TIME ORIENTATION IN DELINQUENTS

By

Robert J. Barndt

A THESIS

Submitted to the School of Graduate Studies of Michigan State College of Agriculture and Applied Science in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Department of Psychology

1953

ACKNOWLEDGMENTS

The author wishes to express his sincere appreciation to Dr. Donald M. Johnson for his assistance in the design, execution, and reporting of this study; to Mr. E. L. V. Shelley, Chief Psychologist, Boys Vocational School and Mr. Harold Barr, Superintendent of Schools, Bath, Michigan for making available the subjects used in the study; and to Mr. Leo Gladin and Mr. Lawrence Walker for aid in establishing the reliability of the scoring of the protocols.

TABLE OF CONTENTS

LIST OF TABLES

INTRODUCTION

The problem of personal, individual time perspectives and orientations is one which has received relatively little attention from psychologists to date, as evidenced by the paucity of published papers in this area. Little is known regarding the temporal relationships of the individual and his goals. The degree to which the individual relates his behavior to the past, the present, the near future, and the distant future; the length of the time span into the future with which the individual concerns himself; and the length of time the individual is willing and able to postpone immediate gratification in favor of future goals are questions which remain largely unanswered. A number of workers have shown that different individuals and groups do differ in these respects. Bateson (4, p. 730), for example, has said,

> The data can be arranged to give us information about such matters as: native orientations in space and time, among objects and among people . . . This has not yet been done systematically for any culture . . . but from the crude survey work which has been done, it is evident that marked differences among cultures can be revealed by this approach.

In the literature to date, the terms 'time perspective' and 'time orientation' seem to have been used more or less synonymously to refer to the individual's psychologically experienced relationships with the time continuum. The two terms will, therefore be considered equivalent for the purposes of this paper.

Statement of the Problem

The general hypothesis investigated in this study is that delinquents differ from non-delinquents in terms of individual time orientation. This study is a direct outgrowth of a paper by Le Shan (14) in which he speculated that delinquents in general and psychopaths in particular would show shorter personal time orientations than would normals.

With a short time orientation, behavior would be organized on the basis of rapid or immediate sequences of tension and relief, of need and gratification. There would be little or no tendency to plan activities which would not reach fruition until the distant future. The future would be vague and indefinite and, hence, be of little importance in the motivation of the individual. The proverb, "a bird in the hand is worth two in the bush", would typify such an orientation.

Longer time perspectives would result in lengthened sequences of need and gratification. There would be a much greater likelihood of making plans dating further into the future. Furthermore, there would be increased ability to foresee the future consequences of present actions.

One basic assumption of this study is that when presented with a relatively unstructured situation, individuals tend to project their own idiosyncratic interpretations and viewpoints onto the ambiguous stimulus. Since this is the basis for all work with projective techniques, it seems that this assumption is justified in the present study.

Review of the Literature

Basic to the development of stable time perspectives is the prior development of some degree of mastery of time concepts. As Friedman (12) has pointed out,

> It is impossible for a child to comprehend plans for 'next week' or 'next month' until he understands, at least in a general way, the accepted meanings of these calendar-time divisions.

Certain workers believe there is a physiological basis for the perception of time and, ultimately, time perspectives. Mackenzie, Munsterberg, and Hoagland, as reported by Eson (9), believe that time perception is based on rhythmical physiological processes, with respiration as most important. Schilder (20) seems to agree with this formulation. Another biologically oriented worker, Du Nouy (8) has proposed that the acquisition of time concepts is nativistic and primarily determined by the biological functioning of the individual.

Arieti (2) discusses the psychological future as composed of two processes, expectancy and anticipation.

> By (immediate) expectation is meant the capacity of the subject to anticipate certain events while a certain external stimulus is present . . . By (distant) anticipation, instead, the capacity to foresee or predict future events, even when there are no external events.

He posits a neural basis for anticipation and believes this is a frontal lobe function. He states that distant anticipation is found only in humans while expectancy, awareness of the future in the presence of stimuli, is found as low on the phylogenetic scale as the crayfish. In this regard, he seems to suggest that ontogenetic development tends to parallel the phylogenetic sequence.

Freeman and Watts (11) also imply a physiological basis for the development of time perspectives, stating that prefrontal lobotomy frequently results in "an apparent inability to foresee accurately the results of a series of planned acts as they relate to the individual himself."

The psychoanalysts, as represented by Bergler and Roheim (5), seem to consider both physiological functioning and the individual's experience as important in the development of time perception. The physiological functioning provides the basis for the experience of time. Perception of time is a function of the reality principal and hence, is under the control of the ego, which in turn, is under the influence of the super-ego. Since the super-ego develops with the experiences of the individual, these experiences play a part in the development of time perception.

Most investigators in this area conceive of time concepts and perceptions as resulting from the individual's experiences. Babcock (3) states "time is a concept derived from experience." Friedman (12) studied the development of time concepts in school children and he believes that learning, not physiological functioning, is the basis for the development of time perception as well as time concepts. In regard to this learning he says

> To a large extent the time concepts of the child develop independently of organized school instruction. When the child starts to school, he already possesses a fund of ideas, which develops steadily with maturity.

Harrison (13) also found mastery of time concepts developing concurrently with increased maturity. Oakden and Sturt (18) state that

knowledge of conventional time begins at approximately age four and that concepts of time are mature at the age of thirteen. Piaget (19) has integrated his findings regarding the development of time concepts into the same framework with which he explains the development of thought, judgment and causality. He believes the child is at first egocentric, but with added experience, the child acquires a more socialized and cooperative concept of time. Eson (9, p. 14) reports "wide individual variations in this process of acquiring the broader conceptions of time continuum."

In contrast to the above mentioned work on the mastery of concepts of time and the perception of the passage of time, relatively little has been done in the area of time perspectives. In a study of children from one and one-half to eight years of age, Ames (1) found that between 18 and 24 months, the child lives primarily in the present but begins to develop a very small projection into the future. By the age of three, he has developed perspectives of past, present and future, with greater emphasis on future than past. At the age of eight, the child is capable of dealing with extremes of time span.

Lewin (15) feels that this developmental process is not concluded as early as Ames indicates. He states, "The increase of life experience in regard to the time dimension continues into adulthood. Plans expand farther into the future, and activities of increasingly longer duration are organized as one unit." To Lewin (16), the way the individual views his future is important motivationally. He points out

that a positive future orientation tends to expand the individual's felt life-space in a temporal dimension, while a negative orientation, on the other hand, tends to have constricting effects. Lewin maintains an individual is likely to be future-oriented if he feels that a highly valued goal is accessible to him, while a belief that the goal is beyond his reach will tend to produce a present-orientation.

The social milieu in which the individual lives will also influence his future perspective. Lewin mentions that in an autocratic group the future is decided and structured by the leader and a person in this type of group tends to be oriented toward the present, being concerned only with immediate actions to reach immediate goals. In a democratic group, however, the individual is instrumental in structuring the future, hence tends to be future-oriented.

Various authors have described the behavioral differences between members of the different social classes. For example, they point out that members of lower class groups are less likely to postpone gratifications in favor of future gain than are members of middle class groups. In describing the socialization process, Davis (6) suggests that the class culture largely determines the extent and kind of future orientation for a given adolescent. He says, "With regard to a great many goals, what is rewarding to a middle class adolescent is not at all so to a lower class adolescent." Frank (10) also suggests that

> Whole social classes may be described by the time perspectives that dominate their lives as revealed in the range of their planning, their prudential calculations, their forethought, their abstinence, and so on.

Davis and Dollard (7, p. 267), speaking of the tendency of lower class families to use physical force in discipline, state that

> It seems clear . . . that a child cannot be trained in this fashion to undergo the long periods of renunciation which the middle class ideal of socialization demands of him. If a parent wishes to teach a child to save money, he must not only try to prevent him from buying candy or a toy whenever the impulse seizes him, but he must also constantly tell him what more desirable object he will be able to buy in the distant future with his savings.

This gratification must not be postponed indefinitely but must occasionally be reinforced by allowing the child to spend part of his savings for something he wants. This training is not found in the lower classes. Therefore, the lower class adolescent, according to Davis and Dollard (7, p. 268),

> knows, by seeing and being a part of life in his position, that he is not going to be rewarded if he is a 'good little boy', if he leaves girls alone, or if he studies his lessons. The long-range goals do not seem to be 'there' in his world; he does not see other people in his class attaining them, or practicing the behavior required of him, and he feels his parents and teachers are 'crazy' when they demand it of him.

These sub-cultural differences in training methods might result in differences with regard to the felt importance of the future among the various social classes. It was this question that Le Shan (14) attempted to investigate. His subjects were 74 lower class and 43 middle class children, eight to ten years old. Stories were told in response to the stimulus "Tell me a story". The stories were scored in terms of the length of time covered by the action of the stories. Le Shan found statistically significant differences in the length of time covered in the stories told by children of these tow social classes, a chi-square test indicating that "the two groups were not

from the same population insofar as this variable was concerned." Thus, he substantiated his hypothesis that there are different time orientations for different social classes.

THE INVESTIGATION

Purpose

This study was designed to investigate the hypothesis that delinquents would differ from non-delinquents in terms of their personal time orientations. More specifically, it was believed that delinquents would exhibit significantly shorter projections into the future than would non-delinquents. Since delinquency is characteristically expressed in behavior leading directly to immediate achievement of desired goals, with little or no concern for the future consequences of this behavior, the above hypothesis seemed reasonable. The number of broad implications, to be discussed later, inherent in the problem of personal time orientations seemed to justify the present investigation.

Subjects

The experimental group in this study consisted of 26 delinquent boys, ranging in age from 15 years 7 months to 17 years 11 months, who had been committed to a state rehabilitational school by court action. All had appeared before the courts at least four times and 21 had been committed previously, either to the state school or to semi-private correctional schools, and were assigned to the living unit reserved for recidivists. This group was chosen to avoid including boys committed for very minor legal infractions or the few non-delinquents included in the population.

The control group, consisting of 26 boys known to have no history of court appearances, ranging in age from 14 years ten months to 18 years four months, were chosen from a small high school. They were not chosen on the basis of individual matching with the experimental group but by attempting to select subjects within both the IQ and age ranges of the experimental group. Because the population from which the control group was chosen was not large enough to permit the realization of both these aims, it was necessary to include a somewhat wider age range. Since this group included all the members of the population within these ranges, the possibility of biasing the sample in terms of the other equating variables was reduced. The other variables considered important to equate were academic achievement and socio-economic status. Le Shan (14) has already shown the significance of socio-economic status as a variable. It was believed that academic achievement might have a bearing on any verbal task and should also be controlled in the present study. Therefore, the two groups were approximately equated for age, sex, IQ, academic achievement, and socio-economic status.

As mentioned above, the control group had a somewhat wider age range than did the experimental group. However, the means were approximately equal, the mean age of the delinquent group being 16 years eight months and the control group 16 years nine months. Mean IQ of the experimental group was 91.9 with a standard deviation of 3.33, while the mean IQ of the control group was 92.1 with a standard deviation of 3.27.

To control for academic achievement, Stanford Achievement Test (Intermediate Form D) scores were obtained from the records of the delinquent boys and the same test was administered to the control group. The experimental group mean was 6.07 and the control group mean was 6.44, in terms of grade scores. Standard deviations were 2.35 and 2.20 respectively. These differences were not statistically significant.

The Index of Status Characteristics, as developed by Warner, Meeker and Eells (21), was used, despite certain criticisms of the method, to equate for socio-economic status. With this technique, occupation, source of income, type of dwelling and dwelling area are assigned weighted scores. The weighted scores are added and the total is used to determine socio-economic status. In both groups, this information was obtained from the school records and checked by direct interviewing of the subjects. Mean total status score values for the experimental and control groups were 62.2 and 61.6 respectively and the standard deviations were 3.2 and 4.0. This difference is statistically insignificant, the ratio of the difference to its standard error being only 0.58. To the extent to which the Warner scale is an adequate measure, the two groups were essentially the same insofar as socio-economic status is concerned, the average of both being approximately at the dividing line between upper-lower and lower-lower social class. Therefore, there were no significant differences between the groups on the equated variables, age, IQ, academic achievement, and socio-economic status. The results of the equated variables are summarized in Table 1 following.

Table 1

MEANS AND STANDARD DEVIATIONS
OF EQUATED VARIABLES

	Delinquents		Controls		
	M	SD	M	SD	t
Age	16-8	6.75 mo.	16-9	10.3 mo.	.34
IQ	91.9	3.33	92.1	3.27	.21
Achiev't.	6.07	2.35	6.44	2.20	.57
Status	62.2	3.2	61.6	4.0	.58

Procedure

To investigate the span of future time orientation, a projective method was utilized, similar to that used by Le Shan (14). This form of test was selected because of the absence of any standardized test purporting to measure this variable and because it was believed that only in a projective device is the subject completely free to exhibit his own orientation. Since the stimulus in this sort of a procedure is relatively unstructured, the subject, by necessity, must project onto it his own personal view of the world.

A preliminary trial, with other subjects, showed that the members of the delinquent population were unable, or at least unwilling, to respond to the instructions given by Le Shan, "Tell me a story". Therefore, it was necessary to use a stimulus which was somewhat more structured than that of Le Shan. After considerable trial, a stimulus was adopted which was ambiguous enough to allow a marked degree of personal projection, while making it easier for the subjects to respond. As finally adopted, the standard instructions were as follows:

> I want to see what kind of a story you can tell. I'll start a story and then let you finish it any way you want to. You can make it any kind of story you wish. Let's see how good a story you can tell. I'll start it now. 'About 3:00 o'clock one bright, sunny afternoon in May, two boys were walking along a street near the edge of town.' Now you start there and finish the story any way you want to.

In response to these verbal instructions, stories were obtained from all subjects of both groups. The stories were recorded stenographically or on a sound-disk recorder, from which they were written out in full.

In the many instances in which a specific time interval was mentioned by the subject in telling the story, no inquiry was made. If no definite time or time interval was included in the verbalization, an inquiry was made following the end of the story. The standard question asked was "How long was this from the start of the story?" In this way it was possible to score the stories in terms of specific time intervals dating from 3:00 o'clock, since this time was included in the stimulus as given by the examiner.

After all were collected, the stories were assigned score values depending on the length of time covered by the action of the story. To avoid the overlapping categories reported by Le Shan, somewhat different classes were chosen. The scoring categories used were as follows:

1 -- Under one hour
2 -- One hour or more but less than five hours
3 -- Five hours or more but less than twelve hours
4 -- Twelve hours or more but less than one week
5 -- One week or more but less than three months
6 -- Three months or more.

Thus each story was given a score from one to six, as determined by the length of time covered by the action of the story.

To establish the reliability of the scoring, the stories were scored independently by the experimenter and two other judges, both of whom were graduate students in psychology. The percentage of agreement of the three independent judgments was used as an indication of the degree of reliability of scoring.

RESULTS

Before computing the significance of the difference obtained in the stories of the two groups, the reliability of the scoring of the stories was checked. This was done, as was mentioned above, by computing the percentage of agreement of three independent judgments. Since an inquiry was made immediately following any story that did not include reference to a specific time interval or time of ending, it was expected that there would be a high degree of agreement among the three judges. When computed, the results showed one hundred percent agreement, indicating a high degree of reliability of scoring the stories.

The two groups did differ as to the number of stories in each of the scoring categories. The distributions are summarized in Table 2.

Table 2

NUMBER AND PERCENT OF STORIES IN EACH SCORING CATEGORY

	Delinquents		Controls	
Score	No.	%	No.	%
1	6	23.0	0	0
2	6	23.0	6	23.0
3	4	15.4	9	34.6
4	8	30.8	3	11.6
5	1	3.9	6	23.0
6	1	3.9	2	7.8
Total	26	100.0%	26	100.0%

The experimental group had a mean story score of 2.81 and a standard deviation of 1.37. The control group mean was 3.58 and the

standard deviation was 1.27. The t-ratio of the difference between the means was 2.08, which shows significance beyond the five percent level of confidence on a two-tail test, with 24 degrees of freedom. This indicates that differences between means of the magnitude of 0.77, as obtained here, could occur by chance less than five times in one hundred similar samples. This probability justifies the belief that the two groups are actually different in their respective time orientations.

Since means are subject to distortion by extreme scores, it was felt that a t-ratio of differences between means would not adequately represent the actual differences between the two groups. Therefore, a chi-square test was also applied to the data. With five degrees of freedom, the obtained chi-square of 14.10 was significant beyond the two percent level of confidence. Thus the two groups were not from the same population insofar as the variable in question, time orientation, is concerned.

The variables used to equate the two groups, age, IQ and achievement, were correlated with the story scores. None of these correlations differed significantly from zero, as is shown in Table 3.

Table 3

COEFFICIENTS OF CORRELATION OF STORY SCORES WITH EQUATED VARIABLES

	Delinquents	Controls
Age	-.03	.02
IQ	.04	.05
Achiev't.	-.06	.04

These statistically insignificant correlation coefficients indicate that there is little or no relationship between age, IQ or academic achievement and time orientation as measured by the projective method used in this study.

Content differences in the stories of the two groups were marked. Of the 26 members of the delinquent group, 15 presented stories with crime themes or unhappy endings. In the control group, on the other hand, there was only one story regarding crime and three others with unhappy outcomes.

Both groups included a few stories that indicated a high degree of personal projection. These particular stories started with the heroes referred to in the third person, but as the stories progressed there was a shift from the third person to the first person. Instead of continuing to speak of "they" or "he", the terms "we" or "I" were used. A few samples of these stories are included in the Appendix. Although these stories were few in number, their occurrence seems to indicate that it is possible to obtain considerable personal projection in response to a stimulus like that used in the present study.

DISCUSSION

The content differences and the shifts from third to first person, as mentioned above, were considered important in showing that the story completion technique used here was actually a projective device as the term is currently employed. As Murray (17, p. xii) points out, in regard to projective tests,

> Thus we are dealing, in most cases, not with a real cognitive projection (of the Freudian type), or even with a pseudo-cognitive projection, but with an imaginative projection . . . Thus common practice has extended the Freudian concept so that it now includes imaginative, make-believe projections of constituents that are unrepressed and conscious, and of constituents that are acceptable or even admirable to the subject . . . A simplification that has clarified the problem of definition for me is this: Projective techniques are ways of stimulating the imagination, of evoking and exposing single images, fantasies or interactions, and dramatic improvisations.

According to this formulation, the story completion method, as used in the present study, is a true projective technique. The readiness with which the subjects of this study responded to this sort of procedure and the degree of projection evoked suggest that further work with the method might be fruitful.

The degree of projection evoked also tends to justify the use of the technique to investigate time orientations. Since the subject is forced to structure the situation in terms of his own perception of the world, and since his perception of the world is inevitably influenced to some extent by his time orientation, it seems very likely that his orientation will be reflected in his projections: the stories he tells.

The results obtained in this study indicate that delinquents tend to have a shorter span of future orientation than do comparable non-delinquents. Generalization of this difference to delinquents in general depends, of course, on the adequacy of the matching. This finding offers no evidence of causality. On the basis of findings to date, one would not be justified in stating that a short personal time orientation is important in the direct causation of delinquent behavior. However, the concomitance does suggest certain speculations in this regard. An individual with a particularly short future orientation would not have learned to act in terms of more distant future rewards. As Le Shan mentioned, "this orientation in a world that is primarily run on longer sequences might well produce conflicts, failures and resulting hostility." It seems possible that the conflicts and hostility might, in turn, result in delinquent and anti-social behavior. Such an individual might be thought of as rebelling against a social milieu which is organized on a basis different from that on which his own life is organized. This study does not establish this causal connection but further work on this question might prove fruitful.

Another implication of differences in time orientations in delinquents and non-delinquents concerns the area of prevention. As Le Shan said, "It may well be that in order to control delinquency it will be necessary first to change the time orientation of the delinquents." To the author's knowledge, little is known regarding methods of changing time perspectives. It might be possible to effect changes in time orientations during the formal education of the child. Teachers and parents might achieve this through some system of progressively

delayed rewards. However, much work must be done before this would be practical. It would be necessary first to ascertain the extent of future orientation optimal for adequate social adjustment. The degree to which an individual's orientation is amenable to change would also need to be investigated.

A number of other topics for research in the area of time orientations might prove fruitful. For example, cross-sectional studies, testing different age groups, to determine the course of development of time perspectives might provide information now lacking. The stability of an individual's orientation might be investigated by longitudinal methods, such as repeated testing. The implications of time perspectives in the area of prognosis in psychotherapy have not been investigated experimentally. C. R. Rogers, according to Eson (9, p. 128), believes that, "the effectiveness of therapy may be measured in terms of the extent to which the subject ceases to emphasize the past and show an interest in the future." Rural-urban and race differences are other questions which might be investigated.

Certain criticisms of the present study might be made. For instance, the possibility of rural-urban differences was not considered at the beginning of the study, hence no attempt was made to control this factor. However, when checked later the two groups were found to be quite similar in this respect. The delinquent group included 16 boys from urban and 10 from rural areas while the control group was composed of 14 from urban and 12 from rural homes. Since the two groups were so similar, any rural-urban differences would probably influence the two groups approximately equally. Hence, this does not seem to be a significant factor in the differences found in this study.

SUMMARY

A group of 26 delinquent boys was equated with 26 non-delinquents in terms of age, IQ, academic achievement and socio-economic status. Stories were obtained from all subjects in response to verbal instructions which included the beginning of the story. The stories were recorded and then scored in six categories in terms of the length of time covered by the action of the stories. The reliability of the scoring was checked by computing the percent of agreement of three independent judgments and found to be very high. A two-tail t-test of the difference between story score means showed significance at the five percent level of confidence. A chi-square test showed differences statistically significant at the two percent level of confidence. Thus, the delinquent group in this study showed shorter spans of future time orientation than did the non-delinquent group.

REFERENCES

1. Ames, Louise. The development of the sense of time in the young child. J. Genetic Psychol., 1946, 68, 97-125.

2. Arieti, S. The processes of expectation and anticipation. J. nerv. ment. Dis., 1947, 106, 471-481.

3. Babcock, Harriet. Time and the Mind. Cambridge: Sci-Art Publishers, 1941.

4. Bateson, G. Cultural determinants of personality. In Hunt, J. McV. (Ed.), Personality and the Behavior Disorders. New York: Ronald Press, 1944, Vol. 2, pp. 714-735.

5. Bergler, E. and Roheim G. Psychology of time perception. Psychoanal. Quart., 1946, 15, 190-206.

6. Davis, A. Socialization and adolescent personality. National Society for the Study of Education, Forty third Yearbook. Chicago: University of Chicago Press, 1944, Part I, pp. 198-216.

7. Davis, A. and Dollard, J. Children of Bondage. Washington: American Council on Education, 1940.

8. du Nouy, P. L. Biological Time. New York: Macmillan Co., 1937.

9. Eson, M. E. Analysis of Time Perspectives at Five Age Levels. Unpublished Ph. D. Thesis, University of Chicago, 1951.

10. Frank, L. K. Time perspectives. J. Social Philosophy, 1939, 4, 293-312.

11. Freeman, W. and Watts, J. Psychosurgery. Baltimore: Chas. C. Thomas, 1942.

12. Friedman, K. C. Time concepts of elementary school children. Elementary School Journal, 1944, 44, 337-342.

13. Harrison, M. Lucile. The nature and development of concepts of time among young children. Elementary School Journal, 1933-1934,

14. Le Shan, L. L. Time orientation and social class. J. abn. soc. Psychol., 1952, 47, 589-592.

15. Lewin, K. Behavior and development as a function of the total situation. In Carmichael, L. (Ed.), Manual of Child Psychology. New York: Wiley, 1946.

16. Lewin, K. Resolving Social Conflicts. New York: Harper and Bros., 1948.

17. Murray, H. A. Forward. In Anderson, H. H. and Anderson, G. L. An Introduction to Projective Techniques. New York: Prentice-Hall, 1951.

18. Oakden, E. C. and Sturt, Mary. The development of knowledge of time in children. Brit. J. Psychol., 1922, 12, 309-336.

19. Piaget, J. Le Developpement de la Notion de Temps Chez L'Enfant. Paris: Presses Universitaires de France, 1946.

20. Schilder, P. Psychopathology of time. J. nerv. ment. Dis., 1936, 83, 530-544.

21. Warner, W. L., Meeker, M. and Eells, K. Social Class in America. Chicago: Science Research Associates, 1949.

APPENDIX

Sample Stories

Subject 7. "Well, one's name was Bill and the other was Bob. They were going to a track meet. They were making a bet as to which team would win, Central or North. Bob said his team would win 'cuz they were all varsity -- all seniors -- while Central had some sophomores on their squad. Bill said age didn't matter -- size and endurance are what count and North outsized Central. They arrived at the stadium just in time to meet the rest of the guys as they pulled up in a hot rod. We had a discussion as to whether to pay or go in the usual way -- over the wall. Bill figured they better pay while the rest figured they'd go over the wall. He held jiggers while the rest went over so nobody got caught. Later as the meet got started I found Bob to be right -- that North was better than Central. But as the meet ended about two hours later, Bill stuck to the argument that it was their capabilities, not the ages, which made them the better team."

Subject 2B. "Walking aling when suddenly they seen a sudden car crash. These two cars were going along and one had crashed into the other. A man was laying on the street, so quickly they ran to the nearest phone booth across the street and called the police and told them what happened. Then I went back to see what I could do. There was nothing for me to do so I just waited till the police came. They thanked me and congratulated me. Then about two weeks later after the man who was injured got out of the hospital, he gave the two boys a nice reward."

Subject 10B. "The two boys were walking along the street and picked up six other guys and went to the soft ball field and had a game. They played all afternoon and then went home and got cleaned up. They all made an agreement to go to a show that night. So we all met after supper and we all went to a show and didn't get home till about 9:30."

Subject 11. "They was wanted by the cops and just then a cop car spotted 'em. The cops jumped out and told the boys to stop where they were. But the boys thought they could get away and started to run and the cops shot 'em both. So crime doesn't pay."

Subject 12. "They spot a nice car and take it and go to the next town. They meet some girls and things. About three hours later they run out of money so Jim said, 'Joe, we gotta get some money to finish the night with these girls and get this car back.' So Joe said, 'That's right - let's go to that next store and rob it.' So they went in the store and there was three ladies and one man in there buying groceries. One of the ladies pulled out a big roll of money to pay for her groceries and Jim spotted it. He told Joe, 'We'll snatch her purse when she leaves.' One boy bought a candy bar and they both left the store to wait for the lady. The lady lived about four blocks from the store and in about five minutes she come by with her groceries. They snatched her purse and ran around the corner and jumped in the car. The lady told the police and they were picked up ten minutes later in the stolen car. That's the end of that sad story."