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The Attitude of College Students Toward Heterosexual Relationships as Expressed on Thematic Apperception Test Stories

Patricia Diane Dore
Loyola University Chicago

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**THE ATTITUDE OF COLLEGE STUDENTS TOWARD HETEROSEXUAL
RELATIONSHIPS AS EXPRESSED ON THEMATIC
APPERCEPTION TEST STORIES**

by

Patricia Diane Dore

**A Thesis Submitted to the Faculty of the Graduate School
of Loyola University in Partial Fulfillment of
the Requirements for the Degree of
Master of Arts**

March

1964

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LIFE

Patricia Diane Dore was born in Chicago, Illinois, March 11, 1939.

She graduated from St. Patrick's Academy, Des Plaines, Illinois, in June, 1956. She received the degree of Bachelor of Science with honors from Loyola University in February, 1960.

Graduate studies at Loyola University were begun in February, 1960, under an assistantship from the University. From September, 1961, until October, 1962, she did a clerkship, then worked for Catholic Charities of Chicago.

Since March, 1963 she has been employed as a research assistant at the Loyola Psychometric Laboratory.

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CHAPTER I

INTRODUCTION

The purpose of this research was to isolate and describe the ideas expressed about the heterosexual relationship on the Thematic Apperception Test by college students.

College students were selected for the study because they were often used as controls when nosological groups were being studied. Though they were used as controls and their responses on projective tests compared to whatever other group was being studied, there was insufficient literature on how they respond as a group. In the literature when all the responses to a test were investigated, none was treated thoroughly. When one area was not concentrated upon, the subtleties and trends of the responses were overlooked. Thus, only one type of response given by the college student was considered in the present study; the response revealing attitudes about the heterosexual relationship. The attitude toward the heterosexual relationship was selected because college students are in a stage of

life where an important interest and consideration is the opposite sex and the attitudes, ideals, and misconceptions this involves.

The term heterosexual relationship was defined as any actual or phantasied relationship between a male and a female who are not blood related. When the subjects told stories about married couples, engaged couples, prostitutes, intercourse, employers and employees of both sexes, married persons involved with unmarried persons, males and females in general, it was assumed that they were revealing in these stories their own attitudes toward the heterosexual relationship.

The attitude toward the heterosexual relationship was revealed in stories told to TAT cards. It appeared necessary not only to define what was being studied (the heterosexual relationship), but to locate it by describing where (in which cards) the heterosexual relationship was being revealed by the college students, how often did it occur, did the males and females differ in the number of responses to TAT cards, what was the characteristic stimulus of the card, was the heterosexual relationship an important area of conflict for the group? After the number of heterosexual stories which were told to each TAT card were tallied, separately, for the males and females, these questions were investigated specifically in the following three hypotheses: 1) Cards which picture more than one person will elicit a higher number of stories of a heterosexual nature than will cards with no person or with only one person pictured. This hypothesis investigates the characteristic stimulus of the card. 2) Females will relate a significantly higher number of stories involving heterosexual attitudes than will the males. 3) Persons relating stories of a heterosexual nature on card 16 will relate more stories of

this nature than persons not using card 16 in this manner. Card 16, the blank card, has been thought to reveal autobiographical data or conflict areas, if the latter is true, then the hypothesis should be supported.

It appeared necessary to investigate further the attitude toward the heterosexual relationship by attempting to study the qualitative aspect of the attitude. The attitude toward the heterosexual relationship was considered as a composite of the subjects' attitudes toward specific topics. At the onset of the study there was no a priori set of specific topics set up to be tested. Each specific topic or story was assumed to have a value which could be, on a relative basis, completely positive or completely lacking in a positive value.

The assumptions that the heterosexual attitude could be broken down into specific topics and that it would be possible to determine a value for the topic led to the development of two hypotheses and to the construction of methods to isolate the topics and evaluate them.

The topics were to be called categories. Only the five categories containing the largest number of stories were used in order to prevent placing emphasis on stories given by an inconsequential number of subjects. Each of the stories in the selected categories was to be evaluated as to whether or not the attitude it expressed was positive. Two hypotheses involving the categories and the positiveness of the attitude were presented. 1) For each of the categories, the male group and the female group will relate at a significant level stories which are positive. 2) For each category obtained the male group will not differ significantly from the female group in the number of positive stories related. A "normal," healthy, mature or

maturing, properly informed and guided college group should elicit a positive rather than a negative picture or presentation or attitudes, ideally.

The method used to isolate the topics depended first upon the reading of the story after which the essence of the heterosexual attitude was synopsisized and recorded. The synopsisized stories were then read through and grouped according to similarity of the topic of the heterosexual attitude. A five-point rating scale was selected. Each story was then evaluated by two judges in terms of this scale.

CHAPTER II

REVIEW OF LITERATURE

Though there is a vast amount of literature on the Thematic Apperception Test, little work has been done with the college group. It is true that normative information on them is available; but it is found generally in studies in which the college group is used as a control group in order to investigate and compare pathological groups. Little has been actually reported about a typical attitude or pattern of response to the Thematic Apperception Test by the college group. What was reported may have received impetus from a particular method of analysis or may have been involved with a theory of motivation. Thus, the norms are only the norms of a particular method of analysis or of a particular dynamic interpretation of behavior. In recent literature it has become popular to pick the attitude one wishes to study and construct TAT-like cards which stimulate only that attitude rather than do exploratory studies with the Murray TAT.

Some of these studies will be reviewed. Their value lies in the fact that they served as a negative impetus for the present study. For convenience the studies to be reviewed were divided into 1) studies concerned with the method of analyzing or classifying data on the TAT; 2) studies revealing information about the college group and/or about the heterosexual relationship or any aspect thereof; and 3) studies concerned with the contribution or stimulus value of the TAT cards to responses and attitudes. There was, of course some overlap; but the studies were placed into the divisions thought to be their main emphasis or contribution.

Methods of Analyzing the TAT

One source which presents different methods of working with TAT material is Shneidman's book (1951). His book gives one an overview of the seventeen common methods employed with the TAT. Some of these methods are research-oriented, others are strictly for individual records with clinical emphasis. For the present study, interest centered on the research methods described, as information was sought about the ideas of a group of persons.

Betty Aron's method was presented in Shneidman's book; she developed it as a research tool. Her method consisted of analysis on the level of manifest story content using an a priori scheme (needs and press, defenses). As the present study does, she keeps away from deep levels of interpretation, and the formal aspects of the stories are also ignored.

Arnold's work (1962) with the TAT has been concerned with developing a scoring system and a method of analysis suitable for individual cases. She has also evaluated, in a thought-provoking manner, many of the concepts and assumptions used

by persons working with the TAT. Her method of analysis finds the "import" of a story and also takes into account any sequences within the record. The scoring system was empirically derived over several studies. Because the present study was interested in the description of one segment of what can be revealed in the TAT, namely, the heterosexual relationship, the method of sequence analysis could not be used. The present study was also interested in a group of persons rather than individual responses and protocols. Her work gave support to the investigator's decision not to use "tried and true" methods of analysis which often involve theoretical implications not obvious to the author or reader.

McClelland and his group or those using his method were interested in developing an accurate scoring system for measuring human motivation (McClelland, 1953, Atkinson, 1958). They have contributed a great deal of work in the area of aggression, achievement, and affiliation. The subjects throughout McClelland's work were college males. The test was administered in a group, generally after the subjects had taken paper-and-pencil tests.

McClelland's system for scoring n (need) Achievement was derived from Murray whose work served as a starting point. In developing the scoring category for achievement, they began with the definition derived from Murray, then tested two sets of randomly mixed data with the definition. In one group the protocols were written under conditions of achievement arousal and in the other group under neutral conditions. These results indicated a need for revision which procedure was repeated until they developed a useful definition of achievement imagery.

McClelland and his group scored for achievement even though it was not always a main topic. Since it had been planned to include sexual expressions of a secondary nature in the present work, it was encouraging to find that others found the inclusion of secondary topics acceptable.

McClelland's study was concerned with what was achievement or affiliation or aggression and how it could be scored in order to be able to predict behavior accurately. The present work was not interested in manipulating emotional or attitudinal aspects of the subjects nor was it interested in prediction; it was concerned with description. McClelland's research was considered because of its extensiveness and use of college males as subjects. It was also considered in order to obtain some information on how to define what was being studied when organizing data in order to analyze it.

Hartman (1949) attempted to make a systematic analysis by relating the responses on the TAT to the standard personality classification of clinical and academic psychology. Both TAT responses and clinical diagnosis were expressed by rating scales.

Each subject was rated by the experimenter and a psychiatrist, independently. They followed a comprehensive scale of personality and behavior variables. The TAT's were submitted to an independent expert in the TAT who interpreted them by blind analysis. The ratings were compared for each personality variable and for each case as a whole on the basis of the three ratings, an analysis of the form and content characteristics of responses on the TAT was made, and each TAT category was correlated with the personality variables of the rating scale.

The final correlation comparisons were made up of 56 TAT categories: 12 modes of response, 13 formal characteristics of responses, 11 thematic emphases, 12 feeling qualities characterizing the responses, and 8 topics which were emphasized in the responses.

Hartman's scales were too involved with theory. The theoretical implications of his scales could be disputed because they were not "facts". The scales did not give specific or revealing information; therefore, the study did not stand out as different or enlightening when compared with other studies which also evaluated tests and variables.

Rosenzweig and Fleming (1949) published an article concerned with the establishment of adult apperceptive norms for selected pictures. They examined the stories to ascertain what the subjects as a group made of the stimulus material, descriptively; they were not concerned with any deep interpretations. One hundred subjects evenly divided between the sexes were used. The stories were classified as to Figures, Objects, and Problems and Outcomes. As compared to Rosenzweig and Fleming's study, the present study was concerned with broader interests and expressions than it was. Their study and the present one both used levels of interpretation which did not rely on deep interpretation. Apperceptive norms may have their usefulness but are rather sterile in revealing much about a person or a group.

Some researchers have felt that it would be helpful to employ scaling methods with the TAT cards or with TAT-like cards. It is, generally, their reasoning that once a card is scaled for a dimension, it will be possible to proceed to investigate the meaning of conformity or deviancy from the stimulus value (Lesser, 1958,

Murstein, 1961).

One of the studies applying the scaling methods, specifically the Guttman technique, was done by Auld et al. (1955). The subjects were one hundred sailors in a submarine school. The test given was the Navy Group TAT; ten cards were used. The purpose of the study was to scale the cards for the dimensions of aggression and sex. The two dimensions were defined prior to the gathering of the data on a theoretical basis similar to Murray's. The cards with this group of subjects did not produce enough material to work out a scale for aggression. Of the ten cards used, four were decided upon for the dimension of sex; the coefficient of reproducibility for these four cards was .93. The product moment correlation was .13 with the test-retest method.

The recommendations of the authors for further research were to have a large number of cards with which to begin. The cards should be selected or specifically designed for the dimension one wished to scale or tap. The Guttman scale does not account for inhibitory forces acting on the subject, which have been shown by other authors to effect predictive ability regarding overt behavior.

Six specially designed and selected pictures with a built-in dimension of sexual relevance were used by Leiman and Epstein (1961) to determine the influence of sexual drive and sexual guilt upon thematic sexual responses. The subjects were 66 unmarried male undergraduates. Besides writing stories to the six cards, they answered a questionnaire on their sexual behavior.

They concluded that pictures relatively low in sexual relevance best measured drive, while pictures relatively high in sexual relevance best measured guilt.

Thus effects of inhibition are measured when there is no response to highly relevant stimuli.

Leiman and Epstein's study not only investigates sexual responses assumed to be influenced by sexual drive and guilt but attempts to relate the information to overt behavior. The study is concerned with prediction and not with how a group normally responds to material.

It is an assumption and trend that the dimension one is interested in should be designed, then tested: for standard materials are thought to be deficient. This was evident in Auld's study as well as Leiman and Epstein's study. It is felt by the investigator that it is necessary to look first at what the instruments that are being used can and do tell us. Scaling methods may provide clinicians with a way to estimate individual motivation, something McClelland is interested in also. But scaling is complicated, and the use of sophisticated statistics and unidimensional scales does not adequately represent the multidimensionality of the TAT as a whole nor does it represent any specific subdivision within the TAT that one wishes to evaluate.

As indicated in the above-mentioned studies, the TAT stories can be helpful in many ways. Arnold and McClelland were interested in developing a scoring system to evaluate the TAT responses. The data of the TAT were expressed in terms of rating scales (Martman), apperceptive norms, (Rosenzweig and Fleming), or on the level of manifest story content, (Aron), TAT cards or TAT-like cards were scaled for a dimension (Auld, Leiman and Epstein).

It is to be noted that in the present study when the heterosexual attitude was synopsisized there was no deep level of interpretation or involvement with a motivational theory nor was there an interest in developing a general scoring system or one for the heterosexual attitude.

College Students and Aspects of the Heterosexual Relationship

Epstein and Smith (1957) were interested in determining whether projective responses could distinguish between the degrees of the sex drive when the latter was not artificially induced. His subjects were 59 male undergraduates. They were given the Rorschach, TAT, and a questionnaire on their sexual behavior, then they rated pictures of sexually attractive women for sex appeal.

The TAT was thought to be a better indicator of the sex drive than the Rorschach. The author concluded that the important variable effecting the results was the degree to which the sex drive or expression of it is acceptable to the person.

Epstein and Smith's study as well as the following two studies by Hornberger and Clark indicate ways in which the sexual area has been investigated with male college students. The investigator of the present study prefers the type of research by Epstein and Smith where there is no experimentally induced aroused state, thus one can see how the group naturally responds to the topic or area of sex.

Hornberger (1960) studied the effects of fear and sexual arousal upon the rating of 16 neutral pictures. He used 24 male college students in three groups; the fear aroused group, the sexually aroused group, and a control group. The subjects were to rate the stories by selecting one adjective from each of these lists of ten adjectives. The adjectives had been pre-selected as indicative of fear,

sexual or neutral responses.

The study concluded that the sexually aroused group inhibited their sexual responses, for the control group used more sexual adjectives to describe the neutral picture than did the aroused group.

Though Hornberger did not use TAT cards, his conclusions concerning the inhibition of aroused sexual feelings by college males confirmed Clark's earlier findings (1956).

Clark (1956) in his work was concerned with whether the manifest expression of sexuality was being inhibited and whether it was expressing itself in a disguised form as symbolism. The stories were scored for the presence of classical sexual symbolism on a three-point scale by two judges familiar with the literature on symbolism.

His study was a further analysis of data collected from two other experiments (Clark, 1952, 1955) in which TAT stories were collected from one group of subjects after exposure to photographic slides of a non-sexual nature. The second experiment was similar except that one group took the TAT during a fraternity beer party after exposure to nude films; the control group took it during a beer party without prior exposure.

The stories were scored for the presence of manifest sexual content. The content was divided into three components: primary--explicit or implicit evidence for sexual intercourse, secondary--evidence for the occurrence of such secondary sex activity as kissing, dancing, fondling, etc., tertiary--characters in the stories perceived as sweethearts, on a date, courting, in love, etc.

His division of sexual content was on an a priori basis and tended to be quantitative rather than qualitative. Clark's method of scoring and evaluating sexual content did not give sufficient qualitative information, whereas this type of information in the present study was given an important role and was far richer for evaluation. Clark's work is similar to McClelland's work in motivation. In general, Clark was interested in sexual content in a way which eliminated subtle differences and trends. His use of interpretation and the manipulation of the subjects diverges from the present study.

Lindzey and Goldberg (1953) compared the sex differences on the TAT in aggression, sex, achievement, abasement, nurturance, narcissism, and verbal responsiveness. The subjects were 74 pairs of matched male and female students. They were given cards 1, 2, 4, 5, 10, 13MF, 14 and 15 of Murray's TAT.

The males were higher in sexual need, the females were higher in abasement, nurturance and verbal responsiveness. The significance of these differences was between .05 and .10, but the authors chose to accept this as clearly indicative of the directions of response by the males and females. The investigator of the present study would caution wholehearted acceptance of the results.

The authors made a constructive point by cautioning persons interpreting the TAT to note that the greater responsiveness of the females could swell ratings or appraisals, distorting true differences or creating differences where none existed.

One aspect of Lindzey and Silverman's (1959) study was to investigate sex differences in performance on the TAT. Forty males and forty females undergraduates were used. The TAT cards used were 2, 4, 13MF, 14. The stories were analyzed

in terms of 12 variables: achievement, affiliation, dominance, sex, number of figures, ideas, thema, transcendence, verbal productivity, compliance with instructions, involvement, and quality.

The females and males showed significant differences in their transcendence scores, in their verbal fluency, in the number of ideas contained in their stories, and in their dominance motives. The two authors neglected to point out that the significant differences were obtained in only two out of the four different types of test administration, therefore, they are only qualified conclusions, not general conclusions. In the previously mentioned study by Lindzey and Goldberg, the authors also accepted levels of significance which were not clearly significant.

There was no rationale given for the limited selection of TAT cards nor was there a statement on why the particular cards which were chosen either in this study or the previous one by Lindzey and Goldberg from which the present one received impetus. It is difficult to see how sex differences can be adequately explored and conclusions drawn regarding the TAT on a random selection of a limited number of cards. The study would have had more value had the cards been selected on the basis of an explicit rationale or a prior study.

Wittenborn (1949) gave selected cards (2, 3BM, 4, 6BM, 6GF, 7BM, 7GF, 8BM, 9BM, 13MF) of the TAT to college males who requested vocational or educational counseling. He had hoped to establish norms for this type of group (college males seeking vocational or education counseling).

On three of the cards, he obtained responses indicating the attitude his group showed toward women. Card 4 he felt indicated an immature psychosexual adjustment

in his group as there was excessive condemnation of the woman as evil. Card 6GF revealed a negative attitude toward women or toward marriage. Card 13MF revealed the groups' hostility toward women, conflicting attitudes toward sex, and general immaturity.

Wittenborn's study, as opposed to the present one, selected cards to study on an a priori basis. He did not state his method of analysis, but he did interpret his data quite freely. It is felt that the study would have been more helpful had he reported his "facts", then interpreted them. The study, in general, is limited in usefulness because his ideas of interpretation were given preference to his normative data.

Eron (1950) analyzed the stories for themes, identification of characters, perceptual distortions, unusual details, level of interpretation, emotional tone of the body of the story, and outcome. He finally arrived at 125 themes. These were obtained by perusing fifty protocols for the action expressed in each story and summarizing it. At first he obtained 98 themes which he then organized into equilibrium and disequilibrium which was further divided into interpersonal, intra-personal, and impersonal, which division was broken down into parent, partner, peer, and sibling. Note the difference in defining or labeling the information obtained; the present study derives labels or categories strictly from the data available, not from dynamic concepts.

Eron had a rating scale for emotional tone, for outcomes, and for the emotional tone of the individual cards. His key for all scales was -2 Very Sad, -1 Sad, 0 Neutral, +1 Happy, +2 Very Happy. His scales were too interpretative to be useful

in application to the data of the present study. The information available in the study under consideration could not be tapped adequately with Eron's type of scale, as the concern here is with the exploration of one attitude of a particular group of people and not the diagnosis of behavior as representative of a nosological group.

Eron's data (1950) showed that themes of violence, hostility, death, destruction, guilt, and frustration were common to subjects of all types. The normal group contributed more themes concerning illicit sex than did the clinical groups. On the basis of his information, it could not be said that tabooed sexual themes (incest, rape, homosexuality, etc.) were exclusively schizophrenic as they were present among the psychoneurotic and normal groups. It will be seen in later chapters that certain of his observations as violence, destruction, guilt were obtained in the present research. The two sets of data could not be compared strictly because the purpose and methods of analyses were different. What could be compared or at least noted was the commonness of feeling and attitude which appeared in his normal group and which was found in the sample of this study. Since the similarities appeared regardless of the structure of the research, one can assume that this similarity is prevalent among or somewhat characteristic of a college group.

Eron's study is one of the best done with the TAT. What is disliked about the study and at the same time was considered to be the deficit in it was Eron's use of interpretation. If a study is to be normative, then the summarizing of the stories should not be done by persons using principles or theories not clearly defined and spelled out. There was no evidence that the persons doing the summarizing of the stories had agreed or not to use the subject's words or to give

summaries based on dynamic interpretations.

Eron in 1953, using the same approach, worked with a group of females. They were tested individually with Murray's TAT cards recommended for females. The scales for emotional tone and outcome were the same as those used in the original study with males. The original thematic check list had to be revised.

In the TAT literature the broad area of heterosexual relationships has not been extensively explored. Eron's study comes closest to the broad heterosexual attitude investigated in the present study. As has been indicated in the review of the above-mentioned studies, the physical aspect of the heterosexual relationship has been investigated, mainly. The studies used a limited number of cards, induced feeling or attitudinal states in the individual, or were interested in comparison or prediction of behavior.

In college students it was not uncommon to find negative expressions of aspects of the heterosexual attitude. If the students were sexually aroused, they tended to inhibit sexual responses to neutral materials or to highly relevant materials.

Stimulus Value of TAT Cards to Responses and Attitudes

The following studies are concerned with the mood expressed or with the emotional tone of the story or of the outcome. Their concern is with the stimulus or cue value or outcome of the cards, not with the positive or negative value of the content obtained.

The purpose of the study by Garfield et al. (1948) was to obtain information about responses to the various TAT cards (2, 3BM, 6BM, 4, 5, 7BM, 10, 12M, 13MF, 14, 18BM, 20) in terms of the mood of the theme, outcome of story, and the activity

of central character. There were sixty subjects divided equally into three groups-- hospitalized schizophrenics, hospitalized psychoneurotics, and undergraduate students. The results indicated that 3BM, 4, 6BM, 13MF, and 18BM were primarily unhappy or negative in mood; 14 and 10 were of a neutral tone. In all groups the central character was passive on cards 3BM and 18BM. The authors state that if positive outcomes were viewed as wishfulfillments, it was the normal group which gave interpretations of this sort. The authors held that outcomes were a result of individual projections to a greater extent than emotional tone or mood, which appear to be a function of the stimulus properties of the card.

Wittenborn and Eron (1951) studied four groups of one hundred subjects; there were two groups of male college students; a neurotic male, outpatient group; and a neurotic male in-patient group. The results indicated that the affective quality of responses was determined largely by the situations which elicit the responses and not by some general affective state of the individual.

How the form of administration and sex of the subject effect the ratings of emotional tone and outcome and the extent to which there was an interaction was the purpose of Sarason and Sarason's work (1958). They used Eron's (1950) rating scales. There were sixty college students equally divided into four groups and into sex. The cards used were 1, 2, 4, 5, 10, 11, 13MF, 15, 14, 16, 19, and 20 of Murray's series. (It should be noted that these are the cards generally given to both sexes.) The results indicated that group administration leads to sadder stories than does individual administration. Women, regardless of administration, give sadder stories than men. The TAT cards differed appreciably in pull value as there

were marked differences in emotional tone and outcome ratings assigned to them.

The correlation between the raters was not very high. There was no explanation given for the low rater correlation on card 4 which was .38 and on card 20, .54. The pull difference in the cards was mentioned and generally discussed, but the significance of differences between cards was not studied.

Jacobs' (1958) purpose was to develop a method for determining the cue characteristics of pictures used in projective measurement. This was considered important because one needs to know the contribution of the picture to the motivation score and knowing the cue value helps the experimenter select the proper cards.

Jacobs stated that the results supported his idea that cues play an important part in defining the content of the motive as expressed in imaginative productions. He found that the method used to determine cue value was relatively independent of the subjects' motivation. It is to be noted that the values did not quite approach the ten per cent level of confidence. In the opinion of the investigator of the present study, Jacobs did not support his hypothesis as his values were not significant.

Lubin (1960) used six TAT cards: 2 and 19 for the sexual condition, 8BM and 20 for the aggressive condition; 5 and 7BM for the adjusting cards. His subjects were sixty male, white, college freshmen. Set was sought by means of prestige suggestion either to facilitate or to inhibit response.

The results showed that set and stimulus properties produced statistically significant effects on sexual expression and aggressive expression, but not on response time or productivity. Lubin also showed that set produced a statistically significant difference in the creativity of the stories and that the interaction of set

and stimulus properties produced a significant effect on sexual expression but not on aggressive expression, creativity, response time, or productivity. The author concluded that important dimensions of TAT responses were determined by the stimulus configurations of the cards. The fact that response time or productivity were not significantly affected and the fact that response time was not significantly related to any of the other measures used in this investigation would suggest caution in using them as indices of an attitude.

These studies have overlooked an important facet of the TAT clearly brought out by Arnold (1962) that upon presentation of the TAT card the person immediately or soon after starts telling a story. It is a creative production which may start with what was presented, but the subjects do not tie themselves to the stimulus. The person actively searches and combines images to come up with a certain production. It is significant that this was what the person chose to tell. Because it was his choice, it is significant in revealing something about him. Along with the criticism of these studies based on Arnold's assumption is the statement by Henry (1956) that "the individual interprets reality to conform with the reality he expects, he sees in the outer world only what he wants and is able to see."

CHAPTER III

DESIGN

In the first chapter the subjects and the design of the research were briefly mentioned. The present chapter will serve as an elaboration of these and other topics relevant to the structure of this investigation.

Subjects

The protocols used in this study were taken from a sample of two hundred "normal" college students; the records had previously been used in a research project (Siegel, 1960). These records were examined to see if they contained TAT's conforming to the following requirements: 18-25, Roman Catholic, legibility of the record, 20 stories based on Murray's TAT. This search resulted in 54 female protocols and 43 male protocols.

After the 97 protocols were selected, they were read to determine whether the incidence of stories with heterosexual relationships was significant enough to warrant an investigation. When the decision was made to continue the investigation eighty protocols were selected from the 97 available protocols. There were forty

records for each sex. Eighty protocols were selected in order to have the same number of males as females.

The age range of the forty males was 18-25 with the greater number of subjects clustered at 21 or below. The same clustering appeared in the female sample. The actual range of the forty females was 18-24. The ages of the subjects are presented in Table 1 in terms of the mean and median age of each sex. The mean ages of the male (20.30) and of the females (19.82) were not significantly different. The median age of the females (19.33) was almost identical to the mean age. The median age of the male (19.50) was lower than the mean age. It appears that the two groups are comparable in age. The similarity in age distribution of the male group and the female group lessens the possibility of age being the factor in the differences obtained between the sexes.

Table 1

Median, Mean, and Standard Deviation of the
Age of the Males and of the Females

	Male	Female
Mean	20.30*	19.82*
Standard Deviation	1.87	1.61
Median	19.50	19.33

* The t-test indicated that the mean differences were not significant.

The male sample was given Murray's TAT for males and the female sample was tested with Murray's TAT for females. There are twelve cards in each series which were identical-- 1, 2, 4, 5, 10, 11, 13MF, 14, 15, 16, 19, 20. There are eight cards in each series which are not identical for the sexes--3, 6, 7, 8, 9, 12, 17, 18. The male series carries the designation BM, for example, 3BM, 6BM, etc. The female series is designated 3GF, 6GF, etc. The GF and BM cards are said to be equivalent or parallel in their stimulus quality. In the present research when the term not common is used it refers to those cards of the male series and of the female series which are designated BM or GF, respectively.

Procedure

The data used in the present study were obtained in two ways: 1) The frequency with which the male and female group related stories of a heterosexual nature to particular cards was tallied regardless of the qualitative aspect of the story. 2) Each story involving a heterosexual relationship was read and the essence of the story extracted by synopsisizing the relationship while attempting to keep to the subject's wording; therefore, to the essence of the attitude expressed. The summary or essence of the story was put on an index card along with the sex, education level, and card number.

The persons reading the stories and extracting the relationship discussed the method by which this was to be done. In the discussion, the raters were asked to extract the attitudes and ideas from the stories as uninterpretatively as possible. When they could use the subjects' own words or adjectives, they were to do so.

Twenty stories were read, synopsisized, compared, and discussed so that the raters would become familiar with the task of extracting the essence of the attitude. The persons reading the stories had a copy of the following instructions to refer to:

Do not apply a priori categories and ideas, extract the attitudes and ideas from the protocols as uninterpretatively as is possible. Use only a superficial, common sense level of interpretation. Extract what takes place. Personality theories should not be allowed to influence your summary.

For example, the following story was placed in the Marriage category by both raters; the story was given a rating of 1 by both raters.

Subject's story:

The two had been cooped up in this small apartment for nearly a year. They were obviously mismatched--he had been forced to marry her to give the baby a father. Previous to his digression on this moral law, he had been a very good student and now tries to study as much as possible so as to detach himself from the reality in which he must live. He, at the present, is ready to give the whole mess the last try. Conditions do not change and he ends up as a suicide case.

Rater A's synopsis was:

When a couple are forced to marry to give a baby a name, they will find themselves mismatched and the husband will try to detach himself from this reality by studying and will find himself ready to give up, conditions will not change and he will commit suicide.

Rater B's synopsis was:

Couple forced to marry to give baby name are mismatched the man studies to detach self from this reality, his last try does not change conditions so he commits suicide.

The value of synopsisizing the stories was demonstrated more clearly when the lengthy stories were worked.

Categories

The term categories refers to the central topic or themes into which the heterosexual attitude could be grouped.

The categories were developed by separating the responses of the males and females. The separation was followed by a careful reading of each recorded response and grouping those responses in which the essence of the topic was the same. This grouping was rechecked by the investigator. The female and the male sample were read and grouped separately.

The stories were read and grouped three different times. The first grouping resulted in 34 separate categories. It was obvious upon reading through the categories that they had been too finely discriminated, for eight of the categories were represented by only one or two stories, ten of the categories were represented by seven to three stories. The second time the data was grouped ten categories resulted. The third and final sorting was used as the basis of analysis. The ten categories of the second grouping were the ones obtained after the third sorting. Only the five categories which had the highest number of stories were used for further analysis.

The method of reading through stories and grouping them on the basis of similarity of content to obtain categories was not novel to the present study. Eron (1953, 1950) and Hartman (1949) also used this method to obtain their categories.

The five categories which contained the largest number of stories of a

heterosexual nature were also the categories in which there was the least amount of overlap, if indeed it existed at all. The Marriage category contains the stories in which the attitude toward the marital state is expressed. Pre-marital interactions is a category containing stories in which the attitude toward engagement or actions which result in marriage are expressed. The Boy-girl category contained stories in which the males and females expressed their attitude toward the opposite sex in a general way which did not involve considering the state of marriage or of intercourse. The stories in the category were concerned with males and females as they confront one another in social, academic, and business settings. There was no overlap between the Pre-marital and Boy-girl categories as the person is either considering the opposite sex as a potential mate or is involved with the opposite sex in another manner.

Elders as a category appears at first as if it could be discarded and the stories put into the Pre-marital or Boy-girl categories. The stories in the Elders category were first concerned with the effect the older person or authority figure had on the attitude toward the opposite sex; whether the story involved an engaged couple or an employer and an employee was of no consequence. The overlap was considered apparent and not actual. The Intercourse category contained stories in which the attitude toward sexual relations was revealed. Here again the overlap was only apparent as the main concern was the physical aspect of a heterosexual relationship.

Rating Scales

In order to analyze and discuss the material obtained more objectively,

rating scales were constructed for the five categories containing the largest number of stories: Marriage, Pre-marital Interactions, Elders, Intercourse, Boy-girl Interactions.

The general structure of the scale was selected after reading Guilford's *Psychometric Methods* (1954), Eron's two normative studies with the TAT (1950, 1953), Hartman's study (1949), and by evaluating the categories obtained in the initial work with this material. This combination led to several conclusions which ultimately determined the structure of the scales. An over-all rating of a story was desirable since a story is more than just a composite of words and phrases which comprise the beginning, the action, and the outcome of the story. Attitudes concerning a topic may be statistically neutral but rarely are actually neutral; therefore, a strictly dichotomous scale with positive and negative poles distorts the data. The preferred scale was one in which the attitude could be rated as if it was on a continuum.

The scale is similar to the Likert scale: it is comprised of five points and is an attempt to go from a relatively complete positive attitude to a relatively complete absence of a positive attitude. Guilford used the terms "absence, some presence, moderate presence, largely present, relatively complete presence" (Guilford, 1954). These terms were adopted for this study because it was felt that it was impossible to have a neutral attitude in regard to the opposite sex and that these terms would permit an over-all rating of a story. The general structure of the scale is:

- 5 - A relatively complete positive attitude in terms of story content, outcome, feeling-emotional states.

- 4 - A largely positive attitude, etc.
- 3 - A moderately positive attitude, etc.
- 2 - Some presence of a positive attitude, etc.
- 1 - A relatively complete absence of a positive attitude, etc.

In each of the five selected categories, examples were given for the five points of the rating scale. The examples were obtained by sorting the stories in each category into five groups. This was done twice. The statements which appeared in the same group in both sortings were used as examples. A period of one to three weeks elapsed between the sortings to obtain the examples. All the stories in each category were then rated.

Reliability

In order to check the reliability of using extracted stories for ratings, sixty stories were selected. The selection was based on the frequencies with which the TAT cards were used by the group. These stories were read by another who extracted the essence of the stories. The extractions or summaries were categorized. If the story could be put into one of the five categories which had a rating scale, it was rated. The reliability was checked using the Pearson r and the standard error to test for significance.

A total of 373 stories were rated in the five selected categories by the investigator and one other person.

Statistical Methods (McNemar, 1960, Siegel, 1956)

The means and standard deviations were computed in order to apply the t-test to evaluate the first two hypotheses. When the sample was used regardless

of sex then the test for correlated means was used. Chi-square or Fisher's exact probability was used to determine the significance of difference between the males and females on each card. Fisher's exact probability test was used when there was an expected frequency less than five.

The third hypothesis, concerning card 16, was evaluated using percentages. The median test for significance was applied to the information. The t-test or the usual chi-square was not used because of extreme scores which would not have given a true picture of the data.

The reliability of using extracted material to rate the stories was checked, as mentioned before, by using the Pearson product moment correlation. The contingency coefficient was used to determine the reliability of the ratings in each of the five categories because it gave reliabilities which were truly representative of the ratings and not only a function of the statistical method. The contingency correlation was used because it was not necessary to assume continuity of the ratings in the scale nor did the distribution of ratings or subjects have to conform with the assumptions of normality. In order to test significance of the reliability obtained, the statistic used in C was tested for significance. The statistic was Chi-square.

It was not possible to use a 5 x 5 table to which the data, observationally, lent itself. Siegel (1956) states that no cell can have an expected frequency of less than one nor can 20% of the cells have expected frequencies of less than five.

Both of these conditions were violated in all five categories. Thus only a 4 x 4 and a 2 x 2 table could be used with the data.

The **Marriage** category was worked using a 4 x 4 table; ratings 4 and 5 were combined (upper limit for C was .866). Three categories were tested using 2 x 2 tables (upper limit - .707) with ratings 1 and 2 as one combination and ratings 3, 4, 5 as the other combination. The category **Intercourse** was worked with a 2 x 2 table but the division was rating 1 then the combination 2, 3, 4. In this category neither rater used 5; the ratings 3 and 4 were used sparingly, so the division was made in order to satisfy the conditions of the C statistic.

The hypotheses concerned with the rating scale were tested to see if the observed sample of proportions deviated from chance in the positive direction as stated.

CHAPTER IV

RESULTS

The total number of stories each group, male and female, could relate was 800. The males gave a total of 194 stories with heterosexual themes or 24.25% of the 800 possible stories. Out of the 800 possible stories, the females told 287 with heterosexual themes or 35.88%.

Table 2 lists the cards in rank order of frequency with which each card was used by the males and by the females. If one wished to use a limited number of cards, there are two cut-off points for both the male and female sample on the basis of the percentage of heterosexual stories told.

Cards in the upper quartile for the males are 4, 13MF, and 10 in that order: for the females it is 4, 13MF, 6GF, and 10. The cards in the upper quartile of the present sample would probably reveal heterosexual attitudes significantly with any group.

One may wish to examine the heterosexual attitude of a group using more than three cards for the males and four for the females. Instead of randomly selecting cards, one could select cards which were used by 25 to 50 percent of the males and the females in the present sample. The cards to select for the males would be 2 and 5. For the females, the cards to select would be 8GF, 9GF, 5, 17GF, 12F, and 2 in that order. The female group allows for a greater possibility of selection.

Cards used by the present sample less than 25% of the time probably would not elicit heterosexual stories at a significantly higher percentage level in any other type of group.

Symonds (1949) is of the opinion that it is possible to use a limited number of cards to discover a subject's attitude on a particular topic.



Table 2

Frequency and Percentage of Heterosexual Stories
Told to Each TAT Card in Rank Order

Males			Females		
Card	Frequency	%	Card	Frequency	%
4	39	97.5	4	38	95
13MF	35	87.5	13MF	35	87.5
10	28	70	6GF	33	82.5
			10	32	80
2	13	32.5			
5	10	25	8GF	18	45
3BM	9	22.5	9GF	18	45
15	9	22.5	3GF	16	40
16	9	22.5	5	15	37.5
18BM	8	20	17GF	15	37.5
20	8	20	12F	14	35
7BM	8	20	2	13	32.5
6BM	3	7.5	14	8	20
9BM	3	7.5	18GF	7	17.5
11	3	7.5	20	7	17.5
14	3	7.5	15	6	15
17BM	3	7.5	16	5	12.5
12M	2	5	7GF	4	10
19	1	2.5	11	2	5
1	0		1	0	
8BM	0				

If one chooses to agree with this line of thought, it would be possible to investigate the attitudes of a group using only those cards which would give the information required. The information from the present sample could be used to investigate the heterosexual attitudes of other groups. An important decision of a future experimenter would lie in the use of cards in the percentage range 25-50.

The broad picture seen in Table 2 will now be explored in more detail by turning to the specific hypothesis stated earlier (Chaper I). The first hypothesis, it will be recalled, stated that cards which picture more than one person will elicit a higher number of stories concerning heterosexual relationships than will cards with no person or with one person pictured. This may appear to be quite obvious, but adequate exploration of a group's attitude necessitates what their relationship is to "obvious" statements or expectations.

In order to evaluate the hypothesis, all the stories given by the males and by the females were divided into two groups: 1) cards with no person or one person pictured and 2) cards with more than one person pictured. When this division was tested, the hypothesis was supported at a level of significance greater than .001.

The relationship between cards with no person or one person pictured and cards with more than one person pictured was evaluated separately for the males and for the females. There was no difference between males and females in their response to cards with no person or one person pictured. On cards with more than one person pictured, the females contributed more stories of a heterosexual nature than did the males. The difference of this contribution was significant at $>.001$.

Table 3

Means, Standard Deviations, Number of Subjects, and t Values
of Cards with One Person and Cards with More Than One Person

	1 Person Cards							1+ Person Cards							
	Male				Female										
	M	σ	N		M	σ	N	t	M	σ	N	M	σ	N	t
Common & Not Common Cards	1.35	.788	40		1.53	1.18	40	n.s.	3.28	1.24	40	5.05	1.30	40	.001
Common Cards	1.12	.927	40		1.1	1.04	40	n.s.	2.82	.86	40	2.95	.80	40	n.s.
Not Common Cards	.22	.418	40		.42	.49	40	.05	.45	.80	40	2.1	1.06	40	.001

The contribution of the sexes to the hypothesis can be studied in terms of the cards both sexes were given and in terms of those cards which were not common to the two groups. No significant difference was found between the males and the females on cards with one person and cards with more than one person pictured when the cards were the same.

When the cards which were not common to both groups were considered, the difference was close to the .05 level of significance (not accepted) when one person was pictured. There was a difference significant at the $>.001$ level when there was more than one person pictured (Table 3).

In general the two groups studied here support the idea that one is more likely to obtain stories of a heterosexual nature on cards with at least two people pictured on them. The fact that the female group on the GF cards with more than one person differed significantly from the male group on the BM cards with more than one person relates to the investigator's idea that the GF and BM cards are not equivalent. The idea will be investigated more extensively when the next hypothesis is considered.

The hypothesis next to be considered is that females will relate a significantly higher number of stories involving heterosexual attitudes than will the males. This hypothesis was stimulated by the fact that one often hears that the only reason a girl goes to college is to find a mate. If this is true then we can expect the female to talk, think and have more feelings and attitudes about the opposite sex. This should show up on a test such as the TAT where there are twenty opportunities to talk about sex, marriage, dating, husbands, etc.

The hypothesis is supported ($> .001$) when a t-test is used on the total number of responses given by males and the total number of responses by females. It should be recalled that the males and the females of the sample were not given an identical set of twenty TAT cards. Because the sets were different, the cards received by both sexes and those cards which were dissimilar were evaluated. If a t-test is done using only the cards both sexes are given, the hypothesis is not supported. It is supported ($> .001$) when a t-test is done on the cards the sexes do not have in common. This leads to the conclusion that the equivalence of these cards is in question.

The next question which was asked was: are there specific cards which do not appear equivalent? Table 4 is divided into cards common to both sexes and supposedly equivalent cards. The cards both sexes receive are in no case different. Of the eight cards, supposedly equivalent, five are significantly different-- cards 12 and 17 are significant at the .01 level, cards 6 and 9 at the .001 level, and card 8 at greater than .0001 level. It should be recalled that card 6GF was the third highest ranking card in the female group--33 out of 40 persons related stories of a heterosexual nature on this card. Card 6BM produced three such stories from the male group.

The idea of equivalence of TAT cards is divergent from the general investigation, but it was felt, a relevant one as hypotheses can be affected by spuriously high responses. If the responses of the sample had not been studied in terms of common and not common cards, then the hypothesis would have appeared to be overwhelmingly supported.

Table 4

Chi-square and Fisher's Exact Probability Between
Males and Females on 20 TAT Cards

Card	χ^2	Card	χ^2
1	--	11	n. s.
2	n. s.	12	.01
3	n. s.	13	n. s.
4	n. s.	14	n. s.
5	n. s.	15	n. s.
6	> .001	16	n. s.
7	n. s.	17	.01
8	> .0001	18	n. s.
9	> .001	19	n. s.
10	n. s.	20	n. s.

Because of the breakdown of the TAT cards, it appears that the females in this study cast doubts not only on the equivalence of the BM and GF series of TAT cards, but also on the idea that boys are the only topic of conversation for girls (on the TAT). (There was no claim in this study that the sample is representative of the population at large.)

Henry (1956) states that card 16, the blank card, reflects "the anxieties or problems which have been accumulating over the previous stories." This card has also been thought of as stimulating autobiographical stories more than the rest of the TAT cards. In the sample under study, the specific hypothesis stated to investigate card 16 was that a person relating stories on card 16 will relate more stories of a heterosexual nature than persons not using this card.

The reasoning behind the hypothesis is that, if someone is concerned or troubled about a topic and has had the opportunity to relate stories about it on other cards, they should not hesitate to use the topic on card 16. If a story of a heterosexual nature can appear when it is or is not called for by cards presenting stimuli, then we can expect the blank card to fall easily to the person's concern. Any topic can be discussed on the cards. Some cards do elicit stories with similar content, but there is no need for a repetitious theme unless it has some significance for the person telling it. So, if no stimuli encourage a story of a heterosexual nature, then the person could more easily fit stimuli into this category; thus one expects a higher number of stories of this nature from persons using card 16 than from persons who do not tell stories of this nature on this card.

The hypothesis was not supported. In order to estimate significance, the median test was used because of extreme scores. The significance obtained by the group was .06; this level is in that range of significance which can go in either direction; so one really knows little one way or the other. Another reason why it would be risky to speculate that this figure indicates a trend toward the support of the hypothesis is the low N.

To explore the data further, it can be seen from Table 5 that the number of stories each subject gave ranged from 2 to 11 and for the females it ranged from 3 to 12. The mode for the males was four stories; twenty-five per cent of the sample used this number of stories. In the case of the female group the mode was six stories or 22.5%. Nine out of forty males or 22.5% of the male sample used card 16.

Table 5
Number of Heterosexual Stories per Protocol

Number of Stories	Males	% of Sample	Number of Stories	Females	% of Sample
2	2	5	3	2	5
3	8	20	4	3	7.5
4	10	25	5	4	10
5	8	20	6	9	22.5
6	5	12.5	7	6	15
7	4	10	8	6	15
8	2	5	9	3	7.5
9	0	--	10	2	5
10	0	--	11	2	5
11	1	2.5	12	3	7.5

The number of stories each gave was 4, four 5's, two 6's, two 7's. These frequencies were used by 67.5% of the male sample. Of this 67.5%, 13.3% used card 16.

Five out of forty females or 12.5% of the sample used card 16. The number of stories each gave was 7, 8, 10, 11, and 12. These frequencies were used by 47.5% of the sample; of this 47.5%, 10.5% used card 16.

It can be seen that the number of stories related by those persons using card 16 were also used by almost half or more than half of the sample, therefore, the number of stories and card 16 may be in no way able to distinguish a conflict area in a group such as this.

Another interesting phenomenon or speculation to be noted is that though more males told heterosexual stories on card 16 than the females, they used fewer cards per person. Do the males experience more real conflict in the heterosexual area

because they do not feel as free to speak about it? The other possibility is that they would speak freely if the stimulus was there as it appears to be in the GF cards. The way then to explore this may not be by only considering the 12 cards in common but in providing five cards for the males which could stimulate a heterosexual story, card 6GF may be a good one with which to start. Though it was cautioned earlier about speaking of trends, the writer felt that this observation could be a profitable one to explore. In a larger or different sample the phenomenon could well disappear.

Before considering the hypotheses concerned with the positive and negative aspects of the stories, the reliabilities obtained and the categories used are discussed.

The reliability of using extracted or summarized stories for ratings was checked using the Pearson product moment correlation. The reliability obtained was .80 which was significant beyond the .001 level. The reliability obtained at that level of significance was accepted as indicative of the feasibility of using extracted stories.

Table 6 indicates the number of stories each sex gave in a category along with the number of persons contributing stories within the category. Only the five categories having the highest number of stories were used to investigate the hypotheses. The categories which were not selected had an insufficient number of both stories and persons contributing the stories. The five-point rating scale (Appendix) was applied to the stories within the five selected categories. Specific examples of each of the five points were given separately for each category.

Table 6*
List of the Categories

	Male		Female	
Marriage	69**	(38)***	101	(38)
Elders	23	(18)	43	(27)
Intercourse	24	(19)	19	(16)
Pre-marital Interactions	16	(13)	28	(17)
Boy-girl Interactions	16	(13)	30	(21)
Rejection	8	(7)	15	(12)
Triangles	2	(2)	11	(11)
Difference (class, etc.)	5	(4)	14	(10)
Criminal or Impulsive Action	12	(11)	8	(7)

* 37 stories were eliminated because they could not be categorized.

** Represents the number of stories given in the particular category.

*** Represents the number of different individuals who gave stories in the particular category.

The marital state was not just considered by the subjects in a general way. There were more specific considerations in which the category Marriage was discussed; these considerations could be divided into eleven topics. The eleven topics were: alcoholism, third party involvement, worry, change, jealousy, job-success-ambition, separation, involvement in tragedies, elderly couples, death of a spouse,

the marital state in general, The The death of a spouse was a topic told on 49 out of the 170 stories in the marriage category. The other ten subdivisions were not represented in an outstanding fashion.

The category, Pre-marital interactions, was involved with stories in which engagement or courtship was discussed or in which marriage was held out as a distinct possibility. The Boy-girl category concerns social, academic, and business situations in which the two sexes are involved.

Elders refer to stories in which the heterosexual relationship is effected by the subjects' attitude toward persons considered by the subjects as older and having some authority over them. The females relate 65% of the stories which fall into this category. One can speculate that the greater interest of the females was due to their greater involvement with parental and other authority for a longer period of time. In our culture there is still among the middle class (the present sample is largely from this class), a desire to protect or restrict the actions of the female until she is safely turned over to another's care. The possibility of conflict with authority figures, therefore, is much more likely to occur and is more likely to be a serious concern or conflict area for the female. It would be reasonable to find the attitude reflected in the TAT in the heterosexual attitude since the involvement with the opposite sex is the area in which the parties would tend to encounter conflict.

Intercourse is a category that is somewhat different from the other categories. In adjusted persons, it is expected that they will handle the matter in a controlled fashion and not make it a topic of a story. Because this topic could be made into a

category and because, as we shall see later, it was negatively skewed, it is relevant in the consideration of the heterosexual attitude of the college group. It is not expected that the ratings would be normally distributed, because of the nature of the category. It can be concluded that this aspect of the heterosexual attitude had not been fully brought into the control or into the defense system of the person at this stage in life when emotional maturation is still going on.

Another more speculative reason which would need investigation is that many of the college group of males and females probably came from non-coeducational high schools and are now involved with the opposite sex on more than a social level. This may necessitate new adjustments on the part of the college group. This latter point may find little support as compared to that of maturation, as Eron (1950) found that themes of illicit sex or tabooed sexual themes were highly represented in his college groups.

For each of the five categories the percentage of agreement between the two raters was calculated. Table 7 gives the results of the agreement. The raters agreed completely or deviated by only one point between 70 to 95 per cent of the time. In three categories (Marriage, Intercourse, Boy-girl) the percentage of complete agreement and one point of difference was 80% or greater. The larger deviations of three or four points was negligibly represented. Only in one category, Elders, did the raters deviate by four points; this represented 4.5% of the total ratings for that category. A deviation of three points occurred in four categories; it did not occur in the Boy-girl category. The two categories in which the three point

Table 7

Percentage of Agreement Between Two
Judges in Rating Five Categories

Category	N	0*	1	2	3	4
Marriage	170	44.7	35.3	15.9	4	0
Pre-marital	44	40.9	29.5	20.4	9	0
Intercourse	43	72	23	2	2	0
Boy-girl	46	52	32.6	15.2	0	0
Elders	66	42	34.8	10.6	7.6	4.5

*Represents number of deviation points between the two raters.

deviation reached a noticeable per cent were Pre-marital and Elders. A deviation of two points was notable in the Pre-marital category.

The raters had the most disagreement in the Elders category where the 3- and 4-point deviations represented 12% of the total number of ratings in that category. The Pre-marital category also presented some disagreement though less so than that of the Elder category. In the Pre-marital category the raters disagreed by two or three points 29% of the time.

In the Elder category the disagreement occurred because one rater evaluated the adults' actions in many of the stories in which the 3- and 4-point deviations occurred, the other rater evaluated the male or female attitude toward the adult as they are involved in heterosexual attitudes.

The category in which almost total rater disagreement at no deviation or 1-deviation level occurred was that of Intercourse. In the earlier discussion of the

categories it was noted that this category was distinctive as compared to the other four categories. In still another way it retains its distinction by the high rater agreement.

The reliability of the raters in each category was tested by means of the contingency correlation. Table 8 indicates the contingency correlations (C) attained by the raters in each category. The reliability of the ratings in every category but the Pre-marital was significant at greater than .001. The chi-square needed at the .001 level of significance is 10.83, the Pre-marital chi-square was 10.07. The reliability of the raters in each category was highly significant.

Table 8

Contingency Correlations for
Two Judges on Five Categories

Category	N	Upper Limit	C	Signifi- cance
Marriage	170	.866	.65	>.001
Pre-marital	44	.707	.43	>.01
Intercourse	43	.707	.52	>.001
Boy-girl	46	.707	.53	>.001
Elders	66	.707	.44	>.001

It was stated in one of the hypotheses that in each category the male group and the female group would relate stories which were positive. Table 9 indicates whether or not the hypothesis was supported by the males and by the females.

Table 9

Significance of Positive Stories Told by the Male
Group and by the Female Group

Category	Male	Female
Marriage	n. s.	>.001
Pre-marital	n. s.	n. s.
Intercourse	>.001	>.001
Boy-girl	n. s.	.05
Elders	n. s.	.016

The females told positive stories at a significant level in the Marriage category. The ratings of the male group were arranged through the five points of the scale in an almost rectangular distribution. The Pre-marital category did not elicit a significant difference in terms of positive and negative responses. The male group and the female group attained a level of significance .001 in the category Intercourse; but this does not support the hypothesis as the significance represents the negative end of the scale. As mentioned before, the nature of the category would structure the responses to the negative end of the scale.

In the Boy-girl category the female group approaches an acceptable significance level (.05) but again it is the negative type of responses that are significant. The male group was not significant, though the trend was toward the negative emphasis in the stories.

In the Elders category, the ratings of the male group did not significantly

support the hypothesis though the trend was toward more positive stories. In the female group the stories were significant, but it was negative stories which were emphasized. This supports the earlier statement that the females are in more conflict with authority figures in their relations with the opposite sex, whereas the males seem to tend toward good relations with authority figures.

In general the males do not give, at a significant level, a positively skewed distribution of stories. In the Elders category the trend of their stories was positive. In the Boy-girl category the trend was negative. In the Intercourse category the stories were negative at a significant level.

In general the female group gave stories which were skewed, negatively or positively, at a significant level. Their stories in the Marriage category were positive. In the Intercourse category the stories were negative at a significant level. In the Boy-girl and Elders categories the stories were negative at an acceptable though not highly significant level.

It appears that the hypothesis was not supported by the female group. The lack of significance in the direction the male responses took, except for one category, prevents any general comment on the hypothesis.

The final hypothesis to be discussed refers to whether the differences in response to the stories between the males and females is significantly different. It was stated that there would be no difference between the males and the females in the number of positive stories related. Table 10 indicates whether the differences between the males and females in the number of positive stories told was significant.

Table 10

Significance of Differences Between Males and Females
on Number of Positive Stories in Five Categories

Category	Significance
Marriage	.06
Pre-Marital	n. s.
Intercourse	.025
Boy-girl	n. s.
Elders	> .001

In the Marriage category the difference between the sexes approaches an acceptable but not highly significant level. At an acceptable significance level the males and females differ in their responses in the category, Intercourse. Though both groups relate negative stories at a significant level, there is a difference between the sexes in the number of negative stories related. The males not only tell negative stories in this category but also tell significantly more stories of this tenor than do the females.

There was no difference between the sexes in their responses in the categories Pre-marital and Boy-girl. It should be recalled that there was no significant difference in the Pre-marital category when the responses were considered in terms of positive or negative qualities. In the Boy-girl category there were negative trends.

The difference between the males and females in the Elders category was highly significant. This seems to support the prior conclusion that authority figures ~~conflict or become more involved in the females' relationship with the opposite sex~~

than they do with the males.

In general the difference between the responses of the males and females in the five categories considered does not strongly support the hypothesis that there is no difference between the two groups. In one category the difference is highly significant; in two categories the difference is not highly significant but neither does it support the hypothesis. Only in two of the five categories is the hypothesis supported.

CHAPTER V

SUMMARY

The purpose of this study was to investigate the heterosexual attitude of the college student as it was expressed on the Thematic Apperception Test.

The attitude was studied in terms of five hypotheses. Three were concerned with the frequencies with which stories of a heterosexual nature were given to certain TAT cards. Two hypotheses referred to the positiveness of lack thereof of the stories in five selected categories (Marriage, Pre-marital, Intercourse, Boy-girl, Elder) as estimated or rated on a five point rating scale.

The reliability of using extracted stories for rating was .80 which was significant beyond .001. The reliability of the ratings in each category was tested using the Contingency Coefficient. All the reliabilities were highly significant and acceptable. In all the categories the raters agreed completely or deviated by one point in their ratings between 70 to 95% of the time. In the Elder category large deviations of three and four points were reported. In the other four categories there was no four-point deviation.

The conclusions of the study were:

- 1) Stories of a heterosexual nature are more likely to appear on cards with more than one person pictured.
- 2) The females tell significantly more stories of a heterosexual nature ($> .001$) than do the males. This conclusion was qualified by the demonstration that this difference disappears when the cards common to both sexes are evaluated. The difference appears significantly ($> .001$) when the cards the sexes do not have in common are studied. It appears then that the equivalence of the eight cards must be considered. Actually five cards (12, 17, 6, 9 and 8) are significantly different at the .01 level or greater. Further investigation of the hypothesis is necessary. The male and female responsiveness to the same set of TAT cards could be investigated.
- 3) The hypothesis stated that persons telling heterosexual stories on card 16, the blank card, will relate more stories of this nature than persons not using card 16. in this manner. The median test for significance was .06.
- 4) It was stated that the males and the females would relate positive stories in each of the five categories. Generally, this was not supported; instead it was noted that the stories tended to be negative at a significant level or approach an acceptable level of significance. The negative trend could be more clearly supported in the female group. The male group did not tend to have a skewed distribution of ratings.
- 5) It was stated that there would be no difference between the males and the females in the responses in the five categories. The hypothesis was not clearly

supported. In the Elder category the difference was significant. In the categories Marriage and Intercourse, the trend indicated that there was a difference between sexes' stories in these two categories. In the Boy-girl and Pre-marital, there is no difference in the attitude of the sexes.

The general impression created by this study concerning the heterosexual attitude of the college student can be discussed in terms of the differences between the sexes and in terms of the positiveness of the attitude.

The differences between the sexes that are tentatively proposed are:

The greater difficulty of the male in integrating the sexual impulses. The greater difficulty the female has with authority figures who are involved with her heterosexual relationships. The general negative trend of the over-all female attitude as compared to the male, who is neither positive nor negative, seems to indicate that the girls have learned or developed many misconceptions. The females have a basically poor, immature attitude which could effect their happiness and their level of adjustment.

This does not say that the boys have a better attitude. This study was less revealing of their attitude in a statistically significant manner. It also appears that the TAT does not offer the males as many opportunities to relate a story of a heterosexual nature.

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APPENDIX

RATING SCALE

General Structure:

- 5 - A relatively complete positive attitude in terms of story content, outcome, feeling-emotional states.
- 4 - A largely positive attitude in terms of story content, outcome, feeling-emotional states.
- 3 - A moderately positive attitude in terms of story content, outcome, feeling-emotional states.
- 2 - Some presence of a positive attitude in terms of story content, outcome, feeling-emotional states.
- 1 - A relatively complete absence of a positive attitude in terms of story content, outcome, feeling-emotional states.

BOY-GIRL INTERACTIONS

- 5 - RELATIVELY COMPLETE POSITIVE ATTITUDE. Examples:** Happy because they are together and/or can give comfort to one another. Accept the immaturity of each other but act maturely in working situation out.
- 4 - LARGELY POSITIVE ATTITUDE. Examples:** Shyness, lack of talent no deterrent. Separation is considered as having positive or negative aspects. One party realizes their immaturity and acts maturely. The sexes can be helpful to one another.
- 3 - MODERATELY POSITIVE ATTITUDE. Examples:** Principles and the opposite sex. Shyness or lack of courage prevents one from revealing love or interest in opposite sex.
- 2 - SOME PRESENCE OF POSITIVE ATTITUDE. Examples:** Desirous of the upper hand. Dreams and/or plans are flaunted or changed by the opposite sex. Separation does not "make the heart grow fonder." Intelligence is detrimental in relations with the opposite sex. Misunderstood by or suspicious of the opposite sex.
- 1 - RELATIVELY COMPLETE ABSENCE OF POSITIVE ATTITUDE. Examples:** Boys chosen over girls by boys. Involves suicide, violence, or fantastic situations. Physical features a deterrent and/or equated with naivete or stupidity. Derogatory attitudes toward the opposite sex (men are weak, women only want what they can get out of you). Socially unacceptable situation.

ELDERS

Rate the attitude the students have towards the adult or elder.

- 5 - **RELATIVELY COMPLETE POSITIVE ATTITUDE.** Example: Mature, realistic. Elder seen as helpful, as good models.
- 4 - **LARGELY POSITIVE ATTITUDE.** Examples: The elder person's action is proper but not pleasing to the younger person. Positive attitude toward elder but no interaction with them. Story somehow relates that the elder is seen as having been inconsistent.
- 3 - **MODERATELY POSITIVE ATTITUDE.** Examples: Elder insistent on marriage possibly because of self-involvement or unrealized goals. Elder is seen as giving good advice or of disapproving but the younger person does what he wants with moderately positive outcome.
- 2 - **SOME PRESENCE OF POSITIVE ATTITUDE.** Examples: Elder is seen as not helpful, interested when it is too late, suspicious, communication between them.
- 1 - **RELATIVELY COMPLETE ABSENCE OF POSITIVE ATTITUDE.** Examples: Immature, unrealistic. Elders seen as false moraled, interfering, destructive. Active involvement or strong negative feeling toward elder evident.

INTERCOURSE

- 5 - RELATIVELY COMPLETE POSITIVE ATTITUDE. Examples: Intercourse is good, pleasurable, occurs in socially acceptable situations and manner.
- 4 - LARGELY COMPLETE POSITIVE ATTITUDE. Examples: Some detraction of a minor nature in the generally positive story.
- 3 - MODERATELY POSITIVE ATTITUDE. Examples: Infidelity but realistic reaction of spouse and/or mistress. Sexual affair with a realistic attitude toward it or its termination.
- 2 - SOME PRESENCE OF A POSITIVE ATTITUDE. Examples: Seduction. Intercourse with consent but not satisfying, produces guilt. Involvement with a prostitute or rogue. An affair.
- 1 - RELATIVELY COMPLETE LACK OF A POSITIVE ATTITUDE: Examples: Evolves into murder, suicide, never forgiving self, life-long repentance. Unrealistic ending in light or rape, murder, infidelity. Brings in religion but unrealistically rather moralistically. Intercourse is considered "dirty", "filthy", animal-like.

PRE-MARITAL INTERACTIONS

- 5 - RELATIVELY COMPLETE POSITIVE ATTITUDE. Examples: Mature, realistic involvement. Marriage because they are in love but they are also compatible, have much in common.**
- 4 - LARGELY POSITIVE ATTITUDE. Examples: Marriage at middle age with some negative elements. One must better self before marriage. Marriage is preceded by separation because of duty.**
- 3 - MODERATELY POSITIVE ATTITUDE. Examples: Good or bad experiences with men in general or with one person prior to marriage. Preceded by separation but with negative implications. "Noble" or dramatic action involved. Afraid to propose.**
- 2 - SOME PRESENCE OF A POSITIVE ATTITUDE. Examples: Little or no involvement but it leads to marriage because one is "good" or tricked or cliché type of meeting. Falling in love and marrying or sudden realization of feelings.**
- 1 - RELATIVELY COMPLETE ABSENCE OF POSITIVE ATTITUDE. Examples: Fairy tale type of story or ending. Threats and/or violence or another's weakness involved. Desire for the Perfect Mate.**

MARRIAGE

- 5 - **RELATIVELY COMPLETE POSITIVE ATTITUDE.** Examples: Satisfaction of goals, desires, dreams. Mature, realistic, socially acceptable attitude. Happiness and love.
- 4 - **LARGELY POSITIVE ATTITUDE.** Examples: Some detraction from all being well. Comfort each other through loss of some type or a misfortune.
- 3 - **MODERATELY POSITIVE ATTITUDE.** Examples: Concern for each other but incomplete communication between them or the presence of a derogatory attitude. Immature reaction of spouse in an otherwise realistic situation. Relationship a little far fetched or strained or potentially effected by a third party.
- 2 - **SOME PRESENCE OF A POSITIVE ATTITUDE.** Examples: Feelings are not violently negative though unrealistic for the situation. Theme is less or not at all physically destructive; the abuse is more degrading. Shows lack of awareness of normal adult relationships.
- 1 - **RELATIVELY COMPLETE ABSENCE OF POSITIVE ATTITUDE.** Examples: Feelings are negative or unrealistic for the situation. Theme is self or other destructive, impulsive, unrealistic, or incongruous with feelings, theme, or life.

Approval Sheet

The thesis submitted by Patricia Diane Dore has been read and approved by three members of the Department of Psychology.

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content, form, and mechanical accuracy.

The thesis is therefore accepted in partial fulfillment of the requirements for the Degree of Master of Arts.

May 27, 1964
Date

Frank Hobler
Signature