# THE UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

THE TEMPORAL ORIENTATION OF THE JUVENILE DELINQUENT

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THE TEMPORAL ORIENTATION OF THE JUVENILE DELINQUENT

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#### THE TEMPORAL ORIENTATION OF THE JUVENILE DELINQUENT

#### CHAPTER I

#### INTRODUCTION

In general, much has been learned about juvenile delinquency in the past fifty years. Voluminous literature dealing with the causes of delinquency has come from the fields of sociology, psychology, anthropology, ecology, and psychoanalysis. But there has been a tendency for each field to relegate the others to a lesser position or to ignore the findings from other areas. For example, there are a number of studies typified by the early work of Bonger (4) which stress economic conditions as the sole source of delinquency. On the other hand, a great many other studies, similar to and including the pioneer works of Shaw (22), Healy (12), and Glueck (9), have emphasized the relationship of neighborhood and particular cultural conditions to antisocial behavior. In contrast, Lombroso (15) early stressed the innate origin of criminality. In the 1930's, Aichhorn (1) first applied psychoanalytic principles to the study of juvenile delinquency and his findings have been supplemented in later years by Friedlander (8), Lindner (14), and, recently, by Bettelheim

(3), and Red1 and Wineman (21). The tendency for most of these writers to attribute causation of delinquency to one factor or condition while minimizing or ignoring others springs from their specialization in one particular method or science. It is believed, however, that a unification of approach either through core research or by individual application of principles from one area to another is now a necessity. For this reason, it is encouraging to note the recent effort on the part of the Gluecks (10) to make a comprehensive study of delinquency using an eclectic approach.

Without doubt, juvenile delinquency has become a severe and pressing problem in modern psychopathology. symptoms and etiology have been discussed in a great many articles but often with little real agreement or even pragmatically useful results. However, the essence of the varibus definitions advanced seems to rest on two general symptoms: impulsivity and marked hostility turned outward and/or inward. It seems appropriate, therefore, to make a closer scrutiny of the delinquent individual who, aside from being characterized very frequently as impulsive and hostile, is btherwise much of an enigma. Perhaps it may be enlightening to investigate more closely what is already known about the delinquent in an effort to understand the ramifications of these particular known characteristics. Therefore, an investigation of the juvenile delinquent, one so frequently characterized as impulsive, seems warranted.

Most writers agree that the factor, impulsivity, by which delinquents are so often described involves qualities in the affective reactions of a person which permit inner drives, feelings, and urges to take their course and thus lead to certain actions more or less regardless of the consequences and of the objective requirements of the situation. Those who commit impulsive acts are emotionally labile persons who react vehemently with very little control. After a study of the characteristics of delinquents, the Gluecks (10) state:

It becomes evident that they /the delinquents/ are more inclined to impulsive and non-reflective expressions of their energy drives than are the non-delinquents. The delinquents are more inclined to the immediate indulgence of their appetites.

They act without deliberation and respond in overt action quickly in a situation.

Inherent in this characteristic of impulsivity is the factor of temporal orientation of action, for delinquents do not seem to inhibit themselves or their actions, or to renounce present gratification for future gains. Instead, they seem to act without deliberation or hesitation. For example, the delinquent will frequently and impulsively commit an antisocial act such as stealing a car without regard for future consequences. Apparently the future is too indefinite, vague, diffuse a region and its rewards and punishments are too uncertain to have a great deal of socially acceptable motivating value. This study is an attempt to examine the

perceived relationship of the delinquent individual and his goals in time. How far in the future is the time span with which the delinquent is concerned? What is the crucial time limit during which he will frustrate himself in order to attain a goal? Does he relate his behavior primarily to the far future, the immediate future, the present, or the past? How real or meaningful to him is the future? It would be expected that these temporal orientations be demonstrated in the techniques with which the parents of the delinquents train their children. One might speculate that an individual raised in an environment where reward and punishment administered by the parents were unpredictable and inappropriate a large part of the time would be especially likely to demonstrate impulsive behavior in later years. He would not have learned to act in terms of future reward and would, in all probability, have learned the opposite. For him the future would be an unpredictable region and to work in terms of it would be nonsensical. Thus, it is predicted that the impulsivity of delinquents should be evidenced by the brevity of their temporal orientation. If this is the case, this orientation in a world that is primarily run on longer sequences might well produce conflicts, failures, and resulting hostility.

A study of the time orientation of delinquents who are generally characterized as impulsive is important for it is directly related to theory concerning the development of a moralistic awareness or a realization of socially prescribed

An individual must possess a certain degree of behaviors. this awareness if he is to curtail his actions and renounce present pleasure for future gains. These standards of right and wrong are built up out of the child's image of the parents in his early years, for it is they who reward him for selfcontrol and punish him for transgressions. The individual in later years reacts in situations as he has perceived his parents reacting and as he has learned from them to react. Murray characterizes the individual's moralistic awareness as "the aggregate of all the internalized or imaginatively constructed figures of moral authority functioning as conscious or unconscious images to inhibit or otherwise modify social behavior" (19, p. 76). He makes the point that "This instituted composite of parental and cultural influences corresponds roughly to the system of rewards and punishments administered during childhood" (19, p. 76). Whether or not impulsive, antisocial behavior is exhibited during later years may well be determined by the manner of parental administration of rewards and punishments during early childhood.

Dooley (5) has indicated that the individual's time orientation (whether he is a delinquent or not) has relevance to self theory, for the self is felt to be more consistent as it is recognized to be continuous and persistent over long periods of time. The most highly integrated persons are those who can review their lives over the total span and see

themselves in the present as the product of earlier trends.

A sense of continuity of the present with the past is necessary for ego integrity. Dooley maintains:

In order to bring about organization of the ego, integration of sensations and of experience is essential, otherwise activity cannot be directed toward any given end. Any disturbance of the sense of time may bring a sense of loss of integrity (5, p. 19).

It is felt that the individual's temporal orientation is one major ego attribute by which accrued experiences are structured and assimilated. The most important of these experiences, those with the most personal reference, become the anchorages of the individual's basic identity. According to Sherif,

...disruption of these anchorages, or their loss, implies psychologically the breakdown of his identity. Such a disruption or loss of the individual's moorings is accompanied by anxiety or insecurity. Consequently, struggles to establish some sort of new moorings occur, for anchoring one's ego securely in some setting is a psychological necessity (23, p. 105).

If a faulty development of one's temporal orientation occurs or if there is a lack of stable anchorages, it is likely that the individual will experience some loss of identity, increased anxiety, and insecurity. Sherif and Harvey further elaborate this point by stating:

Or when, under critical circumstances, the stability of our physical and social bearings are disrupted with the subsequent experience of not being anywhere definitely, of being torn from social ties of belongingness, or when nothing but a future of uncertainty or blockages is experienced as our lot, the by-product is the experience of insecurity. The individual tossing in such a state of anxiety or insecurity flounders all over in his craze to establish for himself some stable anchorages (24, p. 280).

Aside from the literature which deals with the subject of the perception of time based on duration and succession of events in the external world, there has been little written concerning the subjective meaning and use of time in a psychological sense. Bergler (2) has discussed the inability of the neurotic to wait because enforced waiting is conceived as a denial of love. Dooley (5) has pointed out that with the neurotic, any lapse of time for which he has no memory, even a lapse of only a few minutes, is a signal for distressing anxiety. It means to them a dangerous break in the continuity of consciousness, although no serious consequences are apparent. The use of time as a defense has been well recognized by Dooley. For example, she points out that the adult obsessive separates the painful past from the menacing present by the use of consciously directed time intervals. In children, the ability to tell time is developed at approximately the ages of six or seven, although no great awareness of time comes until early adolescence. Dooley states:

Since the principal defensive function of the concept of time is that of saving the ego from being overwhelmed by instinctual drives and from losing its integrity, the chronological place of this type of defense must be in adolescence. It is in adolescence that the great fear of the instincts as such arises, and here that intellectual activities become the natural means of defense (5, p. 14).

In another vein, Mowrer and Ullman (17) have demonstrated experimentally that the tendency for a given action to be inhibited or perpetuated is influenced not only by the nature of the consequences of that action but also by the temporal order or timing of these consequences. That is, they demonstrated with rats that if an immediate consequence is slightly rewarding, it may outweigh a greater but more remote punishing consequence. Conversely, if an immediate consequence is slightly punishing, it may outweigh a greater but more remote rewarding consequence. But concerning human beings, Mowrer and Ullman state:

The prodigious capacity found in normal adult human beings for using symbols, i.e., for 'reasoning,' seems to have what is perhaps its greatest utility in enabling the individual to bring the remote as well as the immediate consequences of a contemplated action into the psychological present and thereby compare and balance the probable (anticipated) rewards and punishments in a manner which enormously increases the chances that the resulting behavior will be integrative. Such behavior is properly termed rational, in contradistinction to the pre-rational behavior seen in lower animals. Neurotic and criminal behavior may be said to represent either a fixation at or a regression to the pre-rational level of functioning (17, p. 89).

For the most part, the only pertinent literature dealing with the subject of temporal orientation comes primarily from the field of sociology and the investigations of the various levels of social class. Out of the vast amount of data collected, many important implications have been extracted and reported. However, there are always new implications to be explored and tested. Erickson (7) termed this new variable of time orientation the "collective-ego-spacetime." It concerns the perceived relationship of the individual and his goals in time. Leshan (13) tested the hypothesis that there are different temporal goal orientations in the various levels of social class. He attempted to determine

if individuals of high and low socio-economic class related their behavior primarily to the past, present, immediate future, or far future. The hypothesis which he tested and confirmed is that there are different temporal goal orientations in the various levels of social class. For example, in the upper class, the individual tends to see himself as part of a sequence of several or more generations and the temporal orientation is backward to the past. In the middle class, the temporal orientation is toward the future and is one of longer tension-relief sequences than would be expected in the lower class. As the individual grows older, he plans further and further into the future and acts on these plans. As an adult, he may start planning for retirement. In this class, one eats at regular "clock" hours. One learns to inhibit activity leading to the relief of a basic tension such as food-getting behavior until a watch shows it is time to eat. But in the lower class the orientation is one of quick sequences of tension and relief. One does not frustrate oneself for long periods or plan action with goals far in the future. The future generally is an indefinite and vague region and its rewards and punishments are too uncertain to have a great motivating value. In this social class one eats when hungry, providing there is food available. There are no regular meal Leshan points out that various books and articles on social class demonstrate these expectations, and he is also able to confirm these hypotheses experimentally. He found a

significantly greater time span of action in stories told by middle class children as compared with the time span in stories told by lower class children.

In short, it is believed that the concept of temporal orientation is an important characteristic in the lives of individuals, particularly delinquents, for it reflects their past parental influences as they have affected one aspect of their character structure, the degree of their moralistic awareness; to a certain extent, it reflects one's present adjustment, one's ego integration; and it reflects the individual's awareness of the future, his goals and aspirations. It should be possible to demonstrate the existence of differences in temporal orientation experimentally when delinquents are compared with non-delinquents. Furthermore, it is expected that it may be possible to demonstrate that a difference in temporal orientation is not merely a function of social class affiliation.

#### CHAPTER II

#### STATEMENT OF THE PROBLEM

From the initial investigation of Leshan it was demonstrated that differences in temporal orientation could be observed in divergent social classes. The present study, in contrast, is concerned with the problem of the demonstration and analysis of temporal orientation in relation to types of persons rather than in relation to types of social class. pilot investigation using but a few subjects has suggested that this may well be possible. A significantly different time span of action in the stories told by delinquents as compared with non-delinquents was noted. In addition, it was observed that the orientation of the stories told by delinquents was primarily toward the present, whereas the nondelinquent group was more concerned with the past, present, and future in roughly equal proportion. It remains necessary to demonstrate this difference in temporal orientation more objectively, more conclusively, if possible, and in such a manner that it will be possible to analyze and characterize the temporal orientation of the two groups used in this study. In addition, it appears mandatory to determine whether

class to which individuals belong, or whether it is characteristic of delinquents regardless of their social class affiliation. It should be possible to demonstrate the existence of differences in temporal orientation experimentally. Therefore, the following hypotheses were tested:

- 1. It is expected that a considerable and significant difference in temporal orientation will be noted when individuals who are customarily characterized as impulsive are compared with others not so characterized. That is, the temporal orientation as evidenced by the time span of action in stories told by delinquent subjects should be of shorter duration than the time span of action in stories told by non-delinquents.
- 2. The temporal orientation of the stories told by the delinquent group will be <u>directed</u> toward the present while the temporal orientation of the non-delinquents should be directed more toward the future and the past.
- 3. It has been demonstrated in one experimental study that different social classes possess characteristically different temporal orientations. However, it is expected that variance in temporal orientation is not merely a function of social class affiliation and therefore it is postulated that there will be a significant difference between the temporal orientations of the delinquent and non-delinquent groups regardless of social class. That

- is, there should be a significant difference between the two groups even though they come from the same social class, whether middle or low.
- 4. A significant difference in temporal orientation should be noted when a comparison is made within the delinquent group between those who have a long history of serious antisocial behavior and those whose antisocial history is not so severe.
- 5. It is expected that the delinquents will be comparatively less able to think and relate about the past and future than will the group of non-delinquents.
- 6. It is further expected that the delinquents will be less able to relate or less verbose about the past and future than about the present. However, it is expected that the non-delinquents will relate about the past, present, and the future in equal proportion.

#### CHAPTER III

#### THE PROCEDURE OF THE STUDY

## The Subjects

A total of 42 persons served as subjects in this study, 21 male juvenile delinquents and 21 male high school students. The juvenile delinquent is defined as any child under the age of 18 years who deviates from the socially prescribed norms of conduct to the degree that he has been adjudged to be a violator of the law. In contrast, the nondelinquent high school group of subjects was selected because they had not given any indication by their past behavior in school of a tendency to come in conflict with the established laws.

The delinquent population was selected from the total group of boys who, during a one month period, had been adjudged by The Tulsa County Juvenile Court to be delinquent and who had been placed in detention by the Court at the Mohawk Boys' Home in Tulsa, Oklahoma. Almost without exception, the most frequently committed offense by the delinquents was car theft. Rarely, if ever, were there antisocial acts carefully planned. To the contrary, they were committed on the

spur of the moment in impulsive fashion. The following criteria were used in selecting the delinquent subjects:

- 1. They must range in age from 12 through 17 years.
- 2. They must be of Borderline Intelligence or above (I. Q. scores of 70 or above) as measured by the Otis Test of Intelligence.
- 3. Approximately one-half of the delinquent group must come from a low social class while the other half must be from a middle social class.

The non-delinquent population was selected from two of the large high schools in the city of Tulsa, Oklahoma. Selection of the boys in this group was dependent upon their close correspondence with the delinquent group in terms of their age, intellectual level, and social class standing or affiliation.

The mean age of the delinquent group is 14.52, while the mean age of the non-delinquent group is 14.48 years. Since the Otis Test of Intelligence is routinely administered to all pupils in the Tulsa Public Schools, it was possible to obtain an I. Q. score for each of the delinquent subjects. It was also possible to select suitable non-delinquents whose I. Q. scores were in close correspondence with those of the delinquent subjects. The I. Q. scores of the delinquent group ranged from 72 to 117 with a mean I. Q. score of 91.57. Similarly, the I. Q. scores of the non-delinquent group ranged from 72 to 119 with a mean I. Q. of 92.29.

The determination of social class affiliation was dependent upon where in the city of Tulsa the subjects live, the family income, and the type of occupation in which the father is employed. For example, if the family earned less than \$400 per month, if the father was an unskilled or semiskilled laborer, and if the family lived in a section of the city generally inhabited by families of a low socio-economic class, that boy was classified as a subject in the low social On the other hand, if the father earned more than class. \$400 per month as a skilled worker or better and lived in a higher socio-economic section of the city, that boy was clas+ sified as a subject in the middle social class. section of the city is populated by families in the lower middle, middle, and upper middle socio-economic classes. the other hand, it is known that the north and northwest sectors of the city are inhabited by families in the lower low, middle low, and upper low socio-economic classes. ledge as to the precise location of these two general social classes has been obtained from the Department of Attendance and Census of the Tulsa Public Schools which surveys the entire city each year. This department gathers information of a socio-economic nature as a part of the yearly census to determine the number of children who will be attending school the following year and the schools they will attend. it was possible to select the delinquent subjects so that 9 of them met the criteria necessary to establish them as coming from a middle social class or above while 11 delinquent subjects were classified as coming from a low social class. The middle and low social class non-delinquents were obtained from two city high schools--one in the south sector of the city and the other in the north part of the city.

In short, it was possible to match the non-delinquent with the delinquent boys so that there was a very close correspondence in age, I. Q. score, and social class affiliation. In addition, from the delinquent group, the 5 boys having the most severe delinquency records were selected out for comparison with 5 other delinquents having the least severe delinquency records. The delinquent group was sub-divided in this manner so that a comparison pertaining to severity of antisocial behavior could be made within the delinquent group. The basis for selection of the five most and least severely delinquent subjects was dependent upon the type of antisocial behavior, the date of the first delinquent offense, and number of antisocial offenses which had been committed by the delinquent boys. This information was obtained from the Court Clerk's office of The Tulsa County Juvenile Court.

# <u>Instrument</u> of <u>Measurement</u>

Selected Thematic Apperception Test cards were used as the stimulus material to elicit the stories by which temporal orientation was assessed and analyzed. Cards 5, 12M, 14, and 17 BM were selected because of their appropriateness as

stimuli for this age group of boys and because no definite time orientation is suggested by them. Murray describes these cards as follows:

- Card 5. A middle-aged woman is standing on the thresh-hold of a half-opened door looking into a room.
- Card 12M. A young man is lying on a couch with his eyes closed. Leaning over him is the gaunt form of an elderly man, his hand stretched out above the face of the reclining figure.
- Card 14. The silhouette of a man (or woman) against a bright window. The rest of the picture is totally black.
- Card 17BM. A naked man is clinging to a rope. He is in the act of climbing up or down (18, pp. 2-4).

Since the Thematic Apperception cards are a projective device customarily used in such a way that stories are told by the subject concerning the content of the pictures, this type of stimulus material is well suited for the purpose of revealing temporal orientation. The assumption is made in the use of this stimulus material that, in a relatively unstructured situation where subjects are simply asked to tell a story about the picture presented to them, individuals tend to project the world as they see it onto the stimulus.

### The Experimental Tasks

Each subject in the delinquent and non-delinquent groups was interviewed individually. The delinquent subjects were interviewed in a private office at the Mohawk Boys' Home, and the non-delinquent subjects were interviewed in empty classrooms at the schools. All the subjects were administered the following three tasks:

Task 1. Each S was seen individually by the E and the following information was obtained: his age, address, occupation of father and mother, if working, and family income per month. The E then stated:

This has nothing to do with the Court or the school. I am making a survey on the development of imagination and I would like you to tell me some stories so that I can get a measure of your imagination. Although I will write down your stories as you tell them to me, no one else will see what I have written. Now I want you to simply tell me a story. It makes no difference if the story is true or whether it concerns you or someone else. Just tell me a story. Go ahead when you are ready.

The S's story was recorded by the E. Then Task 2 was administered.

Task 2. For this task two Thematic Apperception Test cards, number 14 and number 17 BM, were shown to each S. The instructions for this task were as follows:

Now, I am going to show you several pictures. Take a good look at each one and then make up a story about the picture. Here is the first one. /E presents the first card. Tell me a story about this one.

The same procedure was followed for the second selected card or picture. The E recorded verbatum the response or the story which the S gave to each card. Then Task 3 was administered.

Task 3. For this task two different cards, number 12M and number 5, were shown to each S. The verbal instructions for this task are as follows:

Now, I am going to show you several more pictures as before, and again I want you to tell me a story about the picture. Then I will ask you a few questions about each picture. Take a look at this one and tell me a story about it.  $\sqrt{E}$  presents the first card, allows the S sufficient time to inspect it, and then records the

# S's story.7

card used in Task 3.

After the S had given his story in response to the card and it had been recorded by the E, the S was then questioned about the story which he had given with the following three questions: (1) "What is happening right now in this picture?"

(2) "What happened before or what led up to this situation?"

(3) "What will happen or what will the outcome be?" These questions, of course, are oriented toward the present, past, and future, respectively. The S's initial story and his responses to each of the three questions were recorded by the E. The same procedure was followed for the second selected TAT

The five stories which the S had given were then reviewed and the S was asked to classify each one according to whether he believed the action of the story occurred in the past, present, or future. He was also asked to estimate the time span of the action in the stories. That is, he was asked to estimate how much time elapsed between the beginning and the end of each story. In all instances, the judgments and estimates were made by the S and not the E.

It will be noted that Task 1 is the least structured of the three tasks while Task 3 is the most highly structured. This order of presentation of the tasks, from the unstructured to the structured, was necessary to avoid inducing in the subjects the idea that stories in the past, present, and future were desired. This order of presentation was designed to

prevent the development of a possible temporal orientation set.

Stories given in response to the three tasks by some of the non-delinquents and delinquents are to be found in the Appendix. They are fairly typical of the types of stories told by the subjects in each group. Because of the sheer weight and number, it is not possible to include in the Appendix all 210 stories given by the 42 subjects.

## Treatment of the Data

The 42 subjects, 21 delinquents and 21 non-delinquents, each told five stories. Quantitative indices of the temporal orientation of these 210 stories were obtained in the following three ways:

- 1. The report by the subjects of the time span of the action in each of their stories.
- 2. The report by the subjects of the temporal direction of each of their stories—that is, each subject's judgment of whether the action in the story occurred primarily in the past, present, or future.
- 3. The number of words given in response to the three questions which were designed to elicit elaboration concerning the past, the present, and the future on both of the TAT cards in Task 3.

These three types of data pertaining in general to temporal orientation are hereafter referred to as temporal span,

temporal direction, and temporal fluency, respectively. Comparisons in terms of these three temporal variables were made between the delinquent and non-delinquent groups, between the delinquents and non-delinquents from a middle social class as well as between those subjects in both groups from a low social class, and between the most and the least severely delinquent boys.

Temporal span. The usual tests of the significance of differences between groups are inappropriate with this type of data because the time span units of measurement ranged from seconds and minutes through several years. For this reason, the span of time was categorized so that the data would consist of frequencies of occurrence in each of four categories. These four categories are: less than one hour, one to twelve hours, twelve hours to fourteen days, and over fourteen days.

In order to determine whether the delinquent and non-delinquent groups were from the same population insofar as this categorized variable of temporal span is concerned, the Chi-square Test as described by McNemar (16) was employed. In those instances where expected frequencies were small (less than five), the more stringent level of significance, a P of at least .01, was adopted before deriving definite conclusions from the data.

Chi-squares were computed between the delinquents and non-delinquents of middle social class as well as between delinquents and non-delinquents of low social class in order

to determine if a difference in temporal span might be due to social class affiliation. Within the delinquent group, the Chi-square technique was employed to determine whether the five most severely delinquent boys were from the same population as the five least severely delinquent boys in regard to this variable.

Temporal direction. Chi-square was again the indicated statistic since these raw data are not numerical but are categorical data consisting of frequencies. This statistical technique was employed to determine whether the delinquent and non-delinquent groups were from the same population insofar as this variable of temporal direction is concerned.

Temporal fluency. In order to determine whether there was a significant difference between delinquents and non-delinquents, tests of the significance of the difference between mean differences were computed. As this <u>t</u> test is based upon the method of paired score differences, McNemar's (16, p. 226, Formula 92) test for significance of difference between correlated means was employed.

Within the delinquent group, the most severely delinquent quent boys were compared with the least severely delinquent boys on this variable. Means and sigmas for these two groups were computed and the significance of the difference between these means was determined by the <u>t</u> test for uncorrelated means as described by McNemar (16, p. 224, Formula 91).

The more stringent level of significance, a P of at least .Ol was adopted before drawing conclusions from the data.

#### CHAPTER IV

#### THE RESULTS

According to the first hypothesis, it is expected that the time span of action in stories told by delinquents will be of shorter duration than the time span of action in stories told by non-delinquents. The judgments made by the subjects concerning the time span of the action in their stories ranged from a few minutes to several years. This span of time was categorized into four units ranging from "Less than 1 Hour," through "Over 14 Days," as will be noted in Table 1.

TABLE 1
TIME SPAN OF ACTION IN STORIES TOLD
BY DELINQUENTS AND NON-DELINQUENTS

Groups	Less Than 1 Hour	1-12 Hours	12 Hours- 14 Days	Over 14 Days
Delinquents	71	15	10	9
Non-Delinquents	51	18	5	31
(df = 3)	(Chi-squa	re = 17.32)	(P = .00	l)

The Chi-square technique which was applied to the time span judgments made by the subjects in each group yielded a value

of 17.32 which is significant at the .001 level of confidence. It can be seen from an inspection of Table 1 that the delinquents much more frequently judged the time span of the action in their stories to be less than one hour than did the non-delinquents. On the other hand, the non-delinquents much more frequently judged the time span of the action in their stories to be over fourteen days than did the delinquents. It is clear, therefore, that this hypothesis is fully confirmed.

The second hypothesis predicts that the temporal orientation of the delinquent group will be <u>directed</u> toward the present while the temporal orientation of the non-delinquents, in contrast, should be directed more toward the future or the past. The judgments of the delinquent and non-delinquent subjects concerning each of the stories they had given on all three tasks were categorized as found in Table 2.

TABLE 2
TEMPORAL ORIENTATION OF SUBJECT'S STORIES
ON TASKS 1, 2, AND 3

Groups	Past	Present	Future
Delinquents	32	71	2
Non-Delinquents	30	49	26
(df = 2)	(Chi-square = 24.68)	(P = .0)	01)

A Chi-square was computed and a value of 24.68 was obtained. This value is significant at the .001 level of confidence.

It can be noted in Table 2 that the major proportion of delinquent's judgments were directed toward the <u>present</u> as predicted, and only two were directed toward the future. The non-delinquents, on the other hand, made many more <u>future</u> judgments and many less present judgments than the delinquents. Thus, this hypothesis is confirmed.

It has been postulated in the third hypothesis that there will be a significant difference between the general temporal orientation of the delinquent and non-delinquent groups regardless of social class affiliation. That is, a significant difference between the two groups should be noted even though they come from the same social class. To test this hypothesis, comparisons were made between delinquents and non-delinquents of <a href="Low social class">Low social class</a> on the variables of temporal span, temporal direction, and temporal fluency. Similarly, comparisons were also made between delinquents and non-delinquents of <a href="middle">middle</a> social class in terms of the variables temporal span, temporal direction, and temporal fluency.

In Tables 3 and 4 the comparisons between the delinquents and non-delinquents from a middle social class in terms of the variables temporal span and temporal direction can be noted. It is evident in Tables 3 and 4 that the hypothesis regarding middle class delinquents and non-delinquents is confirmed on the variables temporal span and temporal direction since Chi-square values of 14.98 and 9.56, respectively, were obtained. These values are significant at

the .Ol level of confidence.

TABLE 3

COMPARISON BETWEEN DELINQUENTS AND NON-DELINQUENTS FROM MIDDLE SOCIAL CLASS IN REGARD TO TEMPORAL SPAN

Groups	Less Than 1 Hour	1-12 Hours	12 Hours- 14 Days	Over 14 Days
Middle Class Delinquents	33	6	3	3
Middle Class Non-Delinquents	18	11	1	15
(df = 3)	(Chi-squa	re = 14.98)	(P = .01)	)

TABLE 4

COMPARISON BETWEEN DELINQUENTS AND NON-DELINQUENTS FROM MIDDLE SOCIAL CLASS IN REGARD TO TEMPORAL DIRECTION

Groups	Past	Present	Future
Middle Class Delinquents	13	30	2
Middle Class Non-Delinquents	16	18	11
(df = 2)	(Chi-square = 9.56)	(P = .01)	

Concerning the variable of temporal fluency, a  $\underline{t}$  test of the significance of the difference between mean difference scores for the delinquents and non-delinquents from a middle social class was computed. The obtained  $\underline{t}$  value of 4.20 with eight degrees of freedom is significant at the .01 level of confidence. Thus, the hypothesis is also supported by this

variable as well as by temporal span and temporal direction. It seems clear that there is a real difference in the general temporal orientation between the delinquents and non-delinquents from a middle social class.

In an effort to determine if a difference in general temporal orientation also existed between delinquents and non-delinquents from a low social class similar statistical techniques were employed as will be noted in Table 5.

TABLE 5

COMPARISON OF DELINQUENTS AND NON-DELINQUENTS FROM LOW SOCIAL CLASS IN REGARD TO TEMPORAL SPAN

Groups	Less Than 1 Hour	1-12 Hours	12 Hours- 14 Days	Over 14 Days
Low Social Class Delinquents	39	9	4	8
Low Social Class Non-Delinquents	28	13	5	14
(df = 3)	(Chi-squa	re = 4.26)	(P = .30)	

In Table 5 a trend in the predicted direction can be noted on the variable of temporal span, although the obtained Chisquare value of 4.26 is not significant at the .01 level of confidence.

It will be recalled that Leshan (13) in a somewhat similar investigation, found a significant difference between the temporal span of action in stories told by children of low social class and children from a middle social class. An

attempt was made in this study to determine whether a significant difference would also be evident in our groups from a low and middle social class. A comparison of non-delinquents from a middle and low social class can be observed in Table 6. The obtained Chi-square value of 2.95 shown in Table 6 is not significant at the required .01 level of confidence. This suggests that within the non-delinquent group the temporal span of action in the stories told by those of middle social class does not differ significantly from the temporal span of those of a lower social class.

TABLE 6

COMPARISON BETWEEN MIDDLE SOCIAL CLASS NON-DELINQUENTS
AND LOW SOCIAL CLASS NON-DELINQUENTS
IN REGARD TO TEMPORAL SPAN

Groups	Less Than 1 Hour	1-12 Hours	12 Hours- 14 Days	Over 14 Days
Middle Class Non-Delinquent	18	11	1	15
Low Class Non-Delinquent	28	13	5	14
(df = 3)	(Chi-squ	are = 2.95)	(P = .50)	

A comparison was also made within the delinquent group between those from a middle and those from a low social class. This comparison is given in Table 7. The obtained Chi-square value of 1.39 shown in Table 7 is also not significant at the required .Ol level of confidence. Since no significant difference was demonstrated in either the delinquent or non-

delinquent social class comparisons, the results obtained by Leshan do not appear to be confirmed in this study.

TABLE 7

COMPARISON BETWEEN MIDDLE SOCIAL CLASS DELINQUENTS AND LOW SOCIAL CLASS DELINQUENTS IN REGARD TO TEMPORAL SPAN

Groups	Less Than 1 Hour	1-12 Hours	12 Hours- 14 Days	Over 14 Days
Middle Class Delinquents	33	6	3	3
Low Class Delinquents	39	9	4	8
(df = 3)	(Chi-squ	are = 1.39)	(P = .90)	)

In an effort to determine if a significant difference exists between the delinquents and non-delinquents of a low social class in terms of the variable temporal direction, again the Chi-square technique was applied as can be noted in Table 8.

TABLE 8

COMPARISON BETWEEN DELINQUENTS AND NON-DELINQUENTS FROM LOW SOCIAL CLASS IN REGARD TO TEMPORAL DIRECTION

Groups	Past	Present	Future
Low Social Class Delinquents	19	41	0
Low Social Class Non-Delinquents	17	28	15
(df = 2)	(Chi-square =	17.56) (P = .	001)

It is evident in Table 8 that, insofar as the variable of temporal direction is concerned, there is a significant difference between delinquents and non-delinquents of low social class and thus in this instance the hypothesis is supported. Concerning the variable of temporal fluency, however, a t test of the significance of the difference between mean difference scores for the delinquents and non-delinquents of low social class was computed and the obtained t value of 1.80 with eleven degress of freedom was not significant at the necessary .Ol level but at the .10 level of confidence. In short, the hypothesis predicting a significant difference between the delinquents and non-delinquents from a low social class is not supported, although a trend in the expected direction is evident, on the variables of temporal span and The results obtained on the variable of temporal fluency. temporal direction fully support the hypothesis, however.

According to the fourth hypothesis, a significant difference in general temporal orientation should be noted when a comparison is made within the delinquent group between the five least and the five most severely delinquent boys. As before, comparisons were made in respect to the three variables—temporal span, temporal direction, and temporal fluency. The comparisons on temporal span and temporal direction can be noted in Tables 9 and 10, respectively.

An inspection of Tables 9 and 10 evidences the fact that there is no significant difference between the least

COMPARISON BETWEEN THE LEAST AND THE MOST SEVERELY DELINQUENT SUBJECTS IN REGARD TO TEMPORAL SPAN

Groups	Less Than 1 Hour	1-12 Hours	12 Hours- 14 Days	Over 14 Days
Most Severe Delinquents	22	1	2	0
Least Severe Delinquents	17	0	3	5
(df = 3)	(Chi-squ	are = 6.75)	(P = .10)	)

TABLE 10

COMPARISON BETWEEN THE LEAST AND THE MOST SEVERELY
DELINQUENT SUBJECTS IN REGARD TO TEMPORAL DIRECTION

G	roups	Past Present		Future	
Most Severe Delinquents		5	19	1	
	Severe Linquents	7	17	1	
	(df = 2)	(Chi-square =	.446) (P = .	.90)	

and most severe delinquents insofar as the variables temporal span and temporal direction are concerned. In these two Chisquares which were calculated, the obtained and expected frequencies in some of the cells were small. Although agreement is not evident on the part of the authors of statistical textbooks (11, p. 279; 6, p. 85; 20, p. 417), Chi-square with these small frequencies may well be suspected. Finally,

concerning the variable of temporal fluency, a  $\underline{t}$  test of the significance of the difference between mean number of words for the five least severe and the five most severe delinquents was computed. The obtained  $\underline{t}$  value of 1.04 with four degrees of freedom is not significant at the required confidence level. Thus, it is evident that the expected differences between the most severe and least severe delinquents on the three measures of temporal orientation did not occur and therefore the hypothesis was not substantiated.

It is predicted in the fifth hypothesis that the delinquents will be comparatively less able to relate about the past and future than will the group of non-delinquents. This hypothesis is concerned with the variable temporal fluency or the number of words given by the subjects in response to the questions pertaining to the past, present, and future which were asked by the experimenter on both cards in Task 3.

Table 11 presents the means and sigmas upon which a comparison between the delinquents and non-delinquents in terms of past, present, and future number of words was made.

TABLE 11

THE MEANS AND STANDARD DEVIATIONS FOR THE DELINQUENT AND NON-DELINQUENT GROUPS FOR THE TEMPORAL FLUENCY VARIABLE

Subjects		Past	Present	Future	Total	
Delinquent	Mean	26.24	51.00	26.19	103.42	
	Sigma	12.60	21.84	11.43	34.43	
Non-Delinquents	Mean	49.86	47.19	51.86	148.90	
	Sigma	19.19	15.70	22.09	42.08	

To test this fifth hypothesis, a t test of the significance of the difference between mean difference scores of the number of past words for the delinquents and for the non-delinquents was computed. A t value of 4.83 was obtained. With twenty degrees of freedom, this value is significant at the .001 level of confidence. Likewise, a t test of the significance of the difference between mean difference scores of the number of future words for the delinquents and the non-delinquents was computed. A t value of 4.55 was obtained. twenty degrees of freedom this value is also significant at the .001 level of confidence. It is evident, therefore, that this hypothesis is fully supported since delinquents are significantly less able to relate about the past and the future than are the non-delinquents. No statistically significant difference was obtained between the delinquents and non-delinquents in terms of the number of present words given.

Finally, in the last hypothesis it was predicted that the delinquents will be less able to relate about the past and the future than about the present. It was also expected that the non-delinquents would relate about the past, present, and future in roughly equal proportion. To test this hypothesis, within-group comparisons were made for each group in terms of temporal fluency. That is, for the delinquents a test of the significance of the difference between mean difference scores of the number of past words with the number of present words was computed. A to value of 5.25 was obtained.

With twenty degrees of freedom this value is significant at the .001 level. Likewise, for the delinquents a <u>t</u> test of the significance of the difference between mean difference scores of the number of future words with the number of present words was also computed. A <u>t</u> value of 4.94 was obtained. This value with twenty degrees of freedom is also significant at the .001 level of confidence. It is evident, therefore, that the delinquents are less able to relate about the past and the future than about the present.

A comparison within the non-delinquent group in respect to temporal fluency can readily be made by inspection of Table 11. It will be noted that the mean numbers of past, present, and future words are 49.86, 47.19, and 51.86, respectively. The differences between these means were not significant. As predicted, the non-delinquents related about the past, present, and future in fairly equal proportion. Thus, the obtained data support both sections of this last hypothesis.

#### CHAPTER V

## DISCUSSION OF RESULTS

This study was designed to investigate the general temporal orientation of juvenile delinquents: those who are customarily characterized as impulsive individuals. It was hypothesized that the general temporal orientation of delinquents would be of shorter duration than that of the non-delinquents and would be directed primarily toward the present rather than toward the future or the past. It was also predicted that delinquents would be comparatively less able to relate concerning the past and future than would the non-delinquents and that the delinquents would be less able to relate about the past and future than about the present.

with few exceptions, the major hypothesis was well supported by the results which were obtained on the three time variables, temporal span, temporal direction, and temporal fluency. As predicted, the temporal orientation of the delinquents was directed primarily toward the present while the non-delinquents judged the action in a significantly greater number of their stories as occurring in the future. The delinquents much more frequently told stories in which the span

of the action was less than one hour, while the non-delinquents often told stories in which the span of action was over fourteen days and sometimes as much as many years in the For example, the non-delinquents frequently told about their future vocational and educational aspirations and As compared with the non-delinquents, the delinquents were less able to relate about the past and the future even though they were urged to do so by being questioned directly. Unlike the non-delinquents who related about the past, present, and future in almost equal proportion, the delinquents were less able to relate about the past and future than about the present. From these results, it would certainly seem that there are major differences between delinquents and nondelinquents in general temporal orientation since pronounced differences were obtained between the two groups on all three of the time variables.

Despite the fact that in the sampling procedure the variable of social class affiliation was controlled by selecting matched groups in terms of age, sex, I. Q., and social class, in order to further rule out the possibility that any difference in temporal orientation might be due to social class affiliation, comparisons were made between delinquents and non-delinquents of the same social class. It was predicted that a significant difference in temporal orientation would be evidenced regardless of social class affiliation, whether middle or low. As predicted, significant differences

in general temporal orientation on all three time variables were obtained when delinquents and non-delinquents from a middle social class were compared. Although a significant difference was also evidenced between the two groups from a low social class in regard to the variable of temporal direction, significant differences could not be demonstrated on the variables of temporal span and temporal fluency. a trend in the expected direction is evident on each variable. It is likely that the non-occurrence of significant differences between the groups from a low social class in regard to temporal span and temporal fluency is due primarily to the observed tendency for those from a low socio-economic class to be somewhat guarded and verbally reticent. This explanation is supported by the fact that a t test of the significance of the difference between mean number of words for the non-delinguents from a middle social class and non-delinguents from a low social class resulted in a t value of 2.63. With 19 degrees of freedom, this value is significant at the .02 level of confidence. The middle class non-delinquents were significantly more verbal than the low social class non-delinquents. In no other statistical comparison between middle and low social class within the non-delinquent group was a significant difference obtained.

It might be pointed out that of the six tests of significance computed between delinquents and non-delinquents from the same social class, four of the six demonstrated a

significant difference between the two groups. On the other hand, five of the six tests of significance which were computed within the delinquent and non-delinquent groups resulted in non-significant differences. It is evident, therefore, that there are major temporal orientation differences between delinquents and non-delinquents. Furthermore, in contrast to the results obtained by Leshan, these differences in temporal orientation between the groups cannot be accounted for on the basis of social class affiliation.

The hypothesis regarding severity of delinquency was not confirmed by the results which were obtained on any of the three temporal variables. That is, contrary to our expectations, no significant difference in temporal orientation was demonstrated between the five most severely delinquent boys and the five least severe delinquents. Perhaps this may be due to the use of an inadequate measure of severity. it may be that those who have committed only one offense such as stealing a car have the same general temporal orientation as those who have committed six or eight known offenses such as larceny, burglary, and assault. In other words, this finding might suggest that with delinquents there is considerable in-group similarity in temporal orientation and that their temporal orientation may not be related to the nature and severity of the type of offenses which they have committed.

The assumption upon which this study is based is that

as a group delinquents are characterized by impulsiveness. This is supported by the literature on delinquency and by the impulsive types of offenses, such as car theft, which delinquents commit. The results of this study demonstrate that temporal orientation is also one of the significant factors characterizing the delinquent. The importance of this characteristic is evident by the probability that it may well be related to the development of ethical standards of conduct and moralistic awareness, for each individual must have a certain degree of such awareness in order to defer immediate gratification of impulses for future gains. The individual reacts in situations in a manner similar to the way he has perceived his parents react in the past and as he has learned from them to react. When parental actions and reactions have been unpredictable, inconsistent, and inappropriate, it is inconceivable that a strong and stable ego-ideal could be developed. The possible remedial role of the school is obvious for it is in the early school years that the impulsive, potential delinquent may encounter a stable ego-ideal with whom to identify. This strongly suggests that perhaps a more stringent observance of qualifications and a recognition of the necessity for different types of qualifications be utilized in the selection of teaching personnel. In addition, an attempt to inculcate into the educational process an orientation toward future consequences and long-term goals seems equally possible and necessary.

It is hoped that this preliminary investigation of temporal orientation will provide a basis for further exploration of this important area. The assessment technique of temporal orientation employed in this study could readily be applied to various other types of investigations of this variable. Future research could profitably be directed toward an investigation of the chronological development of temporal orientation in both sexes. It would be highly useful to the clinician to have some knowledge concerning the rigidity of temporal orientation and the methods of inducing temporal re-Investigations of the temporal characteristics orientation. of known clinical groups in modern psychopathology such as the different types of neuroses and psychoses seem particularly warranted since temporal orientation is related so closely to ego integration and general level of adjustment. In short, it is believed that much could be learned about the motivation of human behavior by further research in this recently recognized area.

## CHAPTER VI

#### SUMMARY

The purpose of this study was to investigate the general temporal orientation of juvenile delinquents: those who are customarily characterized as impulsive individuals. These children seem to be especially prone to seek immediate gratification of their impulses rather than to renounce present pleasure for future gain. For them, the past must consist of innumerable unpleasant experiences while the future must be an indefinite and vague region where rewards and punishments are too uncertain to have much socially acceptable, motivating value. It is unlikely that such an individual would endure frustration over long periods of time and plan action with goals far in the future. To the contrary, it is more plausible to expect immediate gratification of desires in impulsive fashion.

An investigation of the temporal orientation of delinquents was necessary to shed some light upon the possible source and ramifications of impulsiveness. Accordingly, it was hypothesized that the general temporal orientation of the delinquents would be of shorter duration than that of the non-delinquents and would be directed primarily toward the present rather than to the future or the past. It was predicted that the delinquents would be comparatively less able to relate about the past and the future than would the non-delinquents and that the delinquents would be less able to relate about the past and future than about the present. A significant difference in general temporal orientation was expected when the five most severely delinquent boys were compared with the five least severely delinquent boys. Finally, it was predicted that differences in temporal orientation between the delinquents and non-delinquents would be more than just a function of social class affiliation.

Twenty-one juvenile delinquents, held in detention by The Tulsa County Juvenile Court, composed the delinquent group. Twenty-one non-delinquent boys were selected from the Tulsa Public School population on the basis of a close correspondence to the delinquents in terms of age, I. Q., and social class affiliation. In each group approximately one-half were from a low social class and the remaining subjects in each group were from a middle social class. Each subject was individually interviewed either at the detention home or at the school. After rapport had been established, each subject told five stories, the first of which was given in response to the statement, "Tell me a story." The remaining four stories were given in response to four selected Thematic Apperception Test cards and the instruction on each

card to, "Tell me a story about this picture." Each subject was questioned specifically about the stories given on the last two cards. The questions asked were: "What is happening right now in this picture? What happened before or what led up to this situation? What will happen or what will the outcome be?" The number of words which were given in response to each of the questions by all subjects made up the temporal fluency variable. The five stories which the subject had given were reviewed and the subject was asked to classify each one according to whether he believed the action of the story occurred in the past, present, or the future. classification of the stories given by all subjects became the temporal direction variable. Each subject was also asked to estimate the time span of the action in each of the stories which he had given. These estimates from all subjects became the temporal span variable. The general temporal orientation of the delinquents and non-delinquents was assessed by these three time variables, temporal span, temporal direction, and temporal fluency.

The major hypothesis was well supported by the results obtained on the three temporal variables. As predicted, the temporal orientation of the delinquents was directed primarily toward the present while the non-delinquents judged the action in a significantly greater number of their stories as occurring in the future. The delinquents much more frequently told stories in which the span of action was less than one hour as

opposed to the non-delinguents who told stories in which the span of action was over fourteen days and often many years in The delinquents were less able to relate about the future. the past and future than the non-delinquents even though urged to do so by direct questioning. Unlike the non-delinquents who related about the past, present, and future in almost equal proportion, the delinquents were significantly less able to relate about the past and future than about the present. No significant difference in temporal orientation was demonstrated between the most severe and the least severely delinquent boys. From these results, it would certainly seem that there are major differences in the general temporal orientation of delinquents and non-delinquents. Furthermore, these differences in temporal orientation were not found to be accounted for on the basis of social class affiliation in this study.

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APPENDIX

The following five stories were told by a non-delin-quent subject, age 14, whose father is employed as a Greyhound Bus driver, earning \$520 per month.

Task 1. Story given in response to the statement, "Tell me a story."

It all starts right here in junior high school. I'm going to start here and take radio electronics and also work on it in my spare time. Then I'm going to college and study the same thing and after two years of college I'll go into the Navy as a radar man. After the Navy I plan to go with an oil company as an electrical engineer

Temporal Direction: Future Temporal Span: 9 years

14.

Task 2. Story given in response to TAT card, number

It's early morning in the winter and the sun is coming in the window. The sun is rising and the boy is looking out to see how long it takes. He's looking out the window at the horizon. He's been sitting there for some time watching it.

Temporal Direction: Present Temporal Span: 1 hour

Story given in response to TAT card 17BM.

This is a man with a good physical body and a good mind. He's planning on trying out for track. He will be good in sports—better at sports than as a business—man. He wants to learn more about his sport from the expression on his face. I imagine he'll practice hard and he may even be good enough for the Olympics after a while.

Temporal Direction: Future Temporal Span: 4 years

Task 3. Story given in response to TAT card 12M. This is a boy who is ill and the father is trying to comfort him as much as he can. The boy is asleep or knocked out or something.

Temporal Direction: Present Temporal Span: 2 hours

E asked, "What is happening right now in this situa-tion?"

Response: "Well, the father is bending over him and he's probably praying for him and hoping his son will come out of it okay."

E asked, "What happened before, or what led up to this situation?"

Response: "The boy could have, he's a good sized boy, he could have been playing in the house, which he shouldn't have been doing, and struck his head."

E asked, "What will happen or what will the outcome be?"

Response: "The doctor will come and if it is a simple concussion the doctor will be able to cure him. It just depends on how hard he struck his head and if it is a simple or complex concussion."

Story given in response to TAT card 5.

I think she--someone is coming in the front door of her house. She's surprised and she's not too sure about them by the expression on her face.

Temporal Direction: Present Temporal Span:  $\frac{1}{4}$  hour or less

E asked, "What is happening right now in this situation?"

Response: "The main thing is that she is surprised and sort of puzzled about whoever it is. She's not at all sure she wants to see them."

E asked, "What happened before or what led up to this situation?"

Response: "She has been having some trouble with her family--nothing serious but this man was supposed to come and see her. He is a lawyer and he is the communication between her and her family."

E asked, "What will happen or what will the outcome be?"

Response: "The man will come in the door. He is a lawyer. He will tell her that the others in her family aren't going to do anything mean or anything to her. They want her to come to their town and try to straighten things out. She'll probably go."

The following five stories were told by a non-delinquent subject, age 13, whose father is employed as a radio and television repair man.

Task 1. Story given in response to the statement.

"Tell me a story."

14.

My sister and her boyfriend and I drove to Oklahoma City to ride horses. It takes about an hour and a half to get out there to Nichol's Barn. We rode horses and when we got started the horse I had didn't want to go. He kept trying to go back. I didn't know how to ride very good and they went on. I played with a dog while they went on and when they got back my sister's boyfriend was going to pay for the horses but he didn't have the change and so I paid. On the way home he wanted to pay me back when we stopped at a station for gas, but I told him to keep it. Then we came on home.

Temporal Direction: Past Temporal Span: 5 hours

Story given in response to TAT card, number Task 2.

It looks like he's sitting there dreaming and looking at the stars and thinking. He might be thinking of his girlfriend and what they are going to do together sometime. He might be thinking of taking her dancing the next night and they might go to a show after the dance.

Temporal Direction: Future Temporal Span: 24 hours

Story given in response to TAT card 17BM.

It looks like he's going to try to run away from He looks like he's afraid. He might be in a somebody. hurry to go down the rope to see somebody. Yes, that's They will make plans of going swimming. Then they might talk about what they'll do after that.

Temporal Direction: Future Temporal Span: 3 hours

Task 3. Story given in response to TAT card 12M. This boy is sick and the doctor comes to see what's wrong with him. The doctor thinks his tonsils should come out and that he should go right away.

Temporal Direction: Present

Temporal Span: 1 hour

E asked, "What is happening right now in this situation?"

"This boy is so sick that he can't get out Response: of bed. The doctor is giving him an examination."

E asked, this situation?" "What happened before, or what led up to

Response: "He went out in the cold and got tonsilitis and has to have his tonsils taken out."

E asked, "What will happen or what will the outcome be?"

Response: "He'll get his tonsils out and it won't take him too long to get over it."

Story given in response to TAT card 5.
She's coming in to call her kids to dinner. She might say, 'Kids, go get your father.' They might go to the show after they eat dinner. After that they'll go over to see their aunt and then they'll come home and watch T. V.

Temporal Direction: Future Temporal Span: 5 hours

E asked, "What is happening right now in this situation?"

Response: "She's put her head in the door to see where they are and to tell them to come and eat."

E asked, "What happened before, or what led up to this situation?"

Response: "She was fixing dinner and the kids were playing house and the father was out working on his car."

E asked, "What will happen or what will the outcome be?"

Response: "Like I said, they'll go to a show and then they'll stop in at the aunt's house and see her for a while. They won't stay long 'cause they want to get home and watch a T. V. program."

The following five stories were told by a delinquent subject, age 15, who had committed larceny and stolen an automobile. This boy's father holds an executive position and earns approximately \$525 per month or more.

Task 1. Story given in response to the statement, "Tell me a story."

One time a boy and I went out and we stayed out 'till 2 and we pulled up at a stop sign. There was a car there with two boys and two girls in it. There were four boys in our car--two in the front and two in back. We got in a fight with them and they tried to push us off the road. One of their guys came back to our car and we jumped out and took off. We drove off after that and they came

after us again but we got away.

Temporal Direction: Past

Temporal Span: 4 hours

Task 2. Story given in response to TAT card, number 14.

There is just a man here looking out a window. It has all the indications that he is looking at the stars. That's about all.

Temporal Direction: Present Temporal Span:  $\frac{1}{h}$  hour or less

Story given in response to TAT card 17BM.

This reminds me of a man I saw in a circus about two or three years ago. He's a trapeeze artist and right now he's in the act of climbing up a rope.

Temporal Direction: Present

Temporal Span: \frac{1}{4} hour

 $\frac{\text{Task}}{\text{This}}$   $\frac{3}{\text{man}}$  story given in response to TAT card 12M. This man wants to love her and she turned him away and he came back. And he's here and he wants to love her.

Temporal Direction: Present

Temporal Span: 2 hours

E asked, "What is happening right now in this situation?"

Response: "He thinks she is okay and would like to spend some time with her."

E asked, "What happened before, or what led up to this situation?"

Response: "They had a lot of fun. He was rich and had a lot of money but he lost it. That's why she turned him away.

E asked, "What will happen or what will the outcome be?"

Response: "She might feel sorry for what she has done and they might get married."

Story given in response to TAT card 5.

The woman is alarmed about something by the expression on her face.

Temporal Direction: Present Temporal Span:  $\frac{1}{4}$  hour or less

E asked, "What is happening right now in this situation?"

Response: "She's standing in the doorway and she's

scared. She has that look on her face."

E asked, "What happened before, or what led up to this situation?"

Response: "A strange man might have walked into her house."

E asked, "What will happen or what will the outcome be?"

Response: "She'll call the police."

The following five stories were told by a delinquent subject, age 16, who had committed one burglary and two automobile thefts. Both parents of this boy are employed and they earn \$600 per month.

Task 1. Story given in response to the statement, "Tell me a story."

Can I tell about my first offense? Well, I went to school one day and after that I went and mowed two lawns. Then I went to a show. I went to a store after the show and saw two boys I knew. We got together and I was the only one who could drive so we went and got a car. We stole a 1952 Pontiac and went to Ponca City and then to Hardy or Hominy, Oklahoma, where we changed license plates. We needed gas so we stopped and got ten gallons We didn't have any money to pay for it so we just took off. They picked us up right away. That's about it.

Temporal Direction: Past Temporal Span: 24 hours

Task 2. Story given in response to TAT card, number 14.

All I can see is a man standing by a window looking out. He's. . .well, its a dark night. That's all I can tell you, I guess.

Temporal Direction: Present Temporal Span:  $\frac{1}{4}$  hour or less

Story given in response to TAT card 17BM.

It looks like to me that he's a circus man. He's climbing a rope and he's built good. Maybe he's climbing up for something and those are trees on the sides there. I don't know what he's climbing up for.

Temporal Direction: Present

Temporal Span: # hour

Task 3. Story given in response to TAT card 12M.

"This is a minister praying for this boy."
Temporal Direction: Present

Temporal Span # hour

E asked, "What is happening right now in this situation?"

Response: "Well, he's bending over him with his arm out and he's saying a prayer for him.

E asked, "What happened before, or what led up to the situation?"

"The boy could of got sick." Response:

E asked, "What will happen or what will the outcome be?"

Response: "If he led a hoodlum's life, he might go. If he led a Christian's life, they might save him."

Story given in response to TAT card 5. "This woman hears a noise in the next room. It sounds like somebody knocked over something." Temporal Direction: Present

Temporal Span: hour or less

E asked, "What is happening right now in this situation?"

"She hears the noise and is looking in the Response: room to see what caused it."

E asked, "What happened before, or what led up to this situation?"

Response: "She was knitting and listening to the radio."

E asked, "What will happen or what will the outcome be?"

Response: "Maybe someone is out to kill her. don't know if they will."

The following five stories were told by a delinquent subject, age 14, whose father is employed as a salesman in a book store.

Task 1. Story given in response to the statement, "Tell me a story."

Our scout troop went to a cave in Arkansas and we explored it and had lunch. In a big room in the cave there were staglites and stagmites, or whatever you call 'em, and there was cold water there. We explored this cave and found a big hole and we caught bats. A friend of mine fell down and got the hell knocked out of him. Then we went back to the car and were almost late getting back.

Temporal Direction: Past Temporal Span: 2 hours

Task 2. Story given in response to TAT card, number 14.

This boy or man is looking out of the window. It's like here at the Boys' Home. He's wishing he was free. I wish I was.

Temporal Direction: Present Temporal Span:  $\frac{1}{4}$  hour or less

Story given in response to TAT card 17BM.

"It looks like this man is climbing up a wall and he looks back and sees something and he slips."

Temporal Direction: Present Temporal Span:  $\frac{1}{4}$  hour or less

Task 3. Story given in response to TAT card 12M.
"It looks like someone is sick or asleep and this man is preaching and praying for him."

Temporal Direction: Present Temporal Span: ½ hour

E asked, "What is happening right now in this situa-tion?"

Response: "Well, he's sick, I guess, and that's his old man caring for him."

E asked, "What happened before, or what led up to this situation?"

Response: "He might of gotten hurt in an accident."

E asked, "What will happen or what will the outcome be?"

Response: "He will live, I think."

Story given in response to TAT card number 5.

"A burglar is swiping something and she looks in and is surprised."

Temporal Direction: Present

Temporal Span: ½ hour

E asked, "What is happening right now in this situation?"

"The lady was upstairs and didn't hear Response: him at first. But then she hears a noise and comes down."

E asked, "What happened before, or what led up to this situation?"

Response: "The burglar got the bright idea of committing a burglary."

E asked, "What will happen or what will the outcome be?"

Response: "If he is a juvenile and its his first offense, he'll get off on probation."

The following five stories were told by a non-delinquent subject, age 16, whose father works in a personnel department of an engineering firm.

Task 1. Story given in response to the statement, "Tell me a story."

This summer I'm going down to Corpus Christi to see my grandmother and work in their drugstore. I'm going to go swimming in the Gulf and use my grandma's boat and do a lot of fishing, if I can get the time.

Temporal Direction: Future Temporal Span: 3 months

Story given in response to TAT card, number Task 2. 14.

It looks like he's going to jump out the window into a lake under him. Its in an old mill over a lake. He's going to jump out the window and go swimming.

Temporal Direction: Future 2 hours Temporal Span:

Story given in response to TAT card 17BM. "It looks like one of the boys in the gym is climbing up a rope to see how fast he can do it without using his legs."

Temporal Direction: Present Temporal Span: \frac{1}{11} hour

Task 3. Story given in response to TAT card 12M. "It looks like a person is trying to hypnotize somebody and make them sleep. It looks like they are unhappy." Temporal Direction: Present

Temporal Span: ½ hour

E asked, "What is happening right now in this situa-tion?"

Response: "He's being hypnotized by this man and it looks like he's not very happy about it."

E asked, "What happened before, or what led up to this situation?"

Response: "This was at a private party and they hired a man to come in and put on a show. So he got somebody and hypnotized him and made him do certain things."

E asked, "What will happen or what will the outcome be?"

Response: "The person will wake up and not remember anything that happened."

Story given in response to TAT card, number 5.
"It looks like someone is coming in a room and they're rather surprised."

Temporal Direction: Present Temporal Span:  $\frac{1}{4}$  hour or less

E asked, "What is happening right now in this situation?"

Response: "This lady is surprised at the way the room looks--all torn up."

E asked, "What happened before, or what led up to this situation?"

Response: "A dog has torn up the furniture."

E asked, "What will happen or what will the outcome be?"

Response: "So the old lady will get a broom and straighten all the damage. She'll get the dog out with the broom and then straighten up."

The following five stories were told by a delinquent subject, age 15, whose father is deceased.

Task 1. Story given in response to the statement, "Tell me a story."

A while back I was at Tulsa Boys' Home and we had a ball team. Coach. . . was there. Coach got us a game

with Mohawk Boys' Home and we won ten to one. We played Jenks and they beat us and then we played Owasso and we beat them. We had one night game. We played seven games but it got so hot we quit.

Temporal Direction: Past Temporal Span: 2 months

14.

Task 2. Story given in response to TAT card, number

This is one of them observatories. This guy is in the room where this telescope is. He's looking out at the stars. I can't. . .well, he's just looking at the stars.

Temporal Direction: Present Temporal Span:  $\frac{1}{4}$  hour or less

Story given in response to TAT card 17BM.

Well, that guy looks like an Englishman to me. This man is on England's track team. He's in the contest with men from other countries. He's got to climb this rope and break all records.

Temporal Direction: Present

Temporal Span:  $\frac{1}{4}$  hour

Task 3. Story given in response to TAT card 12M. These guys are having a party with boys and girls there. This one guy is trying to hypnotize another one. He put him to sleep.

Temporal Direction: Present

Temporal Span: 2 hours

E asked, "What is happening right now in this situa-tion?"

Response: "I guess they didn't have nuthin' better to do so just for the heck of it they tried hypnotizing."

E asked, "What happened before, or what led up to this situation?"

Response: "There was this party."

E asked, "What will happen or what will the outcome be?"

Response: "He'll wake up the guy and when the party is over they'll go home."

Story given in response to TAT card, number 5.
This is a girl's room and that is her mother. Her
daughter is sixteen and wants to go skating and her
mother doesn't want her to go. A boy stops at the corner
of the house and she slips out the window and goes.

Temporal Direction: Present

Temporal Span: 2 hours

E asked, "What is happening right now in this situation?"

Response: "Well, the mother--she's pretty mean--is lookin' in the room and she's real mad that her daughter didn't listen to her. She doesn't like her daughter going out."

E asked, "What happened before or what led up to this situation?"

Response: "She wanted new shoes and mother said 'no' so she hit the ceiling and went skating."

E asked, "What will happen or what will the outcome be?"

Response: "There's not much the mother can do 'cause she don't know where her daughter is at. She'll bawl her out when she gets home."