code, or its absence.

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

$$\% \text{ Agreement} = \frac{\# \text{ of Agreements on Presence} + \# \text{ of Agreements on Absence}}{\text{Total } \# \text{ of stories scored}}$$

Behavioral Assessment Situations

A. Task Variable

1. Task-oriented condition. A problem-solving situation was devised in which Ss were asked to learn to use a desk calculator for the solution of simple arithmetic problems. The S was given a five-minute period of standardized instruction on the calculator during which time questions were discouraged. Following this, S had up to twenty minutes in which to do practice problems. Ss were told that if they ran into difficulty they could use the calculator manual, but that the E would be available if help was needed. The problems were designed so that S was forced to seek extra help from E (i.e., the manual was deliberately wrong). At the end of the practice period Ss were timed while doing two simple test problems, a task included to maintain the overt purpose of the study. None of the Ss intimated that they were aware of any other reason for the study.

Because there were two status conditions of confederates which had to be introduced, the calculator learning procedure was divided into two parts--one focusing

on addition and multiplication, the other on subtraction and division. Depending on the experimental sequence, the second task condition with the remaining status confederate could immediately follow the first problem set, or one or both of the person-oriented conformity conditions could intervene. In any case, at the appropriate time, the E who ran the first set excused herself. The authority E noted that she had to phone other subjects for later participation in the study, and would ask the peer E to step in for her. For the transition from peer to authority condition, the authority E would return and thank the peer E for helping out.

The behavioral measures of task-oriented affiliation were obtained from responses in the practice period. From pre-testing, a set of problems was selected that made correct solutions difficult to obtain on the first trial. Ss would, thus, have to give careful thought to the calculator procedures, use the manual provided and/or ask the E for help. The entire instruction and practice periods were tape recorded, allowing the coding of most of the affiliation measures to be done at a later time.

The variables are as follows:

1. Number of Questions Asked Per Minute.

The main determinant for considering an S's verbalization a question was that it elicited a reply from the experimenter. If the S asked several related questions in rapid succession, the secondary questions were considered requests

for clarification of the main question and were counted as one. A relevant cue for determining whether a new question was being asked was a time lapse in the conversation. More important than the time lapse, however, was the continuity of content in the interaction. If new content was introduced, another question was scored. When Ss prefaced their remarks with questions about asking a question (e.g., "may I ask about this?") this was not counted as a separate question. Questions concerning general procedures such as "How much time may I take with the test problems?" were counted as questions since they were considered to be requests for instrumental structuring of the situation.

2. Number of Times Manual Used Per Minute.

During the practice period E covertly recorded the frequency of S's manual usage. A unit of "use" was defined as consultation of the manual followed by calculator computation without continued reference to the manual. One exception to this rule was allowed; if S continued to refer to the manual, successfully completed a practice problem, and then continued to consult it while starting on a new problem, another unit was scored.

This variable was used as an index of non-affiliative behavior since the decision to use a non-interpersonal resource for aid necessarily meant the avoidance of the interpersonal, affiliative interaction with the confederate who also had the information and could probably have helped more directly.

This was the only variable assessed during the practice period rather than from the recording. Since the experimental set-up did not permit multiple external observation of S at work, an index of inter-observer reliability could not be obtained. Thus any positive results need to be interpreted with more caution than for the other variables.

3. Latency to First Question-Practice Period.

This measure was the number of seconds between E's last instructions concerning the practice period ("... I'll be here if you want help.") until S asked the first question. This variable should be highly correlated with Variable 1., but

is theoretically separable from it. The number of questions asked per minute can be affected not only by Ss affiliative need, but also by her evaluation of the E's contribution as the interaction progresses.

4. Total Practice Time.

This measure was used for computation of the other variables. It was the elapsed time between the end of the instructions concerning the practice period to the click of the stopwatch indicating the start of the test problems. The latter point was chosen as a standard limit since Ss occasionally asked questions even after they had announced they were finished with the practice problems.

2. Person-oriented condition. For this situation, a modification of Asch's (1956) conformity experiment was chosen since it fulfilled the requirement of maximizing the importance of the relationship between the subject and other participants. At the appropriate time in the experimental sequence, the E in the conformity experiment interrupted the task-oriented problem-solving task and asked if both the subject and the experimenter would help him out by serving as subjects in a visual discrimination study. The E explained that six subjects were needed for each experiment and he had only obtained four. The S and the confederate were put in the same room and given suitable explanations regarding the visual stimuli. They were told that the four other subjects in the experiment were in two other rooms with identical material and that communication would occur via a two-way intercom system. The E explained that separation into groups of two was

necessary to minimize distracting stimuli such as movement of other subjects, and to control for distance from the stimuli since the rooms were small. The E then left the room, established intercom contact, and proceeded with the Asch conformity study.

The Ss were asked to estimate the length of lines by matching a standard line on one card against one of three possible comparison lines on another card. On the comparison card one line was identical with the standard, one line was moderately but distinguishably different from the standard, and the third line was more different--in some cases in the same direction as the moderate line, in other cases in the opposite direction.

On the experimental trials the S noticed that the "subjects" preceding her whom she heard over the intercom (tape recorded judgments of faculty and staff members at the college for the authority condition, or of other students for the peer condition), and the "subjects" in the room following her were giving responses that all agreed with each other, but that differed from what appeared to be, and was in fact, the correct response. On half of these experimental trials the confederate chose the extreme incorrect comparison stimulus, and on the other half chose the moderately incorrect stimulus. The S could thus completely agree with the other participants, give the veridical response, or give an incorrect

compromise response on those trials where the confederates gave extremely deviant responses. The variables scored were those used by Asch in his analysis of susceptibility to group influence and are as follows:

1. Total Errors.

This consists of the total number of incorrect responses on experimental trials without a differentiation of the specific types of errors. It is a general index of Ss susceptibility to group influence.

2. Trial of First Yielding.

This variable is another general measure of susceptibility, reflecting the degree of initial resistance to the group's judgment before a conformity response is made.

3. Extreme Errors.

This measures errors of complete agreement with the majority on trials where the majority response was most deviant from the standard. Theoretically this decision is influenced by two factors--concerns about one's social relationship to the group and/or concerns about task performance and the possible higher accuracy of the group's perceptions. Subjects with a high number of extreme errors are the most compliant to group influence.

4. Compromise Errors.

This response variable measured the choice of a moderately incorrect response on trials where the majority gave an extremely incorrect one that differed from the standard in the same direction as did the moderate response. As for Variable 3, both normative social concerns and task accuracy could mediate this choice. This measure indicates less susceptibility to social pressure than extreme errors yet more than if S gave the veridical response.

Following the completion of the first experimental series E expressed the hope that those Ss who had only gone through the experiment once would be able to repeat the experiment again later with a different set of stimuli (in reality the same set) since it was necessary to get judgments on two sets of stimuli if the results were to be valid. This enabled the other status confederate to be introduced for the second status condition to be fulfilled. The E would then note that the confederate had been through the task twice already, or the confederate would ask if she might continue later because there was other work to do on her own study.

When all four experimental situations were completed, E interviewed all Ss, following Asch's post-test questionnaire, to determine if they were aware of the deception. The interview questions and procedures are described in Asch's monograph (1956). The questions are designed to lead gradually up to a direct inquiry about awareness of social influence and to determine the extent of Ss awareness of the experimental manipulation. Thus, by the end of the interview all Ss were informed of the deception and requested not to talk about the study to others.

B. Status Variable

1. Authority condition. For the authority confederate condition the E was a 50 year old professional woman who had returned to school for further education. She was previously unknown to all the subjects. In assuming the experimenter role she acted as though the problem solving study was her own, assumed responsibility for its operation, arranged all the appointments with the Ss, and paid them afterwards.

2. Peer condition. For the peer confederate condition the E was a 20 year old female undergraduate who posed as the authority experimenter's research assistant. She was ostensibly working on data for the research project in a room across the hall from the calculator room. This enabled her introduction on short notice when the peer condition was needed.

For the person-oriented conformity condition, these experimenters doubled as confederate subjects and sat in the same room with the S. To accentuate the status differences during the authority condition, the E called for the confederates' live and tape recorded judgments using their titles and surnames and called for the subject's judgments using her first name. During the peer condition, S and all confederates were addressed by their first names.

CHAPTER III

RESULTS

Coding of TAT Affiliation Measures

Prior to implementing the results of the coding of the TAT Approach and Deprivation Affiliation measures, a correlation matrix was obtained on all the categories scored. This was used to determine the appropriate categories for inclusion in the totals used for analysis and to evaluate the nature of the associations between the two coding schemes. Total scores were computed by scoring plus one for all categories scored present. To be eligible for inclusion the category had to be significantly and positively related to other categories under the main component and to the total scores calculated. The correlation matrix is presented in Table 2.

It can be noted in the results for the Approach Affiliation coding that the categories I?, I-, Ga- and Bp did not meet the criterion for inclusion and were omitted. The total score used for analysis, therefore, included Im, N, I+, Ga+, Bw, G+, G- and Th.

TABLE 2

Correlation Matrix of Approach and Deprivation
Affiliation Coding Categories (N=51)

	1.	2.	3.	4.	5.	6.	7.	8.
<u>Approach</u>								
<u>Affiliation Codes</u>								
1. Im								
2. N	40**							
3. I+	67**	49**						
4. I?	13	19	05					
5. I-	08	38**	-17	-09				
6. Ga+	52**	26	58**	02	-16			
7. Ga-	No imagery of this type present							
8. Bp	10	-10	10	-05	-07	-09		
9. Bw	46**	40**	35*	19	43**	19		-17
10. G+	54**	28*	64**	-09	04	48**		01
11. G-	35*	09	27	20	-09	35*		-11
12. Th	46**	56**	62**	12	02	38**		-13
13. Total App Aff	86**	61**	85**	16	14	64**		04
14. Heyns App Aff	86**	60**	88**	11	08	66**		-01
 <u>Deprivation</u>								
<u>Affiliation Codes</u>								
15. Im	-13	-08	-12	-04	-01	03		02
16. N	01	10	03	-12	12	20		12
17. I+	07	33*	24	04	-19	29*		12
18. I?	-08	-16	-24	02	-01	-14		-11
19. I-	-02	-15	-19	-11	25	-07		17
20. Ga+	19	04	-04	17	-13	-07		-07
21. Ga-	03	12	02	05	23	11		04
22. Bp	-13	-03	-08	-05	-02	02		-04
23. Bw	-06	04	06	-10	14	08		00
24. G+	-20	-08	-19	02	-10	-01		-11
25. G-	-03	-12	01	-17	-02	17		10
26. Th	-01	-20	-02	-19	00	11		-03
27. Total Dep Aff	-07	-02	-05	-09	04	13		05
28. Heyns Dep Aff	-06	04	-01	-07	00	15		03
29. Heyns Total Aff	64**	50**	69**	04	06	62**		02

TABLE 2. Continued

	9.	10.	11.	12.	13.	14.	15.
<u>Approach</u>							
<u>Affiliation Codes</u>							
1. Im							
2. N							
3. I+							
4. I?							
5. I-							
6. Ga+							
7. Ga-							
8. Bp							
9. Bw							
10. G+	20						
11. G-	64**	15					
12. Th	31*	60**	18				
13. Total App Aff	61**	72**	47**	70**			
14. Heyns App Aff	54**	75**	39**	73**	99**		
 <u>Deprivation</u>							
<u>Affiliation Codes</u>							
15. Im	-14	-17	-06	-22	-16	-16	
16. N	-06	07	-02	-04	06	05	60**
17. I+	-04	-02	02	05	15	16	40**
18. I?	00	-16	15	-20	-16	-19	44**
19. I-	-12	-18	-24	-23	-16	-17	27
20. Ga+	-02	-13	04	-04	01	02	28
21. Ga-	17	-02	06	09	10	08	17
22. Bp	-04	03	-16	-02	-09	-07	59
23. Bw	09	-09	00	-12	00	-01	67**
24. G+	-12	-06	-01	-19	-18	-18	32*
25. G-	-13	09	-03	-17	-03	-02	60**
26. Th	13	09	28*	-16	02	00	37**
27. Total Dep Aff	-05	-07	-01	-19	-06	-07	92**
28. Heyns Dep Aff	-05	-08	03	-17	-03	-04	91**
29. Heyns Total Aff	40**	54**	33*	47**	76**	76**	46**

TABLE 2. Continued

	16.	17.	18.	19.	20.	21.	22.
<u>Approach</u>							
<u>Affiliation Codes</u>							
1. Im							
2. N							
3. I+							
4. I?							
5. I-							
6. Ga+							
7. Ga-							
8. Bp							
9. Bw							
10. G+							
11. G-							
12. Th							
13. Total App Aff							
14. Heyns App Aff							
<u>Deprivation</u>							
<u>Affiliation Codes</u>							
15. Im							
16. N							
17. I+	18						
18. I?	28*	-23					
19. I-	29*	-11	-02				
20. Ga+	29*	14	15	-04			
21. Ga-	16	13	04	26	07		
22. Bp	22	29*	18	11	-08	-04	
23. Bw	46**	13	39**	36**	06	16	30*
24. G+	14	39**	-18	-02	25	-11	34*
25. G-	42**	32*	07	29*	04	06	42**
26. Th	36**	00	38**	-05	15	19	20
27. Total Dep Aff	71**	43**	38**	36**	29*	28*	58**
28. Heyns Dep Aff	74**	50**	33*	23	38**	19	49**
29. Heyns Total Aff	52**	45**	07	02	26	18	26

TABLE 2. Continued

	23.	24.	25.	26.	27.	28.	29.
<u>Approach</u>							
<u>Affiliation Codes</u>							
1. Im							
2. N							
3. I+							
4. I?							
5. I-							
6. Ga+							
7. Ga-							
8. Bp							
9. Bw							
10. G+							
11. G-							
12. Th							
13. Total App Aff							
14. Heyns App Aff							
 <u>Deprivation</u>							
<u>Affiliation Codes</u>							
15. Im							
16. N							
17. I+							
18. I?							
19. I-							
20. Ga+							
21. Ga-							
22. Bp							
23. Bw							
24. G+	03						
25. G-	56**	24					
26. Th	36**	10	43**				
27. Total Dep Aff	74**	37**	73**	52**			
28. Heyns Dep Aff	72**	43**	65**	51**	97**		
29. Heyns Total Aff	46**	14	40**	33*	57**	62**	

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

*p<.05.

**p<.01.

For the total Deprivation Affiliation score, all categories were selected for inclusion -Im, N, I+, I?, I-, Ga+, Ga-, Bp, Bw, G+, G-, and Th.

Inspection of the upper left corner and lower right corner triangles of the matrix shows that the inter-correlations within the Approach and Deprivation Affiliation categories are generally highly significant and positive. The rectangle of inter-correlations between the two coding components shows generally zero order relationships. The data, thus, indicates that the two affiliative themes are independent of each other (see also Zucker, 1970; Langer, 1972). This evidence reduces the risk of confounding when these variables are related to other experimental factors and offers support for a two-factor theory of affiliation.

Median splits were used to classify the Ss into Low and High scoring groups on the affiliation variables. The Low Approach Affiliation group had a mean of 2.42 with a range of 0-5. The mean of the High Approach group was 9.78 and the range was 6-21. For the Low Deprivation group the mean was 4.15 and the range was 0-8. The High Deprivation group had a mean of 12.32 and a range of 9-18.

Main Analyses

In theory, the design of this study dictates that an analysis of variance of five factors with repeated measures on the last two factors should be used - Approach

Affiliation X Deprivation Affiliation X Order X Status X Task. In actuality, the response measures in the task-oriented and person-oriented Task conditions are so different that the statistical analysis was divided into two 4-way multivariate analyses of variance with repeated measures restricted to the last factor - Approach Affiliation (high vs. low) X Deprivation Affiliation (high vs. low) X Order (I - peer-authority vs. II - authority-peer) X Status (peer vs. authority). Because the completed experimental conditions did not have equal group sizes due to reasons unrelated to the treatments per se, an unweighted-means solution for the estimation of sums of squares was used (Winer, 1962, p. 337). Other statistical tests were performed to clarify the results. The results of each Task condition will be presented separately with comparative aspects noted in the Discussion section. Only the measures that account for a significant amount of the total experimental variance ($p = .10$ or less) will be discussed.

Task-oriented Condition

The analysis of variance summary for the response measure Number of Questions Asked Per Minute is presented in Table 3. The results fail to support Hypotheses 1 and 2 concerning the differential effects of Approach and Deprivation Affiliation levels, but do offer evidence for

TABLE 3
 Analysis of Variance Summary for Task-oriented
 Condition: Number of Questions
 Asked Per Minute

Source	df	F	p
A. Approach Affiliation	1	2.31	.136
B. Deprivation Affiliation	1	.00	.944
C. Order	1	3.53	.067
D. Status	1	22.63	.001**
AB	1	.25	.623
AC	1	.90	.349
AD	1	.49	.486
BC	1	2.46	.124
BD	1	2.64	.112
CD	1	9.25	.004**
ABC	1	.00	.977
ABD	1	3.62	.064
ACD	1	.03	.862
BCD	1	.01	.921
ABCD	1	1.90	.175

*p<.05.

**p<.01.

the effects of the Order and Status manipulations. The Status main effect is highly significant ($F = 22.63$, $p < .01$). The relevant cell means for this analysis are shown in Table 4. Examination of the scores for each group reveals that more questions were asked of the peer confederate than of the authority confederate. These results are consistent with other research (Byrne, 1962) demonstrating that status may be used as an index of attitude similarity and, as such, leads to increased attraction and affiliative behavior. Another interpretation is that transference of parental, critical or superior qualities to the authority confederate may have prompted Ss to suppress communication in order to avoid exposure to inadequacy and censure.

Another result which is highly significant is the Order X Status interaction ($F = 9.25$, $p < .01$). Table 5 presents the relevant cell means and shows that when S saw the peer confederate first, more questions were asked than were asked in any of the other three Order-Status combinations. T-tests performed between the conditions showed that the peer first condition was significantly different ($p < .001$) from all the other situations and that the remaining conditions did not differ among themselves. This interaction is complemented by the Order main effect which closely approaches significance ($F = 3.53$, $p = .067$). Summarized in Table 6 the mean score Order data show that

TABLE 4
Cell Means Showing Status Effect for Response
Measure Number of Questions
Asked Per Minute

Status (n=51)	
Peer	Authority
.378	.255

TABLE 5

Cell Means Showing Order x Status Interaction
for Response Measure Number of
Questions Asked per Minute

Order	Status	
	Peer	Authority
I:P-A (n=27)	.474	.276
II:A-P (n=24)	.271	.233

TABLE 6

Cell Means Showing Order Effect for Response
 Measure Number of Questions Asked Per
 Minute (Averaged Over Peer and
 Authority Conditions)

Order	
I:P-A (n=27)	II:A-P (n=24)
.375	.252

Ss assigned to Order I (Peer-Authority) made more affiliative responses than Ss assigned to Order II (Authority-Peer). In general, these overall results suggest that the authority confederate may have had a residual suppressive effect on S's tendency to respond with questions to the later-seen peer.

Another result which approaches statistical significance is the Approach Affiliation X Deprivation Affiliation X Status interaction ($F = 3.62$, $p = .064$). Inspection of the cell means in Table 7 shows an interesting, albeit weak, phenomenon of differential status responsivity among the various affiliative groups. A series of t-tests conducted between these groups revealed that the major contributor to this effect was the performance of the Low App, Low Dep Ss in the Peer condition. This situation resulted in the asking of significantly more questions than in any other subject group-status combination. The Low App, Low Dep Ss were conceived to be low in motivation to affiliate for social, companionate reasons and not concerned about censure, rejection or loneliness. One explanation for this surprising result is that these Ss may have highly task-oriented and asked the questions to obtain the necessary information in order to perform better. They responded more in the peer condition perhaps because of a more efficient communication process stemming from greater identification with the peer-similar

TABLE 7

Cell Means Showing Approach Affiliation x Deprivation
 Affiliation x Status Interaction for Response
 Measure Number of Questions Asked Per Minute

Approach Affiliation	Deprivation Affiliation	
	Low	High
Low	Peer .494 (n=13)	Peer .360 (n=15)
	Authority .250	Authority .343
High	Peer .345 (n=13)	Peer .300 (n=10)
	Authority .207	Authority .194

language, similar concept formation, faster formulation of questions, etc. For these Ss, the importance of the increased attractiveness of similar status target affiliates may have been secondary to the assumed informational value.

The analysis of variance summary for the dependent variable Number of Times Used Manual Per Minute is presented in Table 8. When interpreting the results of this analysis, it is necessary to recall that the experiment was deliberately designed so that S was forced to seek help to correctly perform the calculator procedure. If S chose to use the manual rather than seek an interpersonal mode of assistance, this behavior may be viewed as avoidance of affiliative behavior. Ultimately, S had to request aid from E in order to complete the task.

The results show that the Deprivation Affiliation X Order interaction is significant ($F = 6.15, p .05$). The cell means for this analysis are presented in Table 9. A series of t-tests showed that Order significantly affected the Low Dep Ss, but did not affect the High Dep Ss. The Low Dep Ss used the manual significantly more times ($p .01$) when the authority was present first than when the peer was present first. There were no significant differences in the other contrasts. The results suggest that the High Dep Ss did not differentially perceive the status characteristics of the target affiliates. If these Ss are viewed as having had high levels of fear

TABLE 8
 Analysis of Variance Summary for Task-oriented
 Condition: Number of Times
 Used Manual Per Minute

Source	df	F	p
A. Approach Affiliation	1	3.64	.063
B. Deprivation Affiliation	1	.37	.546
C. Order	1	2.28	.139
D. Status	1	3.80	.058
AB	1	.01	.939
AC	1	.24	.630
AD	1	4.72	.035*
BC	1	6.15	.017*
BD	1	.21	.649
CD	1	.34	.560
ABC	1	.82	.369
ABD	1	.04	.850
ACD	1	.02	.876
BCD	1	.40	.532
ABCD	1	.79	.380

*p<.05.

TABLE 9

Cell Means Showing Deprivation Affiliation x Order
Interaction for Response Measure Number of
Times Used Manual Per Minute (Averaged
Across Peer and Authority Conditions)

Order	Deprivation Affiliation	
	Low	High
I:P-A	.02 (n=16)	.07 (n=11)
II:A-P	.10 (n=10)	.04 (n=14)

of censure, rejection and loneliness, then the concomitant anxiety might have interfered with accurate perception of external events. A regressed, intrapsychic focus on the need to get immediate assistance would lead to non-discriminatory behavior such as interaction with whoever was present, and less self-reliant manual usage. The Low Dep Ss, by definition, did not experience these concerns to such an extent. They might have been less anxious and able to demonstrate better perception of E status differences. Their behavior would then exhibit the tendencies discussed in an earlier section. In Order I (Peer-Authority) more efficient communication with and attraction to the peer would increase their affiliative behavior which might carry over to the authority and result in overall reduced use of the manual. In Order II (Authority-Peer) the authority confederate would have a generally suppressive effect on interaction which would result in a net increase in manual usage.

The results also indicate that the Approach Affiliation X Status interaction is significant ($F = 4.72$, $p < .05$). Table 10 shows the mean scores of the four subject group-status combinations. The most striking aspect is that the High App Ss in the presence of the peer E used the manual significantly less ($p < .01$) than all of the other groups. Further, the status of the target affiliate differentially affected the High App Ss, but

TABLE 10

Cell Means Showing Approach Affiliation x Status
Interaction for Response Measure Number
of Times Used Manual Per Minute

Status	Approach Affiliation	
	Low (n=28)	High (n=23)
Peer	.07	.01
Authority	.07	.07

did not affect the Low App Ss. Though they fall just below the customary significance levels, there are two main effects which are pertinent to the present interaction. The Approach Affiliation main effect ($F = 3.64$, $p = .063$) suggests that Ss who scored high in App Aff used the manual less than Ss who scored low in App Aff. Table 11 contains the cell means supporting this conclusion. The Status main effect ($F = 3.80$, $p = .058$) notes a strong trend for Ss to use the manual more with the authority than the peer confederate. The cell means for this analysis are summarized in Table 12. Overall, the High App Ss' tendency to enjoy active collaborative relationships was heightened by the presence of the peer with whom they might perceive greater attitude similarity and more opportunity for social reinforcement than with the Authority. When faced with the choice of where to obtain task-related information, they might have used this as an opportunity to establish or maintain a relationship with the target affiliate rather than turn to a less rewarding non-interpersonal source such as the manual. The Low App Ss were defined as individuals who were not especially concerned about establishing a positive interpersonal relationship. They might not have exhibited differential status responsivity because they had no interest in the social characteristics of the target affiliate. They behaved in a more independent,

TABLE 11

Cell Means Showing Approach Affiliation Effect
for Response Measure Number of Times
Used Manual Per Minute

Approach Affiliation	
Low (n=28)	High (n=23)
6.85	3.60

TABLE 12
Cell Means Showing Status Effect for Response
Measure Number of Times Used
Manual Per Minute

Status (n=51)	
Peer	Authority
4.15	6.62

self-sufficient manner, preferring to consult the manual for problem solving rather than to ask for help. Thus, Hypotheses 1 and 3a were supported.

Table 13 presents the analysis of variance summary for the response measure Latency to the First Question - Practice Period. The only significant result obtained from this analysis is the Approach Affiliation X Deprivation Affiliation X Order interaction ($F = 5.39, p < .05$). This effect is moderated by a two-way interaction of marginal statistical significance, that of Order X Status ($F = 2.77, p = .103$). The relevant cell means for these two results are shown in Tables 14 and 15. The significant three-way interaction is more clearly illustrated in Figure 1. When interpreting this graph, it should be noted that longer latencies imply less affiliative behavior. Comparison of the cell groups by t-tests indicates that the major contribution to the interaction effect was supplied by the Low App, Low Dep group's differential sensitivity to Order. In Order I, these Ss do not differ significantly from the other groups. However, examination of the latencies of the groups in Order II reveals that this is the only group manifesting a significant difference ($p < .05$) in contrast to its performance in Order I and in comparison with the lowest Order II group ($p < .05$) - the Low App, High Dep Ss. Supplementing this data with the marginal Order X Status

TABLE 13

Analysis of Variance Summary for Task-oriented
 Condition: Latency to First
 Question-Practice Period

Source	df	F	p
A. Approach Affiliation	1	.02	.879
B. Deprivation Affiliation	1	.49	.489
C. Order	1	.94	.338
D. Status	1	2.60	.114
AB	1	.89	.351
AC	1	.04	.836
AD	1	1.03	.315
BC	1	.90	.348
BD	1	.08	.776
CD	1	2.77	.103
ABC	1	5.39	.025*
ABD	1	.57	.453
ACD	1	1.07	.307
BCD	1	.02	.886
ABCD	1	.22	.647

* $p < .05$.

TABLE 14

Cell Means Showing Approach Affiliation x Deprivation
 Affiliation x Order Interaction for Response
 Measure Latency to First Question-Practice
 Period (Averaged Over Peer and
 Authority Conditions)

Approach Affiliation	Deprivation Affiliation	
	Low	High
Low	Order I 13.41 (n=9)	Order I 21.93 (n=8)
	Order II 36.67 (n=4)	Order II 10.98 (n=7)
High	Order I 20.92 (n=7)	Order I 15.02 (n=3)
	Order II 17.71 (n=6)	Order II 26.17 (n=7)

TABLE 15

Cell Means Showing Order x Status Interaction
for Response Measure Latency (Seconds) to
First Question-Practice Period

Order	Status	
	Peer	Authority
I:P-A (n=27)	11.16	24.96
II:A-P (n=24)	21.23	21.52

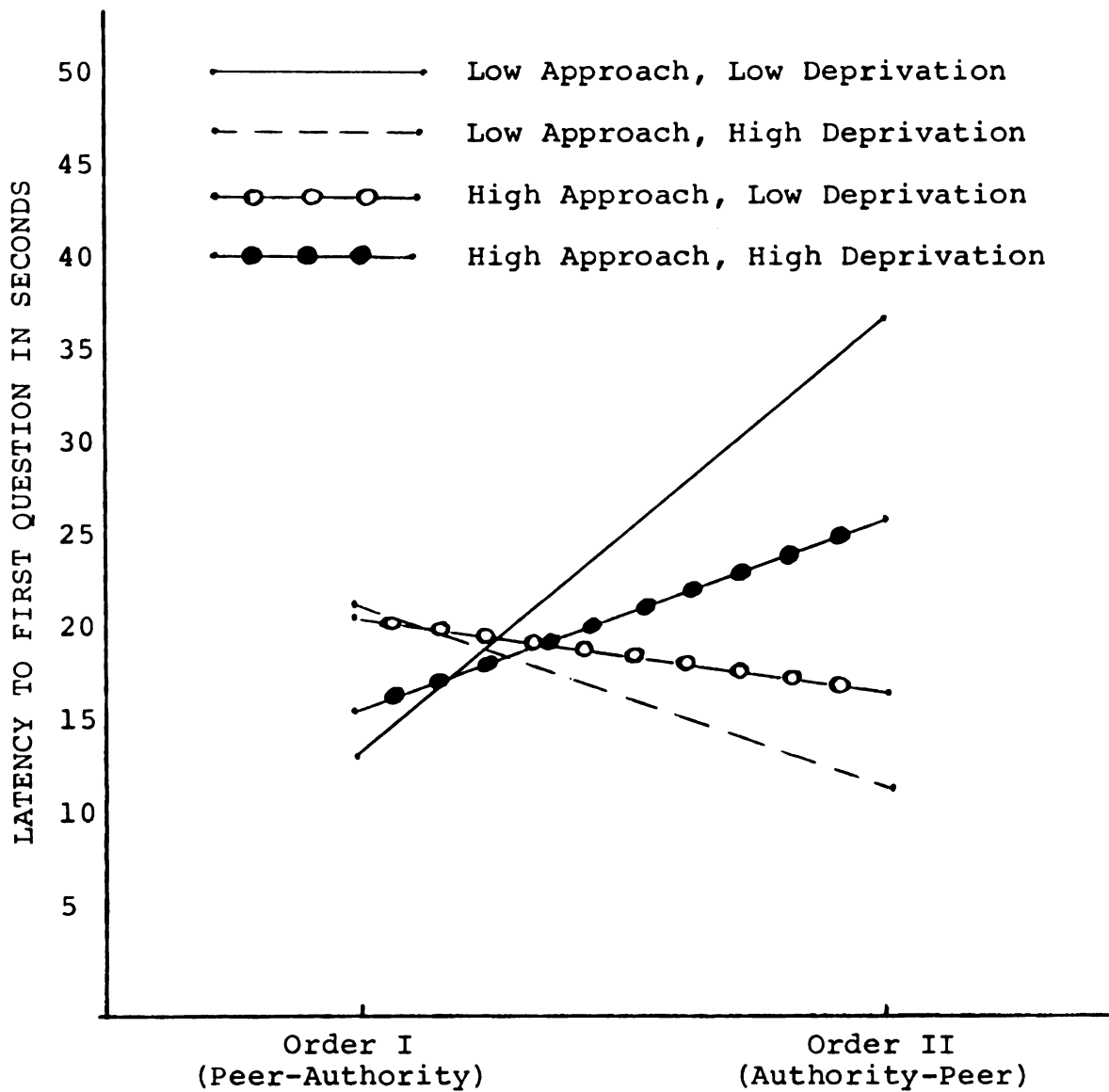


Fig. 1. Approach Affiliation x Deprivation
Affiliation x Order Interaction for Response Measure
Latency to First Question-Practice Period.

interaction, it can be seen that there was a general tendency in Order II for the authority to have a carry-over suppressive effect on affiliative behavior with the peer. The paradigm presented earlier to explain the behavior of Low App, Low Dep Ss (e.g., low interest in social affiliation, low fear of censure, low anxiety, high differential status perception for task-oriented purposes) may require modification to include susceptibility to negative carry-over effects.

Person-oriented Condition

The results of the analysis of variance for the variable Total Number of Incorrect Responses on Experimental Trials are given in Table 16. The data show no evidence of differential Approach and Deprivation affiliative response and so fail to support any of the hypotheses.

There is a significant Order X Status interaction ($F = 5.07$, $p < .05$), however, which is further supplemented by a Status main effect of marginal significance ($F = 3.38$, $p = .073$). Table 17 shows the relevant cell means for the two-way interaction. When Ss received the authority status condition second, they made more conformity errors than when placed in any of the other three order-status experimental combinations. The results of t-tests show that the Order I-Authority cell's score differed significantly from the other groups and that the remaining did not differ

TABLE 16

Analysis of Variance Summary for Person-oriented
 Condition: Total Number of Incorrect
 Responses on Experimental Trials

Source	df	F	p
A. Approach Affiliation	1	.04	.851
B. Deprivation Affiliation	1	.13	.717
C. Order	1	.06	.810
D. Status	1	3.38	.073
AB	1	1.17	.285
AC	1	.51	.480
AD	1	.79	.378
BC	1	.75	.391
BD	1	.12	.734
CD	1	5.07	.030*
ABC	1	.00	.990
ABD	1	.50	.482
ACD	1	.04	.841
BCD	1	.07	.780
ABCD	1	.32	.572

* $p < .05$.

TABLE 17

Cell Means Showing Order x Status Interaction
for Response Measure Total Number of Incorrect
Responses on Experimental Trials

Order	Status	
	Peer	Authority
I:P-A (n=27)	6.44	7.55
II:A-P (n=24)	6.71	6.58

among themselves. Table 18 presents the cell means for the Status main effect and indicates that Ss demonstrated a trend toward more conformity behavior in the authority condition than in the peer condition. The weakness of this trend is illustrated by the similar cell means of the initial conditions of each order. One explanation for this phenomenon may be that the Ss were too concerned with task requirements and coping with the confusion of their internal stress reaction dynamics to be responsive to external social stimuli such as the status of the confederate. When requested to repeat their participation, they were familiar with the task demands yet underwent an incubation period of anxiety anticipating another irrational, stressful process. In the second trial, they might have focused on finding ways to avoid being deviant or used a social comparison process (Festinger, 1954) in the hope of increasing their perceptual accuracy. The authority confederate could be perceived as having superior perceptual judgment abilities as well as great censure power. The shock of her introduction in Order I plus the anxiety incubation might contribute to a collapsing of confidence and an increase in conformity compliance. The entrance of the peer in Order II might have the opposite effect. Hope of decreased deviance and increased judgment confirmation would rise as a more similar standard of comparison was

TABLE 18

Cell Means Showing Status Effect for Response
Measure Total Number of Incorrect Responses
on Experimental Trials

Status (n=51)	
Peer	Authority
6.57	7.10

introduced. This hope might balance the effects of anxiety, thus resulting in a non-significant net change.

On the response measure Trial of First Yielding there were no factors which attained statistical significance. Table 19 shows that the Approach Affiliation main effect ($F = 3.27$, $p = .078$) reflected a trend toward evidence for Hypothesis 1. The cell means are given in Table 20 and suggest that High App Aff Ss yield faster to the group's influence than Low App Aff Ss. Individuals who scored high on this type of affiliative need are conceived to be motivated toward behavior which would reduce disruption and increase, maintain or re-establish positive relationships. They wish to avoid deviance and would comply earlier than would Low App Aff Ss.

Table 21 presents the analysis of variance summary for the variable Number of Extreme Errors. Though there are no significant effects, there are two marginal interactions. Table 22 shows the relevant cell means for the Order X Status interaction ($F = 3.62$, $p = .064$). T-tests performed on this data show that Ss made a somewhat greater number of extreme errors ($p < .10$) when assigned to the peer condition second (Order II) than to the peer condition first (Order I). Order had no effect on the authority condition. It appears as if there were no differential responsivity to status effects in the first condition presentation, perhaps for the reasons previously discussed,

TABLE 19

Analysis of Variance Summary for Person-oriented
Condition: Trial of First Yielding

Source	df	F	p
A. Approach Affiliation	1	3.27	.078
B. Deprivation Affiliation	1	.33	.571
C. Order	1	.75	.391
D. Status	1	.04	.842
AB	1	.95	.336
AC	1	.00	.953
AD	1	.01	.906
BC	1	.48	.492
BD	1	.06	.807
CD	1	.00	.982
ABC	1	.04	.835
ABD	1	.39	.537
ACD	1	.10	.750
BCD	1	.14	.710
ABCD	1	.08	.784

TABLE 20

Cell Means Showing Approach Affiliation Effect
on Response Measure Trial of First Yielding
(Averaged Over Peer and
Authority Conditions)

Approach Affiliation (n=51)	
High	Low
3.95	6.29

TABLE 21

Analysis of Variance Summary for Person-oriented
Condition: Number of Extreme Errors

Source	df	F	p
A. Approach Affiliation	1	.65	.424
B. Deprivation Affiliation	1	.12	.730
C. Order	1	.06	.813
D. Status	1	.05	.821
AB	1	.29	.592
AC	1	1.33	.256
AD	1	1.51	.226
BC	1	1.69	.201
BD	1	.70	.408
CD	1	3.62	.064
ABC	1	.02	.900
ABD	1	.07	.795
ACD	1	.01	.912
BCD	1	3.13	.084
ABCD	1	.03	.859

TABLE 22

Cell Means Showing Order x Status Interaction
for Response Measure Number
of Extreme Errors

Order	Status	
	Peer	Authority
I:P-A (n=27)	2.33	2.70
II:A-P (n=24)	2.83	2.54

e.g., pre-occupation with task requirements and intra-personal distress. On this measure, however, the Order II peer situation shows a carry-over effect from the authority figure, suppressing independent judgment and increasing the number of extreme errors higher than the peer elicits when she is the initial confederate.

The cell means for the Deprivation Affiliation X Order X Status interaction ($F = 3.13$, $p = .084$) are contained in Table 23. Though this is a weak effect, the data show a strong trend for the High Dep Aff Ss to increase their conformity behavior in the second experimental stage, especially when the authority confederate is introduced. This result is consistent with the definition of High Dep Aff Ss as being individuals who are highly motivated to avoid criticism and rejection and who might perceive the authority confederate as having more experience and knowledge and wielding more power.

The analysis of variance summary for the measure Number of Compromise Errors is presented in Table 24 and shows that no factors attained significance.

TABLE 23

Cell Means Showing Deprivation Affiliation
 x Order x Status Interaction for Response
 Measure Number of Extreme Errors

Status	Deprivation Affiliation	
	Low	High
	(n=13) Order I:P-A (n=14)	
Peer	2.25	2.39
Authority	2.16	3.27
	(n=13) Order II:A-P (n=11)	
Peer	3.28	2.37
Authority	3.15	1.89

TABLE 24

Analysis of Variance Summary for Person-oriented
Condition: Number of Compromise Errors

Source	df	F	p
A. Approach Affiliation	1	.64	.429
B. Deprivation Affiliation	1	.45	.506
C. Order	1	.64	.429
D. Status	1	.45	.508
AB	1	2.39	.129
AC	1	2.48	.123
AD	1	.62	.436
BC	1	1.78	.190
BD	1	1.11	.298
CD	1	1.53	.222
ABC	1	.04	.848
ABD	1	.03	.859
ACD	1	1.38	.247
BCD	1	.03	.859
ABCD	1	.22	.644

CHAPTER IV

DISCUSSION

Viewed from an overall perspective, the procedures used in this study to assess a two-factor theory of affiliation motivation did not result in meaningful discrimination among individuals differing in Approach and Deprivation Affiliation. It should be noted, however, that the statistical analyses employed were designed such that the results which did reach significance were true effects and not the result of chance outcome in a large field of tests.

The Order and Status variables proved to be important factors in eliciting differential affiliative behavior, but demonstrated only spotty interaction with the affiliation variables and generally did not attain conventional levels of statistical significance. Carry-over effects seemed to play a role in the suppression or facilitation of affiliative response via authority first or peer first conditions, respectively. There was some evidence that the High App Aff Ss were more affiliative than the Low App Aff Ss, as predicted from the coding

definitions. The Low Dep Aff Ss seemed to exhibit greater differential status responsivity than the High Dep Aff Ss, a trend accounted for by possible lower anxiety levels and more task oriented concerns. Of the two experimental situations, the task-oriented, calculator learning situation elicited more discrimination among the Ss than did the person-oriented, conformity condition which resulted in extremely scanty differential outcomes. The discussion which follows focuses on possible explanations for these results and offers suggestions for further research.

Behavioral Measures of Affiliation

One primary concern in attempting to explain these results is that the selected dependent variables were not sensitive enough to reflect subject differences. Research specifically studying affiliative behavioral cues, published after the present experiment was conducted, offers support for this possibility. Mehrabian (1969a; 1969b) reviewed the experimental evidence for the significance of a wide variety of verbal and non-verbal cues for communicating liking, status differences and responsiveness to a target affiliate. Distance, eye contact, body orientation, arms-akimbo position and trunk relaxation were most consistently found to be indicators of communicator attitude. These variables along with degree of arm openness and degree of asymmetry in the arrangement of arms and legs have been found to be associated with status difference

relationships. For both experimental situations in the present study, these are cues which might have highlighted differential interpersonal orientations. In the Asch conformity situation it might have proved valuable to have seen if there were non-verbal affiliative cues communicated to the confederate in the hope of cancelling out verbal non-conformity responses which threatened to disrupt the relationship with the target. As the experiment progressed and the S's deviance became obvious, she had to deal in some way with the actual presence of E, even though the other conformity participants were audio recordings.

For verbal measures, as in the calculator situation, Mehrabian (1971) states that total statement rate (i.e., number of simple sentences or independent clauses uttered per minute) can be relied on as a prime measure of affiliative behavior when only audio tape recordings are available. In the present learning experimental set-up, the task characteristics make questions, not statements, the appropriate mode of interaction. This means that affiliation becomes confounded with help-seeking dependency and suggests that future studies might better employ a purer free-response affiliative situation. Within the present study, more discrimination might have resulted if all questions had been counted--secondary questions, questions which did not elicit a reply, and inquiries about asking questions as well as requests for assistance.

It would have been useful to categorize the questions according to task-oriented or social content and perhaps obtain a ratio of the two types. This would help clarify, for example, whether the Low App, Low Dep Ss asked more questions of the peer because they were task-oriented, as was hypothesized, or whether another dynamic such as compulsive reaction formation socializing was operating. It could be used to explore the collaborative nature of the interaction, assess instrumental versus emotional concerns, and study the style of affiliative participation. Another variable which has been found effective (Wiener and Mehrabian, 1968) is length of communication which could have reflected the continuous involvement of S with E and supplemented the data giving only the absolute number of interactions.

Comparison of the two task situations shows that the calculator learning condition provided more meaningful variance across factors than did the conformity condition. This may have been because the former was a free response situation with few restrictions on S's potential use of her affiliative response repertoire. The conformity situation was highly structured with responses channeled into a task performance mode. The conformity condition, thus, provided indirect measures of affiliation whereas the calculator task had at least two direct measures-- number of questions per minute which measured direct

interaction and latency to the first question which determined the threshold of response. The latter seems a particularly good index of affiliative tendency because it is a relatively pure reflection of S's affective interpersonal history. Until the first question is asked, the confederate is serving as a projective stimulus. After the first question is answered, S has real evidence as to E's reinforcement value and her subsequent judgment is influenced by rational, cognitive, informational processes. This is also the only variable to show a significant result in which the two types of affiliation interact, as may be seen in the Approach Affiliation x Deprivation Affiliation x Order interaction.

Another reason for less response variation in the conformity task might be that the task calls for perceptual judgments of reality stimuli--a process which is the fundamental anchor of an individual's relationship to the environment, and, thus, not subject to easy vacillation.

The motivational factor of need Achievement might also have contributed to exert a differential task effect since there would be more lee-way in the calculator situation for this motivation to become manifest in behavior and gratified than would be shown in the conformity situation. The overlapping of motivational states and needs such as dependency and achievement with affiliation, particularly in this study where performance was the overt

task demand, suggests that caution be used in studying affiliative behavior to obtain the least confounding possible or to determine the effects of other influences by appropriate personality assessment techniques.

The scanty results provide no evidence of inter-task consistency of affiliative behavior by certain types of subjects.

Projective Measures of Affiliation

The results show no differences in affiliative behavior as effects of the classification of Ss into high and low groups on either Approach or Deprivation Affiliation. There were two non-significant trends for the High App Aff Ss to use the calculator manual less and to yield faster in the conformity task than did the Low App Aff Ss. One reason for the lack of variance is that there may not have been a broad enough spread in the scores so that a clustering of generally similar profiles may have occurred. A broad preliminary test sample would be useful to determine the range of high and low, as well as medium, scores in a larger population.

Another possible explanation for the lack of differences is that the Approach and Deprivation Affiliation coding characteristics may not have been relevant to the interpersonal demands of the task conditions. Samples of the scoring definitions of Approach Affiliation Imagery include "The minimum basis for scoring would be that the

relationship of one of the characters in the story to someone else is that of friendship." (Scoring manual, p. 2) and "Friendly, nurturant acts such as consoling, helping, or giving, are regarded as evidence of affiliative feelings provided they are not culturally prescribed by the relationship, and provided they are not motivated by a sense of obligation. (Scoring manual, p. 3). These definitions are in direct contradiction to the experimental situation which was characterized by the S's interaction with a stranger in a culturally prescribed academic research setting with an implied sense of obligation on the part of S and E to work together to jointly accomplish a task.

Examination of the manual definitions for scoring Deprivation Affiliation Imagery reveals statements such as "Simple instrumental requests for help . . . are not scored, since they imply nothing concerning affiliative goals" (Scoring manual, p. 10a) and "Deprivation Affiliation is scored if any of the following themes are present: . . . nurturant concerns, either culturally prescribed or felt out of a sense of obligation, and nurturant actions in roles where the nurturance is culturally prescribed. In all cases where nurturance is involved there must be some evidence of the person-oriented nature of the involvement." (Scoring manual, p. 11). In the calculator experimental setting, any nurturant actions would have

been task-oriented in response to specific requests by S for help, a sphere of interaction different from that measured via the TAT coding.

Although Deprivation Affiliation does deal with concerns about whether or not one is meeting other people's interpersonal expectations and does reflect the desire to establish a positive affective relationship, it may be that the coding taps only feelings regarding situations where the target affiliate has been known for a longer time period than transpired in this experiment. McGhee and Teevan (1967) discussed the idea that need expression might be influenced by whether or not S knows or likes the confederates in an experiment. Thus, a low need S placed with known acquaintances might behaviorally express a high level of affiliation. High or low need individuals placed with a stranger could both present a low affiliative need response profile. The use of strangers as confederates in the present study might be another contributor toward blocking the expression of affiliative differences.

The results indicate that, with one exception, there were no significant Status x Affiliation Type interactions. This overall failure to link projective and behavioral data may have occurred because the coding manual does not require status discrimination when affiliation is scored. Though the stimulus cards have varying "pull" for status effects, the actual scoring washes out

differences between peer-authority, parent-child, etc. by assigning equal weights to all categories. The significant Approach Affiliation x Status interaction for Number of Times Used Manual resulted from the tendency of the High App Aff Ss in the presence of the peer to use the manual less than the other three group-status combinations. If these Ss are characterized by a high level of enjoyment of positive affective relationships and, if status is a direct index of attraction as other research indicates, then these results are neatly consistent with predictions.

Order and Status Variables

In summarizing the significant and marginal results, it is seen that the variables which had the most influence were the Order and Status manipulations. Although the evidence is not overwhelming, a pattern emerges which shows that the effects of these variables were the opposite in each task. In the task-oriented calculator situation, more affiliative behavior occurred in the peer condition. These results are consistent with other research showing a direct relationship between affiliation and attitude-status similarity. Where the situation permits active interaction, there exists an opportunity to assess similarity.

In contrast to the above, the structured conformity situation resulted in more affiliative responses when the authority confederate was present. The non-interactive characteristics of this task may have heightened the

tendency of Ss to perceive E as a projective stimulus. In a stressful situation, as this was according to Ss' post-experiment reports, there might be a tendency to reduce the cognitive dissonance by transferring parental, authoritative or high credibility traits to E, making her an expert. To conform would then mean to aid S's judgment accuracy as well as to reduce deviance and the threat of punishment. Since each S participated twice in the conformity experiment, it might be expected that conformity would be even greater in the second phase where S would be searching for ways to end her distress. In stage one, she may have been pre-occupied with understanding the task requirements and coping with the shock of unfolding events. The results indicate that this effect did occur and that the Order I--authority cell condition elicited the most affiliative behavior. In the calculator situation, a similar pattern is seen with Order I resulting in more affiliative behavior, especially in the Order I--peer cell condition. In general, it appears that the initial presence of an authority status confederate had a suppressive effect on an S's affiliative behavior which carried over to the peer condition.

There is one procedure pertinent to the status manipulations which was omitted and should be noted for future research. This concerns the determination of the confederates' affiliative needs. Although the two Es

elicited differential responses which operated in different ways across tasks, the effects might have been due to differences in personality traits rather than status differences, or the obtained effects might have been the net result of the blunting or intensifying of status effects by the Es' needs. Multiple target affiliates should be matched as closely as possible in regard to the variable under study.

CHAPTER V

SUMMARY

The assessment of affiliation motivation was studied with emphasis on the development of a two-factor theory composed of Approach Affiliation--enjoyment of warm, companionate, communicative processes, and Deprivation Affiliation--avoidance of noxious, non-affiliative states such as loneliness, shame and feeling unliked. Specific aims were to observe the behavior of the same individuals across an array of situations in which the interpersonal salience of the goal and the expectations about collaboration were systematically manipulated to elicit differential affiliative responses from individuals who varied along the dimensions of Approach and Deprivation Affiliation.

The Zucker-Davis (1969) coding scheme, specifically designed to differentiate the two components, was used to score the TAT stories of 51 college women. Each S participated in two experimental situations--a task-oriented condition in which the overt demand was to learn to use a calculator, and a person-oriented condition which was a

modified Asch conformity situation. There were two parts in each task to permit the introduction of confederates who varied along the status dimension as either a peer or authority target affiliate. In addition, an Order variable was studied to determine the influence of having an initial interaction with a peer or authority figure and the subsequent carry-over effect.

It was hypothesized that across both task conditions, high Approach Affiliation Ss and high Deprivation Affiliation Ss would show more affiliative behavior than similar low scoring Ss.

In regard to the Status variable, it was hypothesized that across both task conditions, high Approach Affiliation Ss would make more affiliative responses in the peer condition than in the authority condition. For the high Deprivation Affiliation Ss it was predicted that across both task conditions, the authority condition would elicit more affiliative behavior than the peer condition.

For the Order manipulation, it was predicted that across both task conditions, high Approach Affiliation Ss assigned to Order I--peer condition followed by authority condition--would make more affiliative responses than similar Ss assigned to Order II--authority condition first, peer condition second. For the high Deprivation Affiliation Ss, the reverse results were predicted.

A correlation matrix of the TAT coding results showed that the Approach and Deprivation Affiliation components were independent of each other. In general, the analyses of variance failed to support the hypotheses. The Order and Status variables proved to be important factors in eliciting differential affiliative behavior, but demonstrated only spotty interaction with the affiliation variables and generally did not attain conventional levels of statistical significance. Carry-over effects seemed to play a role in the suppression or facilitation of affiliative response via authority first or peer first conditions, respectively. There was some evidence that the high Approach Affiliation Ss were more affiliative than the low Approach Affiliation Ss. The low Deprivation Affiliation Ss seemed to exhibit greater differential status responsivity than the high Deprivation Affiliation Ss. Of the two experimental situations, the task-oriented calculator condition elicited more discrimination among the Ss than did the person-oriented conformity condition which resulted in extremely scanty differential outcomes.

Explanations for the weak differential effects focused on the proposed insensitivity of the selected dependent variables and the possibility that the Approach and Deprivation Affiliation coding characteristics may not have been relevant to the interpersonal demands of the task conditions.

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APPENDICES

APPENDIX A

THEMATIC APPERCEPTION TEST

INSTRUCTIONS AND PICTURES

Instructions for Storytelling

On the following pages you are to write out some brief stories that you make up on your own. This is a situation 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, I'm going to show you a series of pictures--on slides--that you can look at and build your stories around. When we're through with these instructions I'll show the first slide, for about 20 seconds. Look at the slide, then write a story suggested by the picture.

There are no "right or wrong answers" or kinds of pictures, so feel free to write whatever story is suggested to you. 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 four minutes. I'll announce when the time is getting close, so you can finish up. Then we'll go on to the next picture.



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 B

SUMMARY OF SCORING PROCEDURES FOR

N AFFILIATION

A. Approach Affiliation

Approach Affiliation Imagery (App Aff Im)--"refers to themes of liking 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 if 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 relationships characterized by friendship" (Heyns et al., p. 211), "mutual liking, or interest or collaborative 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 Environmental (Bp, Bw)--"Categories Bp and Bw are scored when goal directed activity is hindered or blocked in some way" (Heyns et al., p. 215).

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 relationship by 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 non-affiliative states such as loneliness, shame, feeling unliked 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 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 Environmental (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).

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