RESPONSES OF LEBANESE ADOLESCENT GIRLS OF VARIOUS AGE GROUPS TO SELECTED TAT CARDS

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INTRODUCTION

The Thematic Apperception Test is a projective technique which today stands second only to the Rorschach in quality and frequency of use and application in the various fields of personality study. (1)

Unlike the Rorschach, the TAT was originally designed for the study of the normal personality. Experimentation, however, widened the utility of the test to engulf the study of the abnormal personality, and at present, the TAT can be used a psychodiagnostic instrument in the hands of the clinicians. (2)

Outside the clinic, the TAT is being widely applied in cross-cultural research, mainly to study the effects of acculturation on personality. An interesting research in this area was carried out by Caudill who used the TAT in a study of Ojibwa children's personality. (3) The TAT is also being used in connection with the establishment of the national character and in the study of the socialization process. (4)

⁽¹⁾ Bell, John E. Projective techniques. New York: Longmans Green, 1951, p. 207.

⁽²⁾ Balken, Eva R. Thematic apperception. J. Psychol., 1945, 20, 190.

⁽³⁾ Caudill, W. Psychological characteristics of acculturated Wisconsin Ojibwa children. Amer. Anthrop., 1949, 51, 409-427.

⁽⁴⁾ Singer, M. A survey of culture and personality theory and research. In Kaplan, B. Studying personality cross-culturally. New York: Row, Peterson and Company, 1961, p. 42.

Inspite of its very wide application in the various research areas be they clinical, social, or cultural-anthropological - the validity of the
TAT is still far from being established. The literature is rich in
validation studies which produced contradictory results; thus making a
controversial issue out of the problem of validity. What makes validation
of the test rather difficult, is the lack of standardized analysis and
scoring procedures. As long as every research worker contrives his own
method of scoring and analysis, as well as his own rules and determinants
for the stories, there is hardly a hope for an established validity of the
test.

Another major drawback of the TAT, besides the need for standardization, is the lack of normative data. For meaningful interpretation of TAT productions, reference should be made to normative data obtained in a standard fashion from well defined segments of the population. This need for norms is more greatly felt in the clinical area where Eron points out that

in order to diagnose an individual as primarily maladjusted on the basis of projective test responses, account must be taken chiefly of the ways in which his responses differ from those of others in the same age and cultural group. (5)

Although the TAT has been in use for almost three decades, there are, ten all in all, no more than/normative studies reported in the literature.

Among the best known normative studies were carried out by Eron on groups of hospitalized and non-hospitalized male subjects, (6) and Eron on the responses

⁽⁵⁾ Eron, L. Responses of women to the TAT. J. consult. Psychol., 1953, 17, 269.

⁽⁶⁾ Eron, L. A normative study of the TAT. Psychol. Monog., 1950, 64, No. 9 (Whole No. 315).

of women to the TAT. (7) Other normative studies by Fry, (8) Ritter and Eron, (9) and Rosenzweig (10) on different groups of American subjects will be, together with Eron's studies, reviewed in the second chapter.

Lindzey attributes the shortage in normative data to the fact that a normative study of the TAT is a tedious, laborious, and an "unromantic job". (11) This is made clearer when one considers that one hour of collecting data requires around half a dozen hours of analysis. This challenge, however, was not strong enough to prevent the writer from attempting a normative study of the TAT. Thus the object of this thesis is to study the responses of various age groups of Lebanese adolescent girls to selected TAT cards. It is of interest to point out here that except for a study by Melikian on the use of selected TAT cards among Arab university students, no large-scale TAT studies have been carried out in the Arab Middle East. (12) Therefore, the need for more normative studies of the TAT, coupled with the lack of TAT data in this part of the Arab world, were the incentives for this study.

⁽⁷⁾ Eron, op.cit., 269-282.

⁽⁸⁾ Fry, Franklyn A. A normative study of the reactions manifested by college students and by state prison inmates in response to the MMPI, the Rosenzweig P-F study, and the TAT. J. Psychol., 1952, 34, 27-30.

⁽⁹⁾ Ritter, A. and Eron, L. The use of the TAT to differentiate normal from abnormal groups. J. abnorm. soc. Psychol., 1952, 47, 147-158.

⁽¹⁰⁾ Rosenzweig, S., and Fleming, E. Apperceptive norms for the Thematic Apperception Test. II. An empirical investigation. J. Person., 1949, <u>17</u>, 483-503. (Abst.)

⁽¹¹⁾ Lindzey, Gardner. Projective techniques and cross-cultural research. New York: Appleton Century Crofts, Inc., 1961, p. 70.

⁽¹²⁾ Melikian, L. The use of selected TAT cards among Arab university students: A cross-cultural study. J. soc. Psychol., 1964, 62, 3-19.

A study by Bellak, et al., found the TAT to be a sensitive instrument in reflecting the developmental processes in adolescence. How sensitive is it in reflecting the developmental processes in the Lebanese adolescent girls? Are there significant differences among the responses of the various age groups to the test? Does the religious affiliation of the subjects affect their responses? All these are questions which the present study attempts to clarify. But the main question to be answered is the following: How do Lebanese adolescent girls respond to the TAT, and is it possible to establish norms for this particular age and cultural group?

⁽¹³⁾ Bellak, L., Livinger, L., and Lipsky, E. An adolescent problem reflected in the TAT. J. clin. Psychol., 1950, 6, 295-297.

CHAPTER I

THE THEMATIC APPERCEPTION TEST

Since Thematic Apperception Test is the research instrument used in this study, it seems appropriate to give a general description of the test, its assumptions, its methods of administration, analysis, and scoring.

The TAT is one of many techniques designed for the study of personality. The term "projective techniques" gained widespread popularity following its introduction in a paper by Lawrence Frank in 1939. (14) Frank defined projective techniques as "instruments for measuring personality with the aim of getting at the individuality, the phenomenal world, and the private world of meanings, significances, patterns, and feelings of the individual. (15) Since this early definition, a large number of definitions, which differ in certain details but which agree in the basic characteristics of Frank's definition, have been proposed for projective techniques. All the definitions agree that projective techniques aim at gaining insight into personality by presenting the individual with relatively ambiguous stimuli to which he is asked to make some kind of a response; they call for a wide variety of responses; the individual, by responding,

⁽¹⁴⁾ Abt, Lawrence, and Bellak, Leopold. Projective Psychology. New York: Alfred A. Knopf, 1952, p. 3.

⁽¹⁵⁾ Lindzey, op.cit., p. 36.

reveals himself without intending to; and personality is treated as a totality.(16)

The term "projective" derived from the psychoanalytic concept of "projection". According to Freud,

> projection is a process of ascribing one's own drives. feelings, and sentiments to other people or to the outside world as a defense process that permits one to be unaware of the undesirable phenomena in oneself.(17)

In the above definition Freud restricted the meaning of projection to a defense mechanism against anxiety. But as a result of later experimental evidence, Freud's original definition of projection was found to be insufficient. Experiments have shown that feelings of elation too were projected in TAT stories. (18) Freud must have anticipated this experimental investigation since in a later publication he pointed out that

> projection is not specially created for the purpose of defense, it also comes into being where there are no conflicts ... even inner perception of ideational and emotional processes are projected outwardly. (19)

Although projective techniques have, more or less, secured their independence from the Freudian concepts in psychograpytic theory, projection, as defined later by Freud, lies at the basis of all projective techniques, including the TAT. The basic underlying assumption in the use of all

⁽¹⁶⁾ Lindzey, op.cit., p. 41. (17) Abt, and Bellak, op.cit., p. 8.

⁽¹⁸⁾ Ibid., p. 9.

⁽¹⁹⁾ Ibid., p. 10.

projective methods, is that when a person is asked to respond to an unstructured stimulus, he projects his own needs and press into the situation. Projection in the TAT was experimentally established by Bellak who found that when the stories of subjects taking the test were criticized, more aggression was projected into these stories than into the uncriticized stories - the difference being significant at the 1% level of confidence. (20)

The TAT was introduced by Morgan and Murray in 1935. (21) Unlike the Rorschach, which emphasized structural analysis for revealing the formal, expressive nature of personality, the TAT has achieved wide popularity as a technique for studying the content of personality. It is one of fifteen methods proposed by Murray for eliciting fantasies in the exploration of personality. (22)

According to Morgan and Murray the procedure of the TAT is to stimulate creativity and elicit works of imagination that reveal deep-lying and unconscious complexes. (23) Like the rest of the projective methods, the TAT is based on the assumption that when a person interprets an unstructured stimulus situation, he tends to expose his own personality.

⁽²⁰⁾ Bellak, Leopold. An experimental investigation of projection. Psychol. Bull., 1942, 39, 489-90.

⁽²¹⁾ Bell, op.cit., p. 207.

⁽²²⁾ Balken, op.cit., 190.

⁽²³⁾ Morgan, C., and Murray, H. Thematic Apperception Test. In Murray, H. Explorations in personality. New York: Oxford University Press, 1938, p.531.

The original plan of Morgan and Murray was to present the subjects with pictures and ask them to interpret plots for the pictures. Experience, however, made them hit upon the idea that much more of the personality is revealed if the subject is asked to create a dramatic fiction rather than just guess probable facts. Hence, they called the test: "Thematic Apperception Test" - "Thematic," from "thema," refers to the themes that are elicited; "apperception" refers to the perceptual interpretative use of the pictures. (24)

Test materials.

The original test materials of the TAT consist of 30 standardized and published paintings and drawings. (25) The majority of the pictures depict life situation involving one or more persons. One out of the 30 pictures is a blank white card on which the subjects are asked first to imagine a picture, and then to tell a story about that picture. The pictures are grouped according to their use with subjects of various ages of either sex. Thus there is one set for use with adult males, and another set for use with adult females. Two other sets are used respectively with boys and girls below 14 years of age. All in all, no one subject is presented with more than 20 pictures: 11 that are common to all, and 9 that are specific to his (or her) age and sex. (26)

⁽²⁴⁾ Holt, R. The Thematic Apperception Test. In Anderson, H., and Anderson, G. (Eds.) An introduction to projective techniques. New York: Prentice-Hall, Inc., 1951, p. 182.

⁽²⁵⁾ Bell, op.cit., p. 207.

⁽²⁶⁾ Shneidman, E. Thematic Test analysis. New York: Grune and Stratton, 1951, p. 11.

Modifications of the TAT.

Besides Murray's 30 standardized pictures, there are many different sets of TAT cards developed &s modifications of the standard set. The need for modifications of the test materials was faced by research workers applying the instrument in different groups and cultures. As a consequence, the TAT was modified for use with American adolescents, with children between 3 and 10 years of age, with American negroes, and with interacting groups. (27) To meet the demands of the Naval Service, Briggs modified the (28) TAT for use with men enlisted in the navy. The test was also modified for use with children and adolescents among the Papaga, Zuni, Hopi, Navaho, and Sioux. (29) Caudill also modified the TAT for use with the Ojibwa Indians and Japanese, as well as for two South Pacific Micronesian groups. (50)

Administration.

The usual administration procedure of the TAT begins with the more or less standard instructions of the examiner to the subject. The latter is told that the test he is about to take is meant to test his imaginative and creative abilities. Accordingly, he is asked to make up a detailed story

⁽²⁷⁾ Lindzey, op.cit., p. 70.

⁽²⁸⁾ Briggs, Dennis. A modification of the TAT for naval enlisted personnel (N - TAT). J. Psychol., 1954, 37, 233-41.

⁽²⁹⁾ Weinberg, Kirson. Culture and personality. Washington, D.C.: Public Affairs Press, 1958, p. 32.

⁽³⁰⁾ Caudill, op.cit., 409-427.

about each picture. Each story is to include a description of what is going on in the pictured scene, what the people are thinking and feeling, what led to the scene, and what would the outcome be.

The test may be administered either in the individual-oral or the group-written form. These two forms of administration stimulated a good deal of research aimed at comparing the results produced by the two methods, as well as detecting any significant differences between them. Eron and Ritter found that, in general, there was a marked similarity between the stories obtained by the two methods. (31) The stories were almost identical in content, although, certain significant differences in the formal aspects of the stories were detected. Oral stories were a little longer, and included significantly more alternate themes and comments about the pictures than did the written stories. The latter, on the other hand, were found to be significantly more humerous and had happier endings than did the oral stories. Tomkins found that individual subjects produced more in one medium than in another. Again he found no significant differences in the stories produced by either method.

The research on the evaluation and comparison of the written and oral forms of administration of the test started as a result of the need for normative data. In this regard, it was felt that the written form was more economical, since in that form the test could be given to a number of subjects at the same time. It was suggested, therefore, that the written form

⁽³¹⁾ Eron, L., and Ritter, A. A comparison of two methods of administration of the TAT. J. consult. Psychol., 1951, 15, 55-61.

⁽³²⁾ Tomkins, S. The Thematic Apperception Test. New York: Grune and Stratton, 1947, p. 24.

is quite feasible in large, normative studies. But for clinical purposes the individual-oral form is preferred since there is the risk that the written form would produce more superficial stereotyped material which leads to underrating the clinical value of the TAT. (33)

Interpretation, scoring and analysis.

The analysis of the TAT is far from being standardized today, a fact which, in the opinion of the writer, is a drawback to the effective use of the test. There is no one objective method for scoring and interpreting the test; there are rather a number of systems that have been worked out for scoring and analyzing the TAT stories. Among the best developed scoring schemes were worked out by Murray, Stein, Henry, Tomkins, Aaron, Bellak, Wyatt, and Eron. (34)

The original method for analysis was proposed by Murray. Murray based his method of analysis on his theory of personality with its needs and press. The examines the stories produced according to five elements:

(a) the hero, (b) the needs or drives of the hero, (c) the press which acts upon the hero and may benefit or harm him, (d) the thema which is a combination of a certain press and a certain need, and (e) the outcome of the story. This method of analysis has certain advantages in experimental work where details are very important, but it does not have much success in clinical work due to the difficulty of mastering the need concept which makes analysis time consuming. (36)

⁽³³⁾ Terry, D. Rating scale for level of response in TAT stories. J. abnorm. soc. Psychol., 1952, 47, 511.

⁽³⁴⁾ Holt, op.cit., p. 210.

⁽³⁵⁾ Morgan and Murray, op.cit., p. 534.

⁽³⁶⁾ Abt and Bellak, op.cit., p. 193.

Stein's technique for analysis is very close to Murray's. (37) His analysis is also based on the identification of a hero in each story, the environmental stimuli, the hero's behavior which reflects his needs, cathexis, inner status, the manner in which the behavior is expressed, and the outcome.

The method that Tomkins worked out is an attempt at a logically consistent analysis of TAT stories. (38) He analyzes the stories according to four main categories: (a) Vectors, which consist of needs or other qualities of the strivings, (b) levels, such as wishes, daydreams, etc., (c) conditions which may be either external forces or inner states, like anxiety, (d) qualities such as intensity, contingency, and temporal conditions.

Henry's scheme for analyzing the TAT is the most extensive and detailed next to Murray's. (39) Henry distinguishes between form and content variables. Under form variables, he includes 6 major categories: (a) amount and kind of imaginal production, (b) organizational qualities, (c) acuity of concepts, (c) observations and their integration, (d) language structure, (e) intraception-extraception, and (f) the relation of the story told to the (40) content of the total thought. The content variables, Henry divides into the general tone, positive and negative content, and the dynamic structure of the content.

⁽³⁷⁾ Stein, M. The Thematic Apperception Test. Cambridge, Mass.: Addison-Wesley Publishing Company, Inc., 1955.

⁽³⁸⁾ Tomkins, op.cit., p. 29ff.

⁽³⁹⁾ Wyatt, F. The scoring and analysis of the TAT. J. Psychol., 1947, 24, 323.

⁽⁴⁰⁾ Henry, W. The analysis of fantasy. New York: John Wiley and Sons, Inc., 1956, p. 5ff.

Abt and Bellak also propose a method for analysis which is mainly concerned with the content and dynamics of interpersonal relationships (41) and the psychodynamic pattern. They suggest the "inspection technique" which they consider to be the simplest procedure. They advise that it is helpful to read through the stories, treating them as meaningful psychological communications, and underlining anything that seems significant or unique. They also suggest that the examiner should reread the stories, since, if he is experienced enough, he is bound to find a repetitive pattern running through them, and will also find that facts of the different stories fall together into a meaningful whole. (42)

Faced with all the different techniques for analyzing the TAT, a person finds himself at a loss in deciding which technique to use. Yet it does not pose such a big problem when one defines his aims first before attempting any analysis. This is because the interpretative approach is determined by the purpose of the study. (43) A vocational counselor will not look for the same information that a psychodiagnostician looks for, and therefore, has to use a different approach.

If we now turn to the scoring of the TAT, we also find that, here too, there is no objective and universal scoring procedure. Like interpretation and analysis, scoring is subjective and unstandardized. The criticism against this lack of objectivity in scoring is best expressed by

⁽⁴¹⁾ Abt and Bellak, op.cit., p. 195.

^{(42) &}lt;u>Ibid.</u>, p. 191.

⁽⁴³⁾ Holt, op.cit., p. 210.

Wyatt. (44) "In our day and age," he remarks, "it seems to me only methods which can be taught so that many can use them in the same way, are likely to be fruitful for the study of personality." (45) He also adds that fantasy can be meaningful only through a large sample of comparative studies which, in turn, require that variables can be established with a reasonable degree of identity. Therefore, if the TAT is to progress in differentiating aspects of personlity, we need systematic analysis and some degree of quantification. (46)

To minimize the subjectivity in scoring the TAT, Wyatt developed a numerical scoring technique where "variables are added up algebraically and trends are gleaned from the sum total," and where "only manifestly observable phenomena should be described in the analysis for the facilitation of numerical scoring." (47)

Other psychometric scoring procedures were worked out by Dana and by Eron. Dana uses personality orientation as a frame of reference in designating scoring categories, so as to render the TAT a useful diagnostic instrument. (48)(49) These categories are: perceptual keeness (PK), perceptual organization (PO), perceptual range (PR), perceptual personalization (PP), and perceptual energy (PE). (50)

⁽⁴⁴⁾ Wyatt, op.cit., 319-330.

⁽⁴⁵⁾ Ibid., 320.

⁽⁴⁶⁾ Ibid.

⁽⁴⁷⁾ Ibid., 329.

⁽⁴⁸⁾ Dana, R. Cross validation of objective TAT tests. J. clin. Psychol., 1956, 12, 36-40.

⁽⁴⁹⁾ Dana, R. Clinical diagnosis and objective TAT scoring.

J. abnorm. soc. Psychol., 1955, 50, 19-24.

⁽⁵⁰⁾ Ibid., 19.

Among the various scoring techniques developed, the most objective seems to be that of Eron. (51) Since it is the scoring procedure applied in the present study, it is fit to expand a little on this technique.

In analyzing the TAT protocols, Eron looks for the following variables: (a) themes, (b) identification of characters, (c) perceptual distortion, (d) unusual details, (e) emotional tone, (f) outcome, and (g) level of interpretation. (52)

The thematic analysis: For this purpose Eron designed a check list consisting of 125 themes. (53)* The themes fall under two headings: disequilibrium and equilibrium. They are further subdivided into: interpersonal, intrapersonal, and impersonal, "depending upon the sphere to which the situation is referred. (54) The interpersonal subdivision is further broken down into parts dealing with parent, partner, sibling and peer.

The thematic analysis is a process of counting themes occurring in the TAT stories. The objectivity of the scoring technique is due to this counting process; a theme is either present or not present without leaving much scope for subjectivity on the part of the scorer.

⁽⁵¹⁾ Eron, op.cit.

^{(52) &}lt;u>Ibid.</u>, 4.

⁽⁵³⁾ Ibid., 34.

⁽⁵⁴⁾ Ibid., 4.

^{*}See Appendix A.

Identification of characters: Age and sex of the characters depicted in the TAT pictures, as well as their relationship to one another - when there are two or more characters - is taken account of. Also specific identifying features, such as nationality, physical features, and occupation are considered. As far as perceptual distortions go, the standard taken is the description of the pictures as given by Murray, and deviations are viewed in relation to this standard. (55)

The level of interpretation takes account of whether the stories are narratives, symbolic, descriptive, autobiographical, etc.* Like the thematic analysis, and the identification of characters, this is also a process of counting, and judgmental factors are at minimum.

Emotional tone and outcomes: Unfortunately, subjectivity could not be completely avoided by Eron. Judgmental factors do play a big role in the scoring of the last two variables. Stories are rated on a five-point scale ranging from happy to sad. (56) Individual and general scales for both the emotional tone and the outcome were devised. To minimize the subjectivity in the scoring of these two variables, Eron urged that "since the rating of tone and outcome was a judgmental process, someone, other than the investigator, should rate the stories as the latter might be biased by a knowledge of the diagnostic classification of the subjects." (57)

⁽⁵⁵⁾ Ibid., 5.

⁽⁵⁶⁾ Ibid.

⁽⁵⁷⁾ Ibid.

^{*}Refer to Appendix A for a complete list of these characteristics.

CHAPTER II

REVIEW OF RELATED STUDIES

In this chapter normative studies of the TAT, which are relevant to the present one, will be reviewed.

The pioneer in collecting TAT norms and the contributor of four out of ten normative studies reported in the literature, is Leonard Eron. Eron realized that there was an increase in the number of studies aimed at demonstrating the reliability and the validity of the TAT, whereas collecting normative data was completely neglected. He was astounded by the claim of several clinical investigators that differential diagnosis could be based on the presence of "certain characteristic of 'deviant' content in a TAT record." (58) He felt that in view of the lack of norms, such criteria are invalid. As a consequence, three of his normative studies were carried out to investigate whether the TAT is valid as a diagnostic instrument, and whether it could differentiate between normal and abnormal groups of subjects.

The earliest normative study of the TAT and Eron's first attempt in 1948, was aimed at establishing norms for schizophrenic patients and non-hospitalized college students. (59) His sample consisted of 25

⁽⁵⁸⁾ Ritter and Eron, op.cit., 147.

⁽⁵⁹⁾ Eron, L. Frequencies of themes and identifications in the stories of schizophrenic patients, and non-hospitalized college students. J. consult. Psychol., 1948, 12, 387.

schizophrenics and 25 college students comparable as to sex, age, education, and I.Q. All the 20 TAT cards, recommended by Murray for use with adult males, were administered. The 1000 stories produced were analyzed for two variables: (a) the most frequent themes used, and (b) the identification of characters in the stories.

The results of this study showed that the specific personality disturbance of the subject is not so important in determining the particular themes he will produce, and that the thematic material obtained is more a function of the cards themselves than of anything else. (60) In the light of these results, Eron felt that the individual examiner must use the TAT as a diagnostic instrument with great caution.

Having found that, at least as far as content goes, no broad group differences were observed, and believing that hospitalization itself could have influenced the nature of the TAT productions, Eron decided to continue his investigation in a second study. (61) Again it was a challenge to those who assumed that the TAT could be used as a diagnostic tool to differentiate among various clinical groups. This second study was aimed at clarifying three important questions:

- (1) Is there a difference in the TAT productions of normal and abnormal persons?
 - (2) Does hospitalization affect TAT productions of patients?
- (3) In what way can the material obtained from the TAT be standardized to supply sufficient norms for use in a clinical situation? (62)

⁽⁶⁰⁾ Ibid., 385.

⁽⁶¹⁾ Eron, L. A normative study of the TAT, op.cit.

⁽⁶²⁾ Ibid., 1.

The subjects of this study were 150 "male veterars of World War II." (63) They were divided into six groups of 25 each. Two groups were non-hospitalized college students. The remaining four groups were non-hospitalized psychoneurotics, hospitalized psychoneurotics, hospitalized schizophrenics, and general neuropsychiatric hospital patients. (64)

Again, all the 20 cards recommended for use with adult males were administered individually. The stories obtained were analyzed for the following variables: (a) themes, (b) identification of characters, (c) perceptual distortion, (d) unusual details, (e) emotional tone, (f) outcome, and (g) level of interpretation. (65)

The data was first analyzed in terms of total responses; for all the 20 stories, each group was compared with every other group in regards to the "total number of times argiven characteristic was present." (66)

The second step was the analysis on the basis of individuals, which in other words was the number of individuals in each group contributing a given number of responses of each type. In this way information was supplied in regards to whether group differences were caused by a "greater mean number of responses per individual in the group or just a few extreme individuals." (67)

⁽⁶³⁾ Ibid., 2.

⁽⁶⁴⁾ Ibid.

⁽⁶⁵⁾ Ibid., 4.

^{(66) &}lt;u>Ibid.</u>, 6.

⁽⁶⁷⁾ Ibid.

The results of this study, in regards to the emotional tone of the stories, showed that the subjects in all the 6 groups fell into one of two categories: the hospitalized and the non-hospitalized. "The hospitalized groups appeared to be emotionally duller than the non-hospitalized ones since those in the hospital told more of the neutral stories and less of the extremely emotional ones than those not in the hospital." (68) Eron explained that such a flattened affect of the stories is typical of individuals in restricted environments such as orphanages, prisons, and concentration camps. (69) The fact that such a phenomena was common to all the hospitalized subjects, regardless of their type of disturbance, led the investigator to conclude that it was a result of the "insulation" the patients had built around themselves, or a defense against the lack of affective bonds which they experience in this circumscribed environment." (70)

Unlike the emotional tone, which was largely determined by the stimulus properties of the cards, the outcome was more a function of the creativity of each individual. The most frequent outcome for all groups was the moderately happy. (71)

When it came to shift in tone, Eron obtained surprising results. Contrary to the general belief that schizophrenics turn sad stories into happy endings, it was the normals who did so much more significantly. (72)

^{(68) &}lt;u>Ibid.</u>, 7.

⁽⁶⁹⁾ Ibid.

⁽⁷⁰⁾ Ibid., 8.

⁽⁷¹⁾ Ibid.

^{(72) &}lt;u>Ibid.</u>, 9.

Perceptual distortions occured equally frequently for all groups; most of the distortions were sexual misidentifications. (73)

Finally, the thematic analysis did not differentiate between the various clinical groups either. Themes of hostility, violence, death, guilt, restriction, etc., which the literature reported as being peculiar to certain clinical groups, were common to all subjects of all types in response to the TAT. (74)

It was apparent that the types of stories produced were not only determined by the clinical classification of the individual, but by the stimulus properties of the pictures themselves. (75) Some pictures were found to be more stimulating than others.

A third normative study aimed at testing the psychodiagnostic properties of the TAT was carried out by Ritter and Eron. (76) The major assumptions the investigators made were that certain content could be considered as the typical of "expected" response, and that certain deviations could be specified as unacceptable. (77)

There were 150 subjects approximately matched for age, education, intellectual level, and marital status. They were divided into 6 groups of 25 each: two control groups, one group of outpatient psychoneurotics, one group of hospitalized schizophrenics, and one group consisting of a mixed neuropsychiatric population. (78)

⁽⁷³⁾ Ibid., 11.

⁽⁷⁴⁾ Ibid., 13.

⁽⁷⁵⁾ Ibid., 25.

⁽⁷⁶⁾ Ritter and Eron, op.cit., 147-158.

⁽⁷⁷⁾ Ibid., 147.

⁽⁷⁸⁾ Ibid., 157.

If 40% of the normal control groups responded to a picture with the same theme, emotional tone, and outcome, these may be considered as the expected or typical responses. (79) A failure to give such typical responses meant that there was either perceptual distortion, or that the subject did not follow the instructions given him. Such failures were considered to be deviant responses.

The records of each of the 150 subjects were analyzed to determine the frequency of occurrence of each such deviation, individually and in various combinations. This was done to test the hypothesis that in "each of the non-normal groups more individuals would deviate more frequently than did individuals in the normal groups."

The findings supported this hypothesis since significantly more individuals in the non-normal groups deviated from expectation at a reliably higher frequency than did the individuals in the normal control groups. Both the theme and emotional tone deviations, individually and combined, in the hospitalized groups were significantly higher than in the normal groups. (81) Combining all the deviations together, each of the non-hospitalized groups differed significantly from the normal groups at the .001 level of confidence.

On the other hand, no difference have other than what might/occurred by chance, were found between the two normal groups. The non-hospitalized psychoneurotics fell on a point that was approximately half-way between the normals and the hospitalized

⁽⁷⁹⁾ Ibid.

⁽⁸⁰⁾ Ibid., 158.

⁽⁸¹⁾ Ibid.

⁽⁸²⁾ Ibid.

psychoneurotics. (83)

The investigators thus concluded that the method used appeared to be worthy of further research. They saw a possibility for its use to sort out some "proportion of deviant individuals," and eventually to be used as a diagnostic tool. Hence, further evidence was offerred to the claim that fantasy material is important especially when it deviates from the expected response. (84)

The establishment of TAT norms for women was Eron's fourth and last normative study reported in the literature. The subjects consisted of two groups of females: group C, containing 40 women students enrolled in a course in introductory psychology, and ranging in age between 18 and 31, with a median age of 23; group P, containing 20 women in the 3rd-5th month of pregnancy. The age range of the latter group was 19-35 with a median age of 24. (85)

The TAT was individually administered to all subjects in the standard manner. All 20 cards recommended for adult females by the authors of the test were included. (86) Each story was then analyzed for emotional tone, outcome, themes, identification of characters and objects, perceptual distortions, and unusual formal characteristics. (87)

⁽⁸³⁾ Ibid.

^{(84) &}lt;u>Ibid.</u>, 157.

⁽⁸⁵⁾ Eron, L. Responses of women to the TAT, op.cit., 270.

⁽⁸⁶⁾ Ibid.

⁽⁸⁷⁾ Ibid., 269.

The results showed that 52% of the subjects gave stories with emotional tone rating of -1 to card 1, and 75% of the subjects contributed 7 or more stories with emotional tone rating of -1 in a total series of 20 stories. (88) There were significant differences beyond the .05 level of confidence noted between the two samples. (89)Only on one out of 20 cards was there a difference in emotional tone rating between the two groups of subjects, which was significant at or beyond the .05 level of confidence. (90) In regards to themes, in only 10 cases were there significant differences. Significant differences in unusual formal characteristics were found only on one card. (91)

When the data for all 20 cards were combined, the two groups of subjects were still found to be quite similar. There were no differences in the emotional tone of the stories, but the pregnant subjects did contribute significantly more happy outcomes than did the college girls. (92)

Out of the check list of 150 themes, on only one theme did the two groups differ - more college girls gave more themes of occupational concern than did the pregnant women. (93)

⁽⁸⁸⁾ Ibid., 274.

⁽⁸⁹⁾ Ibid.

⁽⁹⁰⁾ Ibid., 281.

⁽⁹¹⁾ Ibid.

⁽⁹²⁾ Ibid.

⁽⁹³⁾ Ibid.

Eron concluded that it was, therefore, reasonable to "pool the data" and offer norms based on a sample of 60 "normal" American women in this age range. By referring to these norms, it would be possible to determine whether any given story contributed by a woman in response to a particular card was unusual and whether there is a "characteristic consistency throughout a series of 20 stories which is outside normal limits." (94)

A recent normative study of the TAT applying Eron's scoring technique was carried out by Mauri on Japanese subjects. (95) A Japanese modification of the TAT using 12 pictures chosen from Mauri's original 30 pictures, was administered to 761 male and female adults. The subjects were grouped according to age and sex, and their responses were analyzed for: degree of structure of story, degree of positive or negative emotional tone, type of outcome, and shift in tone. Mauri found significant differences between the 25-64 year old subjects and those either over 64 or under 25 years.

Franklyn Fry is another name connected with normative studies of the (96) TAT. Fry responded to the absence of adequate norms for college students with respect to the MMPI, the P-F Study and the TAT, by deciding to develop tentative norms for these three psychological tests. His subjects, who were all volunteers, consisted of 121 males, and 115 female college students

⁽⁹⁴⁾ Ibid., 282

⁽⁹⁵⁾ Mauri, F. A normative study of the TAT: chiefly on emotional tone, outcome and shift. <u>Jap. J. Psychol.</u>, 1960, 31, 83-92. (Abst.)

⁽⁹⁶⁾ Fry, op.cit., 27-30.

enrolled at the Pennsylvania State College; and 114 male and 112 female prisoners. (97)

The standard Murray set of TAT pictures was administered to the subjects by means of the group-written method. The test responses were then scored according to a scoring procedure devised by the examiner. (98)

The results of the TAT analysis could be summed up in the following points:

- (1) The TAT cards elicited a greater frequency of emotional reactions of depression and dejection than of elation.
- (2) The scoring procedure developed by the examiner differentiated significantly between the subjects with respect to differences in levels of intelligence, differences in civil and social status, and racial and sex differences.
- (3) Each of the 194 items in this scoring scheme, with a few exceptions, did differentiate between two or more of the groups by differences that were significant at the 5% level of confidence.
- (4) The scoring scheme developed may be used to evaluate protocols secured in group presentation to discover those subjects who are in need of psychological help. (99)

⁽⁹⁷⁾ Ibid., 27.

⁽⁹⁸⁾ Fry, op.cit., 28.

^{(99) &}lt;u>Ibid.</u>, 30.

Wittenborn was yet another contributor to normative studies of the TAT. (100) modified the test to render it applicable to the requirements of the student guidance situation. For purposes of economy, only ten of the TAT cards found to elicit content relative to the problems of youth, were selected. These were cards: 2, 3BM, 4, 6BM, 6GF, 7BM, 7GF, 8BM, 9BM, and 13MF. The cards, together with typed instructions were presented as a test of creative imagination to 100 Yale undergraduate students ranging between 16 and 25 years of age. The test was given either as part of the preliminary testing, before the student was seen by the counselor, or with other tests after a brief initial interview; all the subjects having consulted the examiner about problems of vocational, educational, or personal adjustment. (101)

Results of the study pointed to the presence of several patterns of adjustment with vocational and educational significance among college students. (102) Some of these commonly appearing patterns were the following: conflicting attitudes towards parents, a combined need for and rejection of dependent and passive roles, a desire for emancipation, resistence to authority, hostility towards women and an inability to accept their sexual rights, guilt and self-condemnation, and frustration, aggression and anxiety. (103)

Finally, Rosenzweig and Fleming should be mentioned for their contribution to normative data. (104) Their study was aimed at establishing

⁽¹⁰⁰⁾ Wittenborn, J. Some Thematic Apperception Test norms and a note on the use of the test cards in the guidance of college students. J. clin. Psychol., 1949, 5, 157-161.

⁽¹⁰¹⁾ Ibid., 160.

^{(102) &}lt;u>Ibid.</u>

⁽¹⁰³⁾ Ibid., 161.

⁽¹⁰⁴⁾ Rosenzweig and Fleming, op.cit., 483-503.

norms for 16 selected pictures of the 1943 TAT series. (105) Their subjects were 50 normal men and 50 normal women of a higher than average level of education. The data for each card were in the form of tabulations of popular or common responses, and were grouped under the headings:

Figures, Objects, Problems, and Outcomes. (106) Unfortunately this article was not available locally so that more information concerning the results could not be obtained by the writer.

Thus we see that of the normative studies reported in the literature, four were carried out by Eron, and all, except Mauri's study were done on American subjects. (107) Besides their aim at establishing TAT norms for various groups most of these studies were aimed at testing the psychodiagnostic uses of the test. Hence their subjects consisted of normal as well as of different clinical groups. The results of these studies showed that the TAT did not succeed in significantly differentiating between the various clinical groups and that, therefore, it should be very carefully used by the clinicians as a diagnostic instrument.

As far as the establishment of norms was concerned, the various research workers found their different groups to make up homogeneous populations which in turn suggested to them that norms could be offered based on these populations.

These were beginnings in the establishment of TAT norms, the need for more normative data, however, is still greatly felt.

^{(105) &}lt;u>Ibid</u>.

⁽¹⁰⁶⁾ Ibid.

⁽¹⁰⁷⁾ Mauri, op.cit.

CHAPTER III

METHOD AND PROCEDURE

Subjects.

The subjects of the present study consisted of 160 Lebanese adolescent girls ranging in age between 14 and 18 years. The girls were all enrolled at al-Ahliyya School for Girls in Beirut. Except for those girls who were born to Lebanese emigrant parents living abroad and who are back in Lebanon only for their schooling, as well as for the girls who refused to take the test, the TAT was administered to all students of the six secondary classes at the above mentioned school.

The subjects represented the three main religions found in Lebanon, which are Chistianity, Islam and Druze. Thus, although the purpose of this study was to compare the responses of the various age groups to the TAT, yet the possibility that the religious affiliations of the subjects could affect their responses, made it necessary to control this variable. Each subject, therefore, fell into one of the five age groups - 14 through 18 - and into one of the three religions reprensented. However, the Druzes were found to be a very small minority group in comparison to the other two larger religious groups and, consequently, their test protocols were sorted out and eliminated before the analysis was started. The exact distribution of the remaining subjects according to age and religious affiliation are shown in Table 1.

TABLE 1

AGE AND RELIGIOUS DISTRIBUTION OF THE SUBJECTS

Religion	A g e					
	14 Yrs.	15 Yrs.	16 Yrs.	17 Yrs.	18 Yrs.	Total
Christians	12	15	20	23	10	80
Moslems	10	17	23	15	15	80
Total	22	32	43	38	25	160

Test material.

Twelve of the standardized TAT cards recommended by Murray for use with females above 14 years of age were selected and administered to the subjects. These cards were the following: 1, 2, 3GF, 4, 5, 6GF, 8GF, 9GF, 12F, 13MF, 16, and 18GF. The feasibility of using a few selected cards rather than the whole series has been demonstrated over and over gain by various research workers. Dana, for example, found that TAT sets of as few as 5 cards, when scored for Perceptual Organization provided data which were roughly equivalent to that obtained from the entire series. (108)

Administration.

For purposes of economy in time, the test was administered by means of the group-written method. It has already been mentioned that the group method was found to be feasible in large, normative studies. (109) Slides of the 12 selected cards were prepared and were projected onto a screen.

⁽¹⁰⁸⁾ Dana, R. Selections of abbreviated TAT tests. J. clin. Psychol., 1956, 12, 40.

⁽¹⁰⁹⁾ Terry, op.cit., 511.

^{*}Except for card 16, the more structured cards of the set for female adults were chosen.

Each slide was projected for five minutes during which the subjects were instructed to write down their responses.

For the facilitation of giving the test instructions to the subjects, and the establishment of rapport between the latter and the examiner, the TAT was administered to each of the six classes separately.

No one group exceeded the range of 20-30 subjects.

A large number of subjects, especially those belonging to the older age groups, hesitated in taking the test and insisted first on knowing the purpose of it. It was, therefore, necessary for the examiner, before giving the standard instructions of the test, to explain to the subjects about the importance of their cooperation for research that was being carried out at the American University of Beirut on the imaginative and creative abilities of the Lebanese adolescent girls. That was enough to impress them and make them feel important! They were further reassured to know that they did not need to write down their names on their papers and that all they had to disclose about themselves was their religion and age. The usual procedure of the test then followed. The subjects were told that they were going to be shown 12 pictures projected on the screen. Each picture was to be projected for 5 minutes during which they were to write down their responses to it in the form of a story built around that picture. The stories were to be as detailed as possible and each story was to include the following: a description of what was going on in the picture, what led up to the scene, and what the outcome would be. Special emphasis was to be laid on the thoughts and feelings of the characters in the pictures. When card 16, which is the blank card, was shown, the

subjects were first asked to imagine a picture on it and then to make up a plot around the imagined scene. These instructions were repeated to the subjects twice, once in English and once in Arabic. The subjects were also given the choice of using either language in writing down their responses. This was to make it possible for the individual subjects to write in the language they could better express themselves in. The instructions were easily understood by the subjects and only a few found it necessary to ask questions in the course of taking the test. The period of actual testing was 60 minutes for each group.

Technique of analysis.

The 1920 TAT stories obtained were then analyzed following Eron's method of thematic analysis. This method was chosen because, as has been previously pointed out, "it is actually merely a counting procedure with a minimal judgmental function - a theme is either present or not and the sole criterion is the statement of the subject." (110) In addition to the thematic analysis, the stories were analyzed for identification of figures in the pictures, for the relationships of the figures to each other, and for the level of interpretation.

The thematic analysis was done according to the check list of 125 themes derived by Eron. (111)* However, several themes occurred which were not included in that list and also not all of the 125 themes of Eron occurred since different sets of TAT pictures were used in the two studies.

⁽¹¹⁰⁾ Eron, L. A normative study of the TAT., op.cit., 4.

⁽¹¹¹⁾ Ibid., 34-36.

^{*} See Appendix A.

The themes in the stories on each card were scored for each age group of either religion. Thus card I was first analyzed for the Christian then the Moslem 14 year olds followed by the Christian and Moslem 15 year olds, and so on. The first results obtained were, therefore, frequency tabulations of the themes occurring on each of the 12 cards for each religious and age sub-group.

The analysis for the level of interpretation was done at the same time with the thematic analysis following a list of these levels which appears at the end of Appendix A. Levels are "deviations from the instructions to make up a narrative."

Such deviations, for example, are descriptions, symbolic, abstract, and fairy tales. Levels also include unusual formal characteristics of stories, such as including the examiner in the story or having no connection between the picture and the story told.

The identification of characters, which was actually the first variable to be analyzed, followed the same order of analysis and scoring as the thematic analysis.

The data were analyzed on the basis of total and individual responses. Once the card by card analysis was completed, the themes occurring on all the 12 pictures for each of the age and religious subgroups were pooled together. This was done because the interest of the present study was in comparing each age group with every other age group with respect to the total times a given response was made for all the 12 stories, rather than in the responses of the groups to individual cards.

⁽¹¹²⁾ Ibid., 22.

For purposes of comparison among the groups, all the obtained frequencies were converted to proportions since the five age groups were not equal in size. The chi square test was applied whenever possible and necessary to determine whether intergroup differences were significant or not.

CHAPTER IV

RESULTS AND DISCUSSION

For the sake of convenience, the presentation of the results of this study will follow the same order as that of the analysis. As has already been mentioned in the previous chapter, the stories were analyzed for the following variables: (a) identification of characters and the relationship of the figures to each other, (b) themes, and (c) level of interpretation. Since the 1920 stories contributed by the 160 subjects in response to the 12 administered cards were analyzed for one variable at a time, the results will be presented accordingly. The data obtained from the analysis of each variable will be presented in tables, interpreted, and discussed before moving on to the next variable.

Identification of characters.

The first variable to be analyzed was the identification of characters, mainly in respect to age and sex, and their relationship to one another in pictures where two or more figures were depicted.

This part of the analysis revealed a certain degree of perceptual distortion by our subjects. Most of the distortions were in the form of sexual misidentifications of the figures. Murray's description of the pictures was the standard against which the identifications were judged. (113)

⁽¹¹³⁾ Murray, H. Manual for the Thematic Apperception Test. Harvard University Press, 1943.

Sexual confusion occurred in only five out of the twelve administered cards, and all the five age groups contributed to this confusion, more or less, equally.

TABLE 2

FREQUENCY OF SEX CONFUSIONS AND THE PROPORTION OF CONFUSING INDIVIDUALS IN EACH AGE GROUP

		A	ge gi	roups	3	
	14 Yrs. (N=22)	15 Yrs. (N=32)	16 Yrs.	17 Yrs.	18 Yrs.	Total Confusions
Cards	f	f	f	f	f	30111 40 10110
18GF	14	12	20	19	11	76
12GF	3	2	4	4	3	16
3 GF	2	1	4	4	1	12
8GF	1	1	1	-	\sim	3
ı	1	1		1	~ .	3
Total No. of Misidentif.	21	17	29	28	15	
Percentage of Total Identi	f. 7.9%	4.1%	5.6%	6.1%	5%	
No. of Misidentif. Ss	16	13	24	21	12	
Percentage of Misidentif.S	s 73%	41%	56%	55%	48%	

A chi square test showed no significant differences among the various age groups in the proportion of total misidentifications. Although there was a tendency for more of the 14 year olds to produce these misidentifications in comparison to the four other groups, however, no significant differences in the proportion of individuals making one or more misidentifications in each age group were found either.

The greatest frequency of sexual confusion was in card 18GF.

According to Murray, this card depicts a woman with her hands pressed around the throat of another woman. (114) It was the other woman who was misidentified as the husband or the son of the first woman by our subjects. The proportions of subjects in each age group who made such a sex confusion were: 64%, 38%, 46%, 50%, and 44% respectively.

The second highest frequency of sexual confusion was found in the responses to card 12F which is "a portrait of a young woman. A weird old woman with a shawl over her head is grimacing in the background." (115) The proportion of subjects in each of the 5 groups who confused the sex of either of the two women in the picture was 13%, 7%, 9%, 10%, and 12% respectively. The younger woman was misidentified as the son of the older woman by 5%, 14%, 6%, 15%, and 9% of each age group. The rest misidentified the old woman as an old man.

Murray's "woman standing with down cast head, her face covered with her right hand" in card 3GF was misidentified as a boy by 9%, 3%, 9%, 8%, and 4% of each of the five groups respectively. (116) Less frequent sexual confusions occurred on cards 1 and 8GF.

Although no significant differences were found among the various age groups in the proportion of individuals making sex confusions, yet age group 14 seems to contribute more sex misidentification than any of the other four groups.

⁽¹¹⁴⁾ Ibid.

⁽¹¹⁵⁾ Ibid.

⁽¹¹⁶⁾ Ibid.

To highlight these findings, and to furnish the reader with a frame of reference, Table 3 will present the frequency of sex confusion by the Lebanese adolescent girls and by Eron's American college women. (117) Since no significant differences were found among our five different age groups in both the total and individual proportion of sexual confusion, they will be treated as one homogeneous population to facilitate the comparison between the two ethnic groups.

TABLE 3

FREQUENCY* OF SEX CONFUSION BY LEBANESE AND AMERICAN SUBJECTS

Card	Lebanese (N = 160)	American (N = 60)
18GF	48%	28%
13MF	7 × 2	
12F	10%	3%
9GF	4 .	
8GF	2%	2%
6GF		-
5	-	-
4		· -
3	8%	-
2	-	
1	2%	-

*All frequencies are in rounded percentages.

⁽¹¹⁷⁾ Eron, L. Responses of women to the TAT, op.cit., 273.

Except for cards 1 and 3GF, sex confusion for both our Lebanese and Eron's American subjects occurred in the same cards, viz., 18GF, 12F, and 18GF. For both groups, card 18GF resulted in the highest frequency of sex confusion. However, the frequency was much higher for our Lebanese subjects than it was for the American subjects; a difference which was found to be significant ($x^2 = 6.98$, ldf. P $\angle .05$).

Another difference in sex confusion between the two groups was found in card 3GF where 8% of the Lebanese subjects confused the sex of the girl in the picture, while no such confusion by the American Ss was reported. The Lebanese Ss also had a greater frequency of sexual confusion on cards 8GF and 12F, but the differences between the two groups did not exceed what could be expected by chance.

The fact that in only two instances a significant difference in sex confusion was found between the Lebanese and the American Ss makes us accept the conclusion that, so far as the variable of sexual misidentification is concerned, the 12 administered TAT cards had a similar stimulus value for our Lebanese Ss as for the American Ss on whom the test was originally standardized.

The conclusion reached above was supported when we moved to the analysis of the relationships between the figures depicted in the cards. Here, again, perceptual distortions were observed. The identification of characters and their relationships to each other where 2 or more figures were depicted are presented in Table 4.

TABLE 4

IDENTIFICATIONS OF CHARACTERS AND THEIR RELATIONSHIPS TO EACH OTHER*

			Age	Gro		
	Identification and	14 Yrs. (N=22)	15 Yrs. (N=32)	16 Yrs. (N=43)	17 Yrs · (N=38)	18 Yrs. (N=25)
Card	Relationship	f **	f	f	f	f
2	Father-mother-daughter Husband-wife-unrelated girl Girl-unrelated farmers Girl-boyfriend-boy's mother Only girl specified Only 2 characters specified Girl-student	27% 9% 32% 5% 14% 9% 82%	22% 6% 31% 6% 15% 9%	19% 4% 37% 5% 7% 16% 81%	26% 3% 42% 7% 8% 7% 85%	28% 8% 32% 20% 4% 8% 76%
3GF	Young woman Wife Widow	64% 14% 5%	50% 28% 7%	60% 16% 5%	58% 13% 5%	84% 4% 4%
4	Married couple Unmarried couple Nurse-patient*** Brother-sister	23% 59% 5% 5%	40% 47% - 6%	37% 51% 7% 5%	24% 58% 3% 3%	44% 40% - 4%
5	Mother Wife Old woman	50% 18% 12%	50% 25% 9%	54% 20% 5%	45% 15% 7%	53% 25% 8%
6GF	Husband-wife Unmarried couple Father-daughter*** Employee-boss Woman-burglar	23% 33% 14% 14%	18% 40% 16% 13% 6%	35% 25% 19% 12% 11%	18% 36% 21% 12% 8%	20% 35% 15% 10% 8%
8GF	Daughter Woman Servant Widow Painter's model	14% 46% 14% 16% 5%	22% 33% 16% 18% 6%	16% 43% 20% 16% 7%	16% 36% 16% 21% 2%	12% 44% 8% 12% 8%
9GF	Two girl friends Two unrelated girls Two rivals Two sisters One girl only specified	41% 18% - 18% 5%	34% 9% 30% 22% 3%	44% 12% 12% 12% 6%	34% 34% 24% 20% 5%	48% 12% 18% 16%
12F	Old woman-young woman (unrelated) Mother-daughter Same woman Girl-witch or fortune-teller		22% 15% 10% 3%	21% 26% 20% 9%	18% 12% 18% 6%	25% 10% 12% 3%

Continued on next page

TABLE 4 -- Continued

		Age Group						
	Identification and	14 Yrs. (N=22)	15 Yrs. (N=32)	16 Yrs. (N=43)	17 Yrs. (N=38)	18 Yrs. (N=25)		
Card	Relationship	f##	f	f	f	f		
L3MF	Unmarried couple	41%	40%	46%	48%	44%		
	Married couple	54%	37%	42%	34%	34%		
	Brother-sister***	5%	6%	5%	5%	12%		
	Mother-son or father-daughter**	* 8%	7%	4%	7%	4%		
	Patient-doctor***	9%	9%	3%	3%	4%		
.8GF	Two women (unrelated)	5%	9%	14%	13%	16%		
	Mother-daughter	18%	40%	35%	32%	28%		

^{*}Only identifications and relationships contributed by 3% and more of each group were included.

Studying Table 4, we find that as in the case of sexual confusion, perceptual distortion in respect to the relationships between the figures in the pictures occur in the same cards for all our five age groups. These distortions occurred in cards 4, 6GF, and 13MF.

In the identification of the couple on card 4 as nurse and patient, some, though not significant, differences were found between age group 16 on one hand and age groups 15 and 18 on the other, and between the same two groups and age group 14. No intergroup differences in the identification of the couple as brother and sister were found to be significant

^{**}All frequencies are in rounded percentages, and show % of total number of responses which made each identification.

^{***}Considered by Eron as perceptual distortion. (118)

^{(118) &}lt;u>Ibid.</u>, 276.

either.

In card 6GF, the young woman and the older man standing behind her were seen as relatively frequently as woman and burglar or father and daughter by all our five age groups with no significant differences.

The final distortion in the relationships between the figures was in card 13 MF, where the nude woman lying in bed and a young man standing with downcast head burried in his hand, were seen as patient and doctor. Again no significant difference among the five age groups was found in the proportion of individuals making the distortions in each group.

It seems feasible at this point to make the observation that with respect to the variable of identification of characters and the relationships between them, our five age groups actually make up a homogeneous population since the analysis of this variable did not differentiate significantly between the different age groups.

To furnish the reader with another reference point, the distortions produced by our Ss will be compared with those of Eron's American Ss. (119) Like the sex confusion, the distortion in the relationships between the figures in the pictures occurred on exactly the same cards for both groups. The couple on card 4 were perceived as nurse and patient by 3% of all our Ss and by 5% of the American Ss; the difference being not greater than what could be expected by chance. Also no significant difference was found between the proportion of individuals in each of the two groups who identified the couple as brother and sister; 4% of the Lebanese Ss made such an identification in comparison to the 2% of Eron's Ss.

⁽¹¹⁹⁾ Ibid., 276.

A difference was found between the proportion of Lebanese and American Ss identifying the young woman and the older man in card 6GF as father and daughter. Only 7% of Eron's Ss made such an identification in comparison to the 17% of the Lebanese Ss. This could be due to the difference in age between the subjects in the two groups. The age range of our Ss was 14-18, while Eron's Ss ranged between 18 and 31. (120) Hence it could be explained that more Lebanese Ss identified with the young woman in the picture and, therefore, saw her as a daughter. Another interesting difference could be the relationship our Ss have with their fathers. To borrow a description of the middle eastern family from Patai, (121) it is "patriarchal, patrilineal, and patrilocal." The father is the more dominating of the two parents and the one who inspires fear and respect in his children. The mother is much less dreaded than the father and is usually the softer and less punishing parent. When we come to the thematic analysis, we will find that the most frequent theme produced by all the five age groups was parental pressure. Parents were seen as interfering, checking, frustrating, and punishing. This fatherdaughter relationship in the Middle East, and in this case Lebanon, is best described by a few illustrations of the responses of some of our Ss to this card. "This girl," wrote a 16 year old girl, "has a guilty expression so she has been caught reading something which is not supposed to be read for moral reasons. The man could be her father or anyone with authority over her. She looks defiantly at him and no harm is going to

⁽¹²⁰⁾ Ibid., 270.

⁽¹²¹⁾ Patai, R. The Middle East as a culture area. Middle East J., 1952, 8.

happen to her."

A 17 year old girl wrote; "this lady is sitting writing a letter to her lover in a room alone. No one knows that and she wants nobody to know. She is afraid that her parents will know because before her sister did so and her father scolded her and prevented her from going out and doing anything so she drank some poison and died..."

An 18 year old girl gave the following story: "Our young lady has been reading a forbidden book. Her father has surprised her and she is attempting to excuse herself... Her father will decide that all books from then on are to be checked and the girl will ask for forgimeness. Next day she will get another book (just as bad) and read it secretly this time."

Another 18 year old wrote: "A daughter who has misbehaved or did something wrong, is getting a scolding from her father."

If our Ss had identified with the young woman in the picture, the following story by a 15 year old illustrates this identification:
"The father is advising his daughter and is showing her the right way to go. It seems that the girl is so in need of him because she is in the age of danger as any teenager is."

As far as the stimulus properties of this card go, there is nothing about the appearance of the young woman which suggests that she is a teenager.

From these illustrations we can clearly see that in addition to the feeling of fear exhibited by our subjects, there was also a tinge of defiance and a desire for emancipation from the parental grip. For the American subjects, on the other hand, the father does not play the role of such an authoritative figure as for the Lebanese Ss. A discussion of the American culture would be beside the point here and therefore, will not be attempted. It suffices to point out that the father-daughter relationship in the American culture, because of cultural differences in the family set-up, is different from that in the Middle East. The American father is less feared and the resultant relationship is more permissive and lenient. It would be the exception rather than the rule for an American father to frown upon and punish his adolescent daughter's interest in and relationship with the opposite sex. Hence there is much less chance for the secrecy surrounding those matters which our Ss exhibited in their stories, and for being caught "red-handed" writing "love letters."

Another interesting result was the identification of the young woman and the older man in the same card as woman and burglar by 14%, 6%, 11%, 5%, and 8% of the Ss in each of the 5 age groups respectively. No such relationship was seen by Eron's Ss. Also the fact that only 23% of the Lebanese Ss described the couple as husband and wife in comparison to the significantly (x² = 38.97, 1df P <.001) great 68% of the American Ss, might have interesting implications to the assumption of identification.

Twenty out of Eron's total sample of 60 were married women, which could mean that just as more of our adolescent subjects identified with the woman in the picture and perceived her as a teenaged daughter, more of the married American Ss must have perceived her as a wife. The very high proportion of our Ss who identified the girl in the foreground in card 2 as a student also supports the assumption of identification; the Ss being all students themselves.

Finally, no significant difference was found between the proportion of Lebanese and American subjects making the distortion of a doctor-patient relationship in card 13MF. Such a distortion was made by 6% of the Lebanese and 7% of the American Ss. An interesting evidence in favor of the assumption of identification occurred on this card; only 1% of our Ss identified the boy in the picture as a student in comparison to the 22% and 35% of subjects making such an identification in the studies of Rosenzweig and Melikian. (122) Both Rosenzweig's and Melikian's subjects were male university students which could be the explanation for the very significantly greater frequency of identifying the boy as a student by their subjects than by our Lebanese adolescent girls.

Except for the distortion on the above three cards, our Lebanese
Ss have "correctly" identified the relationships between the figures on the
cards. By referring to Table 4, we find no significant differences in the
proportion of subjects making the "correct" (which is the accepted and
most commonly made) identification occurred among the different age groups.
One significant difference that is worthy of being noted occurred on card 2
where the three people in the picture were identified as girl-boyfriendboy's mother. The 18 year olds made this identification much more
frequently than any of the other four groups. A possible explanation
could be that the oldest age group was more "sophisticated", as it were,
in matters pertaining to boy-girl relationship and therefore, more
familiar with the term "boyfriend" than the younger age groups.

⁽¹²²⁾ Melikian, op.cit., 8.

But the writer has her doubts about this explanation, particularly that the 17 year olds were not much younger to be so significantly less "sophisticated".

In conclusion to the analysis of the variable of identification of characters and the relationship between the figures depicted in the pictures, and in the light of the results presented above, one finds himself in a position to conclude that the TAT did not differentiate significantly among our five age groups. Since the responses to the test are a function of both the stimulus value of the cards themselves and the classification of the subjects, we can clearly see that the 12 administered cards, as far as the variable of the identification of characters was concerned, had the same stimulus value for all our subjects regardless of their age group. In other words, as far as this variable was concerned, the five age groups made up a homogeneous population.

The results presented so far were one positive and assuring step in the direction of showing that the Lebanese Ss perceived the same social situations depicted in the test cards as the American Ss, which in turn justifies applying this test in this part of the world.

Thematic analysis and levels of interpretation.

Both the thematic analysis and the analysis for levels of interpretation were done at the same time, and hence their results will be presented and discussed together in the remaining part of the chapter.

The analysis for themes and levels of the 1920 stories obtained from our 160 subjects in response to the 12 administered cards resulted in 4899 discernible themes and 11 levels which were classified according to the check list in Appendix A derived by Eron. (123) However, several themes were found which Eron's list did not include and were therefore, added to it.

As in the case of the analysis for the identification of characters, no significant differences in the thematic content was found between the Christian and Moslem subjects in each age group and the thematic production of the two religious sub-groups were added together.*

It is of interest to point out here that Melikian in his study on the use of selected TAT cards among Arab university students also did not find significant differences in the content of stories produced by either religious group. Hence our ten religious and age groups were reduced to five age groups only and the results that will follow will be presented in terms of these 5 age groups.

The first observation to be made concerning the results of the thematic analysis is that there was no significant difference in the number of themes produced by each age group. In other words, all five age groups showed to be equally productive on the test. The number of themes produced by each group in response to each of the 12 cards, plus the total number of themes produced by each group to all the cards, and the average number of themes per individual in each group, are all shown in Table 5.

⁽¹²³⁾ Eron, L. A normative study of the TAT, op.cit. 34-36.

⁽¹²⁴⁾ Melikian, op.cit.

*Refer to Appendix B.

TABLE 5

NUMBER OF THEMES PRODUCED BY EACH GROUP TO EACH CARD

			Age	Group		
Card	14 Yrs. (N=22)	15 Yrs. (N=32)	16 Yrs. (N=43)	17 Yrs. (N=38)	18 Yrs. (N=25)	
1	61	87	102	109	77	
2	58	80	90	123	69	
3GF	72	104	129	146	76	
4	56	107	123	108	73	
5	55	91	96	89	60	
6GF	49	104	101	79	58	
8GF	54	98	122	95	73	
9GF	47	95	99	88	56	
12F	60	80	84	64	64	
13MF	60	102	112	86	84	
16	36	67	71	54	32	
18GF	46	94	102	72	70	
Total per group	654	1109	1231	1113	792	
Average per individual	29.2	34.56	28.4	29.2	31.4	

The above table clearly shows that there was hardly any difference in the average number of themes produced by each individual in each of the five age groups.

A second observation that can be made here is that mot all the cards stimulated the same number of themes. Certain pictures were found to be more stimulating than others. This same observation was earlier made by Eron. (125) According to the findings of Eron, card 13MF stimulated the greatest and card 16 the least number of themes by all the 150 subjects. Since most of the cards used in the two studies, the present one and Eron's, were not the same and also were not equal in number, a comparison of the rank orders of the stimulatory value of the whole list of cards for our subjects and for Eron's subjects cannot be made.

Table 6 presents the stimulatory value of the 12 administered cards for our 160 subjects.

TABLE 6

RANK ORDER OF CARDS ON THE BASIS OF THEIR STIMULATORY VALUES

Card	No. of Themes	Stimulatory Value
3GF	527	1
4	467	2
13MF	444	3
8GF	442	4
1	436	5
2	420	6
5	391	7
6GF	390	8
9GF	385	9
18GF	384	10
12F	352	11
16	260	12

⁽¹²⁵⁾ Eron, L. A normative study of the TAT, op.cit., 25.

From the above table we can see that card 3GF stimulated the greatest number of themes and card 16 the least for our Lebanese subjects. For Eron's subjects, card 13MF ranked 1st in the stimulatory value, while it ranked 3rd for our subjects. Both studies found card 16 to stimulate the least number of themes. It could be argued that the card itself did not offer much stimulus value to the subjects in both studies. But it it should be pointed out here that in the case of our subjects fatigue factors could have operated since it was the last card to be administered in the 60 minutes session. Out of the 11% of our total sample who rejected certain cards, 8% rejected card 16. "I think it is better to keep the blank as a blank" wrote an 18 year old girl. A 17 year old wrote: "since it is a blank space why do I have to imagine a picture. A blank is the most beautiful picture. It takes you far away without having anything shown on it which stops your fancy."

As for the themes themselves, it should be repeated that the present study, unlike most of the previous normative studies, was not interested in the themes produced on individual cards, but rather in the themes elicited by the total set of 12 cards for each of the five age groups, in order to determine whether these selected cards call forth similar or different thematic content from the various age groups. Thus, although the analysis and scoring followed a card-by-card order for all the age groups, yet all the themes appearing on all of the 12 cards for each age group were added together. From this pooled data the average production of each theme per individual in each age group was computed, and the rank orders of themes in each group on the basis of frequency

were determined. Also the proportion of subjects in each age group contributing a certain theme one or more times was determined.

Therefore, the intergroup comparisons for the thematic variable were done on the basis of the average production of each theme per subjects in each age group, the proportion of subjects in each group producing the themes, and the rank orders of themes for the five groups.

Tables 7, 8, and 9 respectively present the most frequent themes which were found in 35 and more of the stories of each age group.

Table 7 shows the themes with the obtained averages, Table 8 shows the themes and the proportion of subjects making a theme, and Table 9 presents the rank orders of the themes for the five age groups.

^{*3%} was arbitrarily chosen as a cutting point.

TABLE 7

MOST FREQUENT THEMES AND THEIR AVERAGE PRODUCTION PER INDIVIDUAL

	Age Groups						
		15 Yrs.	16 Yrs.	17 Yrs.	18 Yrs		
	(N=22)	(N=32)	(N=43)	(N=38)	(N=25)		
Most Frequent Themes	Av.	Av.	Av.	Av.	Av.		
Parental pressure	1.727	1.594	1.721	1.606	1.800		
Aspiration	1.273	1.375	1.396	1.395	1.840		
Curiosity	1.045	1.344	1.093	1.711	1.400		
Guilt-remorse-shame	1.136	1.375	1.209	1.291	1.200		
Pressure from partner	.727	.906	.907	.816	1.160		
Rumination	.909	1.313	.721	.395	1.000		
Fear-worry	.818	1.063	.628	.763	.800		
Departure from partner	1.000	.875	.651	.763	.520		
Death or illness of partner	.682	.750	.488	.553	.400		
Illicit sex	.818	.563	.628	.526	.840		
Loneliness	.636	.594	.651	.632	.600		
Inrequited love	.409	.688	.837	.500	.480		
Reunion with partner	.545	.656	.791	.711	-		
Occupational concern	.455	.719	.465	.816	.360		
Death or illness of parent	.682	.750	.488	.553	.400		
ranquility	_	.719	.442	.658	.840		
Economic pressure	.409	.719	.349	.921	_		
Succorance from parent		.688	.582	.563	.520		
Inadequacy	-	.594	.442	.500	.760		
eath or illness of child	.636	.406	.395	.421	.640		
Parental concern	.545	.406	.512	.421	.520		
lggression towards partner	.499	.875	.465	-	.360		
drief	.773	•500	-	.421	.480		
Cuckhold	.364	.531	.349	.447	.360		
Generalized restriction	-	.438	.372	.500	_		
contentment with partner	-	.625	.349	.368	.560		
Retribution	.409	.656	_	.500	-		
aggression towards environment	-	.469	.535	.368	.360		
(ealousy (unspecified)	_	.406	.419	.395	-		
Suicide	.455	.531	.372	_	-		
inconsequential sadness	.499	.500	-	-	.560		
Departure of child from parents	.499	.469	-	.368	_		
Retirement	-	_	-	.368	.480		
seduction	-	.437	-	-	.400		
ealousy of partner	.409	.469	_	-	-		
Self-pity	-	.438	-	-	.360		
ggression from parents	.591	-	-		_		
ggression from impersonal source	-	-	-	-	.480		
xhaustion	-	-	-	-	.400		

TABLE 8

MOST FREQUENT THEMES: NUMBER AND PROPORTION OF INDIVIDUALS IN EACH GROUP PRODUCING THEM

			A	g e		rou					
	14	Yrs.	15	Yrs.		Yrs.		Yrs.	18		
	(N=	22)	(N=	32)	(N=4	43)	(N=		(N=2		
Most Frequent Themes	No.	%	No.	%	No. %		No.	%	No. %		
Demontal programs	19	86	27	84	36	84	30	80	22	88	
Parental pressure	16	73	28	86	34	79	33	87	23	92	
Aspiration	17	77	25	78	37	86	29	76	20	80	
Curiosity Guilt-remorse-shame	16	73	24	75	33	77	32	84	18	72	
	14	64	26	81	33	77	25	66	19	76	
Pressure from partner	15	68	20	63	24	56	10	26	20	80	
Rumination	11	50	24	75	25	58	21	55	15	60	
Fear-worry	17	77	21	66	21	49	25	66	9	36	
Departure from partner	12	56	20	63	29	53	24	63	8	32	
Death or illness of partner	8	36	14	44	23	53	17	45	18	72	
Illicit sex	10	45	15	47	20	47	18	47	11	44	
Loneliness	7	32	18	56	30	70	13	34	10	40	
Unrequited love		41	16	50	28	65	20	53	-		
Reunion with partner	9		17	53	16	37	25	66	7	28	
Occupational concern		32		63	17	40	16	42	7	28	
Death or illness of parent	11	50	20			33	20	53	18	72	
Franquility	8	36	18	56	14		25	66		1.6	
Economic pressure	6	27	18	56	13	30	17	45	10	40	
Succorance from parent	6	27	17	53	20	47				60	
Inadequacy	5	23	16	50	15	35	14	37	15	60	
Death or illness of child	12	56	10	. 31	13	30	13	34	15		
Parental concern	9	41	12	38	18	42	12	32	11	4	
Aggression towards partner	8	36	23	72	15	35	-	-	7	28	
Grief	15	68	13	41	10	23	16	42	9	30	
Cuckold	7	32	14	44	11	26	14	37	6	24	
Generalized restriction	-	-	10	31	12	30	15	39	_		
Contentment with partner	-	-	16	50	13	30	12	32	11	4	
Retribution	6	27	16	50	-	-	15	39	-		
Aggression towards environmen	t -	-	12	38	18	42	10	26	8	3	
Jealousy (unspecified)	-	_	10	31	15	35	20	53	-		
Suicide	6	27	12	38	13	30	-	***	-		
Inconsequential sadness	10	45	12	38	_	-	_	-	10	4	
Departure of child from paren	ts 9	41	11	34	-	-	10	25		1	
Retirement	-	-	-	-	_	-	9	37	9	3	
Seduction	-	-	10	31	-	-	-	-	7	2	
Jealousy of partner	8	36	12	38	-	-	-	-	-		
Self-pity	_	_	10	31	-	-	-	-	6	2	
Aggression from parents	10	45		-	_	_	_	***	_		
Aggression from impersonal	10	10									
source	-	-	-	-	-	-	-	-	9	3	
Exhaustion	-	***	-	_	-	-	-	-	5	2	

TABLE 9

RANK ORDER OF THE MOST FREQUENT THEMES FOR EACH GROUP

8	Total	Total	A	ge G	roup	S	
Theme	Fre- quency	Rank Order	14 Yrs.	15 Yrs. (N=32) Rank	16 Yrs. (N=43) Rank	17 Yrs.	18 Yrs. (N=25) Rank
Parental pressure	269	1	1	1	1	2	2
Aspiration	231	2	2	2.5	2	3	1
Curiosity	213	3	4	4	4	1	3
Guilt-remorse-shame	200	4	3	2.5	3	4	4
Pressure from partner	144	5	10.5	7	5	6.5	5
Rumination	133	6	6	5	9	11	6
Fear-worry	128	7	7.5	6	12.5	9	9
Death or illness of partner	120	8.5	10.5	10	7	9	14
Departure from partner	120	8.5	5	8.5	10.5	9	17
Illicit sex	104	10	7.5	22	12.5	17	7.5
Loneliness	100	11	13.5	21	10.3	14	12
Unrequited love	98	12	24.5	16	6	19	20.5
Reunion with partner	95	13	16.5	16	8	12	35
Occupational concern	93	14	21.5	13	19.5	6.5	28
Death or illness of parent	91	15	12	11	17.5	15.5	24
Tranquility	90	16	33.5	13	17.5	13	7.5
Economic pressure	82	17	24.5	13	26.5	5	35
Succorance from parent	81	18	33.5	16	14	15.5	17
Inadequacy	78	19	33.5	18.5	21	19	10
Parental concern	76	20.5	16.5	34	16	24	17
Death or illness of child	76	20.5	13.5	34	23	24	11
Aggression from partner	68	22	19	8.5	19.5	34	28
Grief	55	23	9	25.5	33.5	24	20.5
Cuckold	51	24	27	23.5	33.5	22	28
Generalized restriction	49	25.5	33.5	31	24.5	19	35
Contentment with partner	49	25.5	33.5	20	26.5	34	14
Retribution	48	27	24.5	18.5	33.5	21	35
Aggression towards environment	47	28	33.5	28	15	34	28
Jealousy (unspecified)	46	29	33.5	34	22	26	35
Suicide	43	30	21.5	23.5	24.5	34	35
Inconsequential sadness	41	31	19	25.5	33.5	34	14
Departure of child from parents	40	32	19	28	33.5	27.5	35
Retirement	26	33	33.5	37.5	33.5	27.5	20.5
Seduction	24	34.5	33.5	31	33.5	34	24
Jealousy of partner	24	34.5	24.5	28	33.5	34	35
Self-pity	23	36	33.5	31	33.5	34	28
Aggression from parent	13	37	15	37.5	33.5	34	35
Aggression from impersonal source		38	33.5	37.5	33.5	34	20.5
Exhaustion	10	39	33.5	37.5	33.5	34	24

The above three tables show that also as far as the variable of themes is concerned our 5 age groups make up a homogeneous population.

Table 7 shows that the most frequent themes were almost equally frequent for all five groups. The differences in the average production of each theme per individual in each group are negligible. This is especially true of the first 21 themes. Some intergroup differences occurred in the remaining 18 themes particularly the very last ones where it was only for one or two age groups that the frequency of the themes exceeded the 3% cutting point and were therefore included in the table.

Table 8, showing the proportion of individuals in each age group contributing each theme, also confirm our so far tentative findings that the five age groups actually make up a homogeneous population. Although some odd significant differences could be observed here and there, yet these differences could be within the bounds of chance. The overall picture is the same as that in Table 7 with no systematic differences occurring as a function of age.

That the most frequent themes were equally shared by the different groups is very obvious from Table 9 which showed the rank orders of the themes for each group. The first four most frequent themes viz., parental pressure, aspiration, curiosity, and guilt-remorse or shame, occupied the first 4 ranks for all the five age groups, though not exactly in the same order. As we move down the list, some differences begin to show in rank order between the different groups until we get to the end of the list where the last 10 themes again occupy almost the same rank orders with one exception. Aggression from parents which ranks 37.5, 33.5, 34 and 35 for age groups 15, 16, 17 and 18 respectively, ranks 15 for the 14 year

olds. A possible explanation could be that being younger, this age group was more prone to physical punishment by their parents, which they in turn projected into their stories.

Tables 7, 8 and 9 show that parental pressure takes the lead among the 39 most frequent themes. It is clear that there are no intergroup differences in the average productivity of this theme. Table 9 shows that parental pressure has the highest total frequency and has the first place in the total rank order. For the various age groups, it ranks first for the 14, 15, and 16 age groups, and second for the 17 and 18 age groups. It is interesting to point out here that Eron also found parental pressure to have the highest total frequency for his 150 Ss. (126)

Pressure from parents was scored whenever parents or parental figures in the stories were perceived as interfering, checking disapproving, disagreeing with, quarreling with and "unduly influencing their child." (127) This theme occurred on almost all the cards although certain cards seemed to stimulate it more than others. The card by card analysis showed it to be elicited most frequently in response to card 12F. The old woman in the picture was described as exerting pressure on the younger woman. Table 10 shows the main themes or the themes which occurred most frequently on each of the 12 cards as well as the proportion of Ss contributing them.

⁽¹²⁶⁾ Eron, L. A normative study of the TAT, op.cit., 14.

⁽¹²⁷⁾ Ibid., 34.

TABLE 10

RANK ORDER OF MAIN THEMES AND THE PROPORTION OF Ss CONTRIBUTING THEM IN EACH AGE GROUP

					A g	e	G r	0 1	р		
Card	Main Themes		Yrs. 22)		Yrs. 32)		Yrs. =43)		Yrs. =38)		Yrs. 25) %
1	Aspiration	1	44	1	34	1	28	1	42	1	40
2	Aspiration	1	32	1	31	1	40	1	45	1	49
3GF	Guilt-remorse-shame	1	32	1	25	1	25	1	34	1	24
4	Pressure from partner	5	17	1	37	1	51	1	56	1	52
5	Curiosity	1	41	1	40	1	42	1	55	1	52
SGF	Pressure from partner	2	28	1	36	1	25	4	9	1	33
BGF	Aspiration	ı	33	2	22	1	25	3	21	1	32
GF	Curiosity	1	33	1	46	1	47	1	48	1	36
12F	Pressure from parent	1	33	1	32	1	35	1	20	1	44
L3MF	Guilt-remorse-shame	ı	35	2	37	2	34	1	39	1	44
L6	Tranquility	4	12	1	30	2	14	1	26	1	28
18GF	Death or illness of child	1	33	1	25	1	21	1	19	1	28

The results in Table 10 are an additional evidence that our five groups age/actually make up a homogeneous population. The main themes on each of the 12 cards are exactly the same for all the groups with only a few negligible exceptions occurring on cards 4, 6GF, 8GF, 13MF and 16.

The parental pressure besides its being the leading theme in total frequency and the main theme in card 12F, it had the second position after

aspiration in card 1. Eron's results were very similar; in card 1, parental pressure was the main theme and aspiration had the 3rd position. (128) In the present study aspiration was first and parental pressure second in rank order on the same card. In card 12F parental pressure which ranked first for our Ss had a second position for Eron's Ss.

In the case of card 12F, most of our subjects contributed stories in which the old woman was trying to convince the younger one to "marry someone she did not love," or was trying to "force her to do something she did not want to do." "A very disgusting picture. An evil woman is trying to convince the young girl to do a bad thing. The girl is hesitating..." wrote an 18 year old girl.

In card 1, parental pressure took the form which is typically illustrated in the excerpt from a story written by a 14 year old: "This boy has been influenced by his parents to take up learning the violin.

After many months, he cannot practice any more. Now he is just miserable at the idea of playing it." However, in this card aspiration was the leading theme and the boy "is dreaming of becoming a great musician one day."

Aspiration ranked second in total frequency of occurrence in all 12 cards, and was the main theme in cards 2 and 8 GF in addition to card 1. In Eron's study aspiration also ranked first in card 2, but had the second and third positions respectively in cards 8GF and 1. (129)

In card 2, the girl who was identified as a student by 79% of our total sample was going to school "to become educated and famous to help

⁽¹²⁸⁾ Eron, L. Responses of women to the TAT, op.cit., 277.

⁽¹²⁹⁾ Ibid.

her poor parents who are farmers." In card 8GF the woman is "dreaming of her future and of the days when she will work in her own home instead of being a servant."

Curiosity ranked third in total frequency. Again, certain cards elicited this theme more than others. Such cards were 5 and 9GF where curiosity was the main theme. In Eron's study, curiosity also ranked first in card 5 and second in card 9GF. (130) The woman standing behind the tree in card 9GF "is spying on her friend to see where she was going."

The fourth total rank position and the leading theme in cards 3GF and 13MF was guilt, remorse, and shame. In the study by Eron on the responses of women to the TAT this theme had the fifth rank in card 3GF and the second in card 13MF. (131) In the case of this study, the theme was produced by our subjects whenever a figure in the stories felt that he or she did something wrong. A child felt guilty and sorry for having misbehaved. A husband or wife was guilty for having wronged his or her partner.

But guilt, remorse and more often shame, were most frequently connected with illicit sex by our subjects. In response to card 3GF, which depicts a young woman with her right hand covering her face while trying to push open a door with her left hand, a 17 year old girl gave the following story:

"She is very sad, she is crying. She discovered that she is pregnant and she is regretting what she has done and is afraid of admitting this to her parents."

^{(130) &}lt;u>Ibid</u>.

⁽¹³¹⁾ Ibid. 278.

In response to card 13MF, a 16 year old girl wrote: "This is an angry man, he is angry for what he has done. He feels guilty and regrets what he has done but it is too late to regret. He has already ruined his future and the future of his girl friend."

A third theme which was tied up with illicit sex and guilt, was suicide. Of a total frequency of 4%, suicide occurred 19 times as a consequence of illicit sex. It was always the girl who committed suicide upon finding herself pregnant or upon "losing her virginity". A 14 year old responded with the following story which is a typical illustration of a number of such stories contributed by subjects in the various age groups.

This man loved this girl but after sleeping a whole night with her, he changed his mind about being in love with her, he woke up early and prepared to leave while she was still asleep. He went away and left her very miserable. But after a month the girl got pregnant and it showed the people mocked and laughed at her, so she became fed up of life and killed herself.

Of the 104 illicit sex themes produced by our 160 subjects, 94 were made in response to card 13MF. An interesting observation to be made here is that 69 of these 94 instances, illicit sex was described as rape rather than just extra- or pre-marital sex. This phenomena could perhaps be better understood in the light of the middle eastern system of values and standards of morality. A very high value is placed in the Middle East upon female chastity before marriage. "Loss of chastity in a girl is still viewed, in all classes and communities, as the greatest misbehavior to be punished by her father or brothers; the penalty varies from severe disgrace to banishment and even death in some traditional communities." (132) Hence, in

⁽¹³²⁾ Berger, M. The Arab world today. London: Weidenfeld and Nicolson, 1962, p. 119.

the stories our subjects gave in response to card 13MF, the unmarried girl having sex relations was, more often than not, taken by force rather than willingly taking part. Suicide, the theme mentioned above as being tied up with illicit sex, was the natural consequence of the fear of punishment and disgrace.

Going down the list of the most frequent themes, we hardly find systematic intergroup differences, which further suggests that our five age groups are really drawn from the same population in so far as TAT stories analyzed according to this methodology are concerned. As for the levels of interpretation, Table 11 shows all the 9 levels occurring on all the 1920 stories with their average production per subject in each age group.

TABLE 11

AVERAGE FREQUENCY OF LEVELS OF INTERPRETATION

			Age	Group	S	
Levels	14 Yrs. (N=22) Av.	15 Yrs. (N=32) Av.	16 Yrs. (N=43) Av.	17 Yrs. (N=38) Av.	18 Yrs. (N=25) Av.	
Symbolic	.592	1.335	1.000	.746	1.250	
Descriptive	.917	1.343	.654	.604	1.000	
Autobiographical	.542	.664	.576	.441	.667	
Alternate themes	.592	.292	.277	.137	•500	
Unreal	.249	.259	.124	.144	.233	
Abstract	, a	.347	.137	-	.432	
Comments	.192	-	.052	.231	.250	
Fairy Tale	.275	.092	.074	.066		
Rejection		.155	.096	.110	.233	

Once more, our subjects seem to make up a homogeneous population.

Symbolic stories were the most frequent for all age groups except age group

14 which produced descriptions most frequently. Descriptions were second in

rank of frequency for the remaining groups. Although some intergroup

differences could be found in the productions of these levels, yet these

differences are not at all systematic. The autobiographical level which

ranks third occurred mostly in card 16. The subjects who produced it told

stories about themselves and/or described themselves in a certain situation

which they liked to be in. Less homogenity, and a negligible one for that

matter, was found in the abstract, comments, rejections, and fairy tale levels.

The abstract level of interpretation was missing in the stories of the 14 and

17 year olds.

Systematic intergroup differences, though not significant, were found on the last two levels, viz., fairy tales and rejection. Fairy tales were not at all produced by the 18 year olds and their contribution seemed to increase with decrease in age, while on the other hand rejection increased with increase in age.

In sum then, the Thematic Apperception Test did not significantly differentiate among our five age groups with respect to the following variables: (a) identification of figures and the relationships between them, (b) themes, and (c) level of interpretation. Neither religious affiliation nor age affected the thematic and formal contents of the stories produced which meant that our 160 subjects were actually drawn out from the same population. This being the fact, it should then be reasonable to pool the data together and offer norms based on a sample of 160 normal Lebanese adolescent girls ranging in age between 14 and 18 years.

As in the case of the normative studies reviewed in an earlier chapter, particularly the studies by Eron, the particular themes produced were more a function of the cards themselves rather than of the classification of the subjects. (133)(134)(135)(136) Even when using groups of normal and clinical subjects of various classifications, Eron found the TAT to show that these groups made up a homogeneous population. The college girls and pregnant women also made up a homogeneous population, and Eron thus offered norms based on the total sample. (137) Only in the study by Ritter and Eron did the test significantly differentiate between the normal and the clinical groups; the non-normal groups producing more deviations than did the normal groups. (138)

The study carried out by Mauri on Japanese men and women of various age groups did significantly differentiate between the 25-64 year old subjects and those either above 64 or under 25 years - but then the age range used by Mauri was much greater than the one in the present study, which may account for the different results obtained. (139)

⁽¹³³⁾ Eron, L. A normative study of the TAT, op.cit.

⁽¹³⁴⁾ Eron, L. Responses of women to the TAT, op.cit.

⁽¹³⁵⁾ Eron, L. Frequencies of themes and identifications in the stories of schizophrenic patients and non-hospitalized college students, op.cit.

⁽¹³⁶⁾ Ritter and Eron, op.cit.

⁽¹³⁷⁾ Eron, L. Responses of women to the TAT, op.cit., 282.

⁽¹³⁸⁾ Ritter and Eron, op.cit., 157.

⁽¹³⁹⁾ Mauri, op.cit.

Although Wittenborn administered a different set of cards to male university students, yet some of his results were very similar to these in the present study. Particularly so were the conflicting attitudes towards parents, the resistance to authority, and the desire for emancipation expressed in the stories of the subjects in both studies.

As far as the question of the test reflecting the developmental processes in adolescence is concerned, the present study showed the TAT to be more a reflection of the middle eastern culture, of which Lebanon is a part, than of the developmental stages.

The attitudes of the subjects towards the family and the father figure in particular, are mixtures of submissiveness and rebellion. It is as if there are two fronts in the family with the daughter on one side and the parents on the other, opposing, checking and punishing her slightest misbehavior. Add to this their attitudes towards sex and the guilt and shame accompanying it and we have a typical representation of the general picture found in the Middle East as a culture area. This is no surprise considering the fact that Islam has been the most important single factor in determining the traditional position assigned to women all over the Middle East. (141)

It is a culture characterized by inequality of the sexes. Particularly in matters pertaining to moral standards. The fate of a girl is pretty much decided by her father or the males in her family without leaving much choice for her. In conclusion, and in the words of Pata, "the Muslim Middle East has been a man's world and its society a man's society, and these they remained to a large extent to this very day." (142)

⁽¹⁴⁰⁾ Wittenborn, op.cit.

⁽¹⁴¹⁾ Patai, R. Golden river to golden road. Philadelphia: University of Pennsylvania Press, 1962, p. 115.

⁽¹⁴²⁾ Ibid. p.116.

SUMMARY

Twelve selected TAT cards were administered to 160 Lebanese adolescent girls ranging between 14 and 18 years of age. The test protocols were then classified according to the religious affiliation of the subjects - Christians or Moslems, and according to the particular age groups - 14 through 18.

The purpose of the study was to detect any significant differences in specific response categories of the various age groups to the TAT, and to establish, if possible, TAT norms for Lebanese adolescent girls within this age range.

Eron's method of thematic analysis was employed and the stories obtained were analyzed for the following variables: (a) Identification of characters, (b) relationship of the figures to one another, (c) themes and, (d) level of interpretation. Only one variable was analyzed at a time for all the subjects.

Having found no significant differences between the results of the Christian and Moslem age subgroups, their data was added together and treated as that of one age group.

The analysis for the four variables mentioned above showed our five different age groups to make up a homogeneous population. In the identification of characters and their relationship to each other, a certain degree of perceptual distortion, mainly as sexual confusions were exhibited by our Ss. Although there was a slight tendency for the 14

year olds to produce more confusion than the other four groups, yet the difference was not found to be significant.

The thematic analysis and the analysis for levels of interpretation also confirmed that the five age groups were actually drawn from the same population. The most frequent themes and levels were produced almost equally by all the age groups. However, a few significant differences occurring unsystematically were occasionally found.

A comparison between the present study and that of Eron on the responses of American women to the TAT showed that the test cards presented both the American subjects and our Lebanese adolescent girls with similar stimulus values. Both the results of the analysis for the variable of identification of characters and the relationship of the figures to one another, and the thematic analysis showed this to be true. The "correct" identification and the perceptual distortions contributed by both groups were very similar. Sexual confusion, for example, occurred on almost the same cards for both American and Lebanese Ss. However, the test results did reveal several, more or less, unique "Lebanese female" trends.

Such trends were the attitudes of the daughters to their fathers or other figures of authority which were colored with fear and rebellion. These attitudes were clearly illustrated in the stories our subjects gave in response to card 6GF where the young woman and the older man were described as a father catching his daughter reading an immoral book or writing a letter to a boy, etc. Other trends were the attitudes of the Lebanese subjects towards pre-marital sex and the guilt and shame attached to it which often necessitates suicide as a solution.

In conclusion then, since the TAT did not significantly differentiate between the five age groups, then the data obtained from these groups which are presented in the tables included in this thesis could be viewed as tentative norms based on a sample of 160 Lebanese adolescent girls between 14 and 18 years of age.

APPENDIX A

CHECK LIST OF THEMES AND INTERPRETATION LEVELS*

- I. Disequilibrium (tension)
 - A. Interpersonal
 - Parent (includes parent substitutes such as older authority figures, etc.)
 - a. Pressure
 - b. Succorance
 - c. Nurturance
 - d. Aggression from
 - e. Aggression to
 - f. Departure
 - g. Concern
 - h. Incest
 - i. Death or illness of parent
 - i. Death or illness of child
 - k. Disappointment to
 - 1. Disappointment in
 - m. Filial obligation
 - n. Confession
 - o. Bad news
 - p. Good news **
 - q. Marriage
 - r. Collusion
 - s. Parental conflict
 - t. Lost
 - 2. Partner (wife, sweetheart, opposite-sexed peer).
 - a. Pressure
 - b. Succorance
 - c. Nurturance
 - d. Aggression from
 - e. Aggression to

- f. Departure from
- g. Concern
- h. Illicit sex
- i. Illicit sex with violence
- j. Death or illness of partner
- k. Disappointment to
- 1. Disappointment by
- m. Jealousy
- n. Competition
- O. Cuckold
- p. Decision
- q. Pursuit
- r. Seduction
- s. Unrequited
- t. Restraint
- u. Childbirth
- v. Surprise**
- Peer (like-sexed, approximately same age).
 - a. Pressure
 - b. Succorance
 - c. Nurturance
 - d. Aggression from
 - e. Aggression to
 - f. Desertion
 - g. Concern
 - h. Homosexuality
 - i. Death or illness of friend
 - j. Belongingness
 - k. Unappreciated by pears.
 - 1. Compitition
 - m. Hypnotism
 - n. Envy
 - o. Revenge

Continued on next page.

- p. Disregard for
- q. Bad influence
- r. Blackmail**

4. Sibling

- a. Pressure
- b. Succorance
- c. Nurturance
- d. Aggression from
- e. Aggression to
- f. Rivalry
- g. Concern
- h. Incest
- i. Death or illness of sibling

B. Intrapersonal

- 1. Aspiration
- 2. Inadequacy
- 3. Curiosity
- 4. Behavior disorder
- 5. Suicide
- 6. Moral struggle
- 7. Guilt-remorse-shame**
- 8. Drunkenness
- 9. Fear-worry**
- 10. Rumination
- 11. Occupational concern
- 12. Physical illness or death of central character
- 13. Retribution
- 14. Reminiscence, sad
- 15. Intra-aggression
- 16. Religion
- 17. Loneliness
- 18. Compensation
- 19. Vacillation
- 20. Acquisition
- 21. Exhaustion
- 22. Revenge
- 23. Sad
- 24. Hurt feelings
- 25. Jealousy
- 26. Self-pity
- 27. Resurrection
- 28. Homesickness
- 29. Grief

C. Impersonal

- 1. Economic pressure
- 2. Legal restriction
- 3. Generalized restriction
- 4. Aggression towards environtment
- 5. Aggression from
- 6. War
- 7. Escape from perilous environment

II. Equilibrium

A. Interpersonal

1. Parent

- a. Cooperation
- b. Resignation
- c. Idealization
- d. Reunion
- e. Fulfillment
- f. Contentment
- g. Ordinary familial activity
- 2. Partner
 - a. Admiration
 - b. Cooperation
 - c. Contentment
 - d. Reunion
 - e. Ordinary activity
- 3. Peer
 - a. Cooperation
 - b. Congeniality
 - c. Reunion
 - d. Approbation
 - e. Exhibition
 - f. Ordinary activity
- 4. Sibling (no II themes found in original sample of 150 cases).

B. Intrapersonal

- 1. Self esteem
- 2. Tranquility

- 3. Reminiscence, happy
- 4. Retirement
- 5. Occupational satisfaction
- 6. Resignation to lot
- 7. Ordinary activity

C. Impersonal

- 1. Favorable environment
- 2. Rescue

III. Level of interpretation

- A. Symbolic
- B. Abstract
- C. Descriptive
- D. Unreal
- E. Fairy tale
- F. Central character is not in picture.
- G. Autobiographical
- H. Continuations
- I. Alternate themes
- J. Comments
- K. Denial of a theme
- L. Rejection
- M. Peculiar verbalizations
- N. Confused
- O. Includes examiner in story
- P. Absolutely no connection of story to picture
- Q. Humorous

^{*}Eron, L. A normative study of the Thematic Apperception Test, op.cit., 34-36.

APPENDIX B-1

IDENTIFICATIONS OF CHARACTERS AND THEIR RELATIONSHIPS TO ONE ANOTHER BY EACH RELIGIOUS GROUPS

		Religi	
		Christians	Moslems
Card	Identification and Relationship	(N = 80)	(N = 80)
varu	Identification and netationship	Т	1
2	Father-mother-daughter	15	23
	Husband-wife-unrelated girl	6	3
	Girl-unrelated farmers	24	33
	Girl-boyfriend-boy's mother	8	6
	Only girl specified	8	7
	Only 2 characters specified	10	6
	Girl-student	57	70
GF		42	56
TUK	Young woman Wife	15	
	Widow		10
	Widow	6	3
4	Married couple	23	31
	Unmarried couple	47	35
	Nurse-patient	2	4
	Brother-sister	6	2
5	Mother	38	42
	Wife	20	15
	Old woman	7	6
GF	Husband-wife	20	19
	Unmarried couple	20	23
	Father-daughter	12	16
	Employee-boss	6	10
	Woman burglar	9	9
GF	Daughter	9	13
	Women	32	33
	Servant	15	10
	Widow	13	15
	Painter's model	7	3
GF	Two girl friends	40	23
Ma.	Two unrelated girls	10	18
	Two rivats	13	14
	Two sisters	10	
	One girl only specified	1	18 4
2F		15	
N-T.	Old woman-young woman (unrelated) Mother-daughter	13	22
	Same woman		
	Girld-witch or fortune teller	9	16 6
3MF			
OLL	Unmarried couple . Married couple	30 29	40
	Brother-sister		34
		4	3
	Mother-son or father-daughter Patient-doctor	4	6
0013			
8GF	Two women (unrelated)	8	11
	Mother-daughter - 72 -	20	32

REFERENCES

- 1. Abt, Lawrence, and Bellak, Leopold. Projective Psychology. New York:
 Alfred A. Knopf, 1952.
- 2. Balken, Eva.R. Thematic Apperception. J. Psychol., 1945, 20, 189-197.
- 3. Bell, John. Projective techniques. New York: Longmans Green, 1951.
- Bellak, Leopold. An experimental investigation of projection. Psychol. Bull., 1942, 39, 489-490.
- Bellak, L., Livinger L., & Lipsky, E. An adolescent problem reflected in the TAT. J. clin. Psychol., 1950, 6, 295-297.
- 6. Berger, M. The Arab world today. London: Weidenfeld and Nicolson,
- 7. Briggs, Dennis. A modification of the TAT for naval enlisted personnel (N-TAT). J. Psychol., 1954, 37, 233-241.
- 8. Caudill, W. Psychological characteristics of acculturated Wisconsin Ojibwa children. Amer. Anthrop., 1949, 51, 409-427.
- 9. Dana, R. Clinical diagnosis and objective TAT scoring. J. abnorm. soc. Psychol., 1955, 50, 19-24.
- 10. Dana, R. Cross validation of objective TAT tests. J. consult. Psychol., 1956, 20, 33-36.
- Dana, R. Selections of abbreviated TAT tests. J. clin. Psychol., 1956, 12, 36-40.
- Eron, L. Frequencies of themes and identifications in the stories of schizophrenic patients and non-hospitalized college students. J. consult. Psychol., 1948, 12, 387-395.
- 13. Eron, L. A normative study of the TAT. Psychol. Monog., 1950, 64, No. 9 (Whole No. 315).
- Eron, L. Responses of women to the TAT. J. consult. Psychol., 1953, 17, 269-282.
- Eron, L., and Ritter, A. A comparison of two methods of administration of the TAT. J. consult. Psychol., 1951, 15, 55-61.
- 16. Fry, F.A. A normative study of the reactions manifested by college students and by state prison inmates in response to the MMPI, the Rosenzweig P-F study, and the TAT. J. Psychol., 1952, 34, 27-30.

- 17. Henry, W. The analysis of fantasy. New York: John Wiley and Son, Inc., 1956.
- 18. Holt, R. The Thematic Apperception Test. In Anderson, H., and Anderson, G. (Eds.) An introduction to projective techniques. New York: Prentice-Hall, Inc., 1951.
- 19. Lindzey, Gardner. Projective techniques and cross-cultural research.
 New York: Appleton Century Crofts, Inc., 1961.
- 20. Mauri, F. A normative study of the TAT chiefly on emotional tone, outcome and shift. Jap. J. Psychol., 1960, 21, 83-92 (Abstract).
- 21. Melikian, L. The use of selected TAT cards among Arab university students: A cross-cultural study. J. soc. Psychol., 1964, 62, 3-19.
- 22. Morgan, C., and Murray, H. Thematic Apperception Test. In Murray, H. (Ed.) Explorations in personality. New York: Oxford University Press, 1938.
- 23. Murray, H. Manual for the Thematic Apperception Test. Cambridge: Harvard University Press, 1943.
- 24. Patai, R. The Middle East as a culture area. Middle East J., 1952, 6, 1-21.
- 25. Patai, R. Golden river to golden road. Philadelphia: University of Pennsylvania Press, 1962.
- 26. Ritter, A., and Eron, L. The use of the TAT to differentiate normal from abnormal groups. J. abnorm. soc. Psychol., 1952, 47, 147-158.
- 27. Rosenzweig, S., and Fleming, E. Apperceptive norms for the Thematic Apperception Test: II. An empirical investigation. J. Person., 1949, 17, 483-503. (Abstract)
- 28. Shneidman, E. Thematic test analysis. New York: Grune and Stratten, 1951.
- 29. Singer, M. A survey of culture and personality theory and research.
 In Kaplan, B. (Ed.) Studying personality cross-culturally.
 New York: Row, Peterson and Company, 1961.
- 30. Stein, M. The Thematic Apperceptive Test. Cambridge, Mass.:
 Addison-Wesley Publishing Co., Inc., 1955.
- 31. Tomkins, S. The Thematic Apperception Test. New York: Grune and Stratton, 1947.

- 32. Weinberg, Kirson. Culture and personality. Washington, D.C.: Public Affairs Press, 1958.
- 33. Wittenborn, R.J. Some Thematic Apperception Test norms and a note on the use of the test cards in the guidance of college students. J. clin. Psychol., 1949, 5, 157-161.
- 34. Wyatt, F. The scoring and analysis of the TAT. J. Psychol., 1947, 24, 319-330.