CRIME, DELINQUENCY, AND FEEBLEMINDEDNESS

BY

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The topic of feeblemindedness in relation to crime and delinquency is an enormously complex one which raises many questions of method and of interpretation, both specific and general. I must therefore make my apologies in advance for the inadequate presentation which I am forced to make at this time. This paper has been prepared under the pressure of many other duties and does not represent the carefully thought-out analysis of questions which this audience is entitled to receive. The discussion that follows should be understood as attempting merely to outline certain developments, to point to a certain emphasis in analysis of crime and delinquency situations, and to raise some questions for the future that seem important at this time.

1. Developments in testing the intelligence of criminals

The Lombrosian theory that criminals constitute a distinct physical type (which agitated Europe at the turn of the century) was continued in the United States as a Neo-Lombrosian theory, which maintained the same logic and substituted psychopathological type for physical type. Some of these Neo-Lombrosians have found the explanation of crime in mental defectiveness, others in dementia praecox, others in psychopathic personality, and others in a composite group of psychopathics. Thus, for example, the psychiatrists examining the admissions to the Illinois Reformatory at Pontiac for period 1919-1929 classified 99.5% as "mentally pathological" and only 0.4% as "having no demonstrable abnormality." Such a diagnosis leads one to suspect that the fact of criminality must have been taken as one of the principal criterion symptoms of psychopathy. During the same time the Department of Mental Diseases of Massachusetts found only from 10 to 15 per cent of the admissions to Massachusetts penal institutions diagnosed as "mentally pathological". It takes no special knowledge of the prison populations of these two states to realize that the difference in psychatric methods involved here is probably much more important than the actual differences in population. There is undoubtedly more variation among the psychiatrists of the two states than in the distribution of pathological mental conditions in the respective institutions.

Mental defectiveness as the type characterizing the criminal is the oldest and most common form of Neo-Lombrosianism in this country. This theory may be said to consist of the following propositions: first, the great majority of criminals are feebleminded; second, feebleminded persons commit crimes, in the absence of special inhibiting conditions, because they do not have sufficient intelligence to appreciate the reasons for laws and the consequences of violations of laws; third, such persons are easily led into crime by others because they do not have sufficient ability to realize what is happening; fourth, feeblemindedness is inherited in accordance with the established Mendelian ratios; fifth, therefore a policy of sterilization or segregation of the feebleminded is the only effective method of preventing crime and of dealing with criminals.

The first proposition, i.e., the high incidence of feeblemindedness among criminals, was given the color of established fact by the early mental testers. In fact, some of these men used the two terms, feeblemindedness and criminality interchangeably. In 1913 H.H. Goddard published in his book Feeblemindedness a list of studies of the intelligence of criminals, in which the study at one extreme diagnosed 89 per cent of the group as feebleminded, the other extreme diagnosed 28 per cent feebleminded, and the median study (which may be used as a simple index) had 70 per cent feebleminded. Many of the earlier testers took these results at their face value and concluded out of hand that the overwhelming majority of all criminals were feebleminded.

In 1915 an Ontario Commission on the Feebleminded presented a list of American studies of the intelligence of criminals in which the median study had a percentage of 62 feebleminded. In 1918 J. H. Williams in The Intelligence of the Delinquent Boy published a similar list with a median of 34. In 1919 a Massachusetts Special Commission on Defectives published a list of studies in which the median study diagnosed 28 per cent feebleminded. In six years the percentage diagnosed feebleminded in the median study in these lists of studies dropped from 70 per cent to 28 per cent.

In view of this striking decrease in the percentage diagnosed feebleminded, E. H. Sutherland was led to make an analysis of all available studies of the intelligence of criminals in 1928. He found approximately 350 such studies, involving some 175,000 offenders. The gist of his findings may be summarized in his Table 1, below. (E. H. Sutherland, "Mental Deficiency and Crime" in Social Attitudes, Kimball Young, Editor, pp 357-375).

Table I (page 358)

Psychometric Studies of Delinquents by periods, 1910-28:
All Institutions.

Years	Number of Studies	Percentage Feebleminded in Median Study	Percentage Feebleminded: Range
1910-14	50	51	4-96
1915-1919	142	28	1- 82
1920-1924	104	21	1- 69
1925-1928	46	20	2- 58

The modest conclusion would seem warranted from this that the proportion of delinquents diagnosed feebleminded has been steadily decreasing. The downward trend may be interpreted in two ways: one is that intelligent people (i.e., those with high scores on intelligence tests) are relatively more likely to commit crime now than they were a generation ago; the other is that the methods of measurement of intelligence have changed during this period. The latter would seem a much more reasonable explanation.

Professor Sutherland's formulation of the problem is sufficiently well put to be worth quoting:

> "It is probable that if ten persons of national reputation could test an identical group of delinquents, being free to use their own methods and criteria, the results would be strikingly different. We might expect Dr. Adler to report that about 7 per cent of the group were feebleminded, Dr. Doll 10 per cent, Dr. Healy 15 per cent, Professor Terman 23 per cent, Dr. Kuhlman 35 per cent, Professor Root 40 per cent, and Dr. Hickson 70 per cent. To be sure, if they all used the same tests and followed prescribed directions no such variation would be found, but they do not use the same tests and criteria. Consequently a report regarding the proportion of a delinquent group feebleminded is of primary significance in locating the mental tester upon a scale of mental testing methods. In this sense the psychometric tests of delinquents throw more light upon the intelligence of the mental testers than upon the intelligence of the delinquents". (E. H. Sutherland, Op. cit., p 362)

The most important influence brought to bear upon the development of intelligence tests during this period was perhaps the experience gained from the psychological work on the Draft Army during the World War. Goddard, who it should be remembered was among the most enthusiastic Neo-Lombrosians of the earlier period, had this to say in 1921: (H. H. Goddard, "Feeblemindedness and Delinquency", Journal of Psycho-Asthenics, 25:168-176, 1921)

> "And then we discovered that we had been guilty of one of these fallacies that apparently almost anybody may fall into at some time. Our conclusion that everybody that tested under twelve was feebleminded was an erroneous conclusion drawn from the fact that all the inmates of a certain institution for the feebleminded had been examined, and none were found to have a mentality above twelve. From this we concluded that everybody who had a mentality of 12 was or ought to be in an institution for the feeble-minded.... Now, as I say, we find that to be absolutely untrue. The most extreme limit that anyone has dared to suggest is that one percent of the population is feebleminded."

And in 1927 he wrote: ("Who is a Moron", Scientific Monthly, 24: 41-46, 1927, pp 42-43)

> "The war led to the measurement of intelligence of the drafted army with the result that such an enormous proportion was found to have an intelligence of 12 years and less that to call them all feebleminded was an absurdity of the highest degree. ... We have already said that we thought 12 was the limit, but we know that most of the twelve, and even of the ten and nine are not defective."

Professor Terman similarly revised his earlier estimates of intelligence distributions from the army experience. He says: (quoted by Fernald, Hayes, and Dawley, A Study of Women Delinquents in New York State, p ?)

> "It has become evident from the results of psychological work in the army that the 'Average Adult Intelligence' is considerably lower than the score of 16 on the Stanford Revision of the Binet test... Because of numerous factors of selection operative, I hesitate to venture an estimate as to what the real average adult score is. I do not think it is below 14, but I doubt whether it is much above this figure..."

In 1925 Professor Terman said: (L. M. Terman, "Research on the Diagnosis of Predelinquent Tendencies", Journal of Delinquency, 9:124-130, 1925, p 24.)

> "It is now generally recognized that delinquency is less often associated with intellectual defect than was believed a decade ago to be the case. Unquestionably the early mental test studies of both juveniles and adult offenders led to an overestimate of the proportion who were feebleminded...There are few things more certain than that some correlation exists between intelligence and conduct. On the other hand, the correlation is not such as to afford much of a basis for predicting that a mentally inferior individual will probably become delinquent. He may, and indeed is more likely than the person of average intelligence, but there are far more chances that he will not become delinquent than that he will."

It has appeared that mental age 13, 12, 11, 10, 9 and 8 have all been used by mental testers in diagnosing feeblemindedness among criminals. These criteria applied to the draft army give the following percentages feebleminded:

Below mental age 13	47.3%	
" " " 12	30.3%	(From: L. D. Zeleny, "Feeble-
" " " 11	17.6%	mindedness and Criminal Conduct",
" " " 10	10.0%	Am. Jour. of Sociology.
" " " 9	5.3%	38:564-576, Jan. 1933 P 569.)
" " " 8	2.1%	

Dr. Zeleny applied the same standards to the results from a large number of studies of criminal intelligence (163 studies, over 61000 offenders) which gave the results indicated:

Percentage Below Mental Age indicated	Criminals	Draft Army	Ratio
13	85.2%	47.3%	1.8 : 1
11	30.3%	16.3%	1.8 : 1
8	3.8%	2.1%	1.8 : 1

In other words, if the criterion of feeblemindedness is taken to be mental age 13, then approximately 85% of the criminals tested have been feebleminded, but by the same criterion nearly 50% of the draft was feebleminded. If it is concluded that about 2% is the correct figure for feeblemindedness in the general population is represented by the draft, then by this same criterion approximately 4% of the criminals test feebleminded.

These results are strikingly similar to those published by Paterson and Pintner in 1916. They say: (Rudolph Pintner and Donald Paterson, "A Psychological Basis for the Diagnosis of Feeblemindedness", Journal of Criminal Law and Criminology, 7:32-55, 1916, p 54.)

> "....by applying Haines' method of diagnosis, (I.Q. 75) to the unselected children of Yerkes-Bridges (670) we arrive at a percentage of 11.5 feebleminded. If there are 30.2% feebleminded among 880 delinquents, then there are on the same basis 11.5% feebleminded among 670 presumably non-delinquent school children tested by Yerkes and Bridges. ... On the hypothesis of 3% feebleminded among school children, we arrive at 6.6% feebleminded among the delinquents, or nearly twice as many...."

These studies all point to the same general conclusion, namely that feeblemindedness is approximately twice as frequent among criminals and delinquents confined in penal and correctional institutions as in the general population, when the same criteria of feeblemindedness is used throughout. If one is willing to say that approximately 2% of the general population is feebleminded, then by the same criteria 4% of the criminals will so test; if we say 10% of the general population is feebleminded, then approximately 20% of the criminals will so test, etc.

In the light of this historical development in the testing of intelligence of criminals, let us turn to a brief examination of some results from our own state.

2. Minnesota results in the testing of criminal intelligence

The Division of Research of the State Board of Control has been conducting mental tests of certain state wards for a number of years. The testing service has gradually expanded until in recent years it has been possible to have routine mental examinations given to all admissions to the state penal and correctional institutions, within a reasonable length of time after commitment. Brief reports on this work together with summaries of some of the results found have been regularly published in the Biennial Report(s) of the State Board of Control.

Examination of these published results reveals that a large proportion of the admissions to the institutions have I.Q.'s of 75 or less. The table on the next page presents these results for the three institutions for males for two different time periods, namely the biennium ending in June 1926 and the four year period ending in June 1932.

(From the 13th, 15th, and 16th Biennial Reports of the State Board of Control). The figures are per cents of the total number in each institution under the successive I.Q. groupings.

I.Q. Group	Prison		Reformatory		Boys' School (Red Wing)	
	1925-26	1929-32	1925-26	1929-32	1925-26	1929-32
0- 74	42	49.2	25	31.0	24	29.4
75- 84	19	14.6	18	12.5	23	17.2
85- 94	13	18.6	18	24.2	19	27.9
95-104	10	8.6	13	17.2	17	17.3
105-114	4	4.6	8	9.6	8	5.1
115-124	5	2.4	8	3.8	5	1.6
125-over	7	2.0	9	1.7	4	1.5
Number of cases	880	943	803	1180	354	548

The assumptions back of these figures may be stated in Dr. Kuhlmann's own words in discussing the 1925-26 report: (13th Biennial Report, p 55)

> "In the general population a relatively very small percentage have an I.Q. of 0-74. If intelligence had been no factor at all in the commission of crimes a relatively very small per cent of the population in the institution should fall under this I.Q. classification of 0-74. The percentages in this table should run parallel with the percentages of the general population that fall under the successive I.Q. classifications, giving much the larger percentages as of average or near average intelligence (I.Q. 100), and very small percentages for the two extremes of low and high."

It is at this point in the analysis that I feel constrained to begin to make reservations. The assumption that average adult intelligence is around I.Q. 100 as measured by these tests seem to me exceedingly questionable and not supported by good information. No representative group of the adult population at large has ever been tested by these tests to see just what the I.Q. distribution may be. To assume that the same distribution prevails as is found with children who are maturing with chronological age seems to be going pretty far.

An illustration from the army results will help make clear this point. I.Q. 74 and below is equivalent to mental age 12 and below (base age 16). The same criteria that gave 42 per cent feeble-minded in the prison in 1925-26 and over 49 per cent in 1929-32, would have given 30.3 per cent of the draft army in the same classification. In other words, the same criteria that placed 42 per cent of the prisoners in Stillwater in the I.Q group 0-74 in 1925-26 would also have placed 30 per cent of the draft army in that I.Q. group. If that qualifying condition is kept in mind it is apparent that the percentage in the lower I.Q. group is by no means so disproportionately high as seems to be the case under the conventional assumption that average adult intelligence is indicated by an I.Q. of around 100.

I have tried to approach this problem from another angle by using the figures for mental age instead of the I.Q. as the measure of intelligence. Through the gracious courtesy of Dr. Kuhlmann last summer, I had opportunity to go over the report sheets on which his mental testers report their results from the respective institutions. Admissions during the calendar years 1931-32 were studied. By using the figures for mental age rather than I.Q., comparisons with the draft army may be readily made. Time has not been available in which to complete this work but some interesting tentative results may be mentioned at this time. They are submitted to this group for purposes of discussion and not as a final conclusion.

1077 Stillwater cases were recorded for the period. The median mental age for these was found to be 13 years and 1.2 months. 1127 St.Cloud cases were involved. The median mental age for this group was 13 years and 11.2 months. It should be recalled that the median mental age of the draft army was found to be 13 years and 1.8 months. It is apparent, therefore, that the median mental age at Stillwater and the draft army are practically identical; at St.Cloud the median mental age is actually about 7 months higher than for the draft army. (13 years, 11.2 mo.) (1127 cases).

These results are even more apparent when the respective mental age distributions are plotted on graph paper in the form of superimposed of cumulative curves. (Only the rough work sheets can be shown at this time). A high degree of uniformity is apparent throughout the three curves. It is especially pertinent to note that no concentration of population for either institution occurs at the lower ends of the curves. The apparent concentration in the I.Q. group 0-74 tends to disappear when mental age is taken as the measure of intelligence. It is entirely possible that this concentration reflects no more serious condition than the innacuracy of the arbitrary base age chosen for converting mental age into I.Q. scores. If then mental age 8 (I.Q. 50) be taken as the criterion of feeblemindedness, 3.3% of the admissions to Stillwater during 1929-32 would have been diagnosed feebleminded instead of 49.2% so diagnosed with I.Q. 74 as the dividing line. Mental age 8, it should be recalled, diagnosed ~~21.1%~~ 2.1% of the draft army as feebleminded.

I am not now directly interested in which figure is taken as the criterion of feeblemindedness--only that the same standard be applied to the non-criminal population that is applied to those in the institutions. Reasonable standards for the non-criminal population, applied to the inmates of our institutions, seem to indicate no very excessive number feebleminded within the institutions. This point is of tremendous significance in criminological theory, both as to causation and as to a philosophy of treatment. If there is no very large percentage of criminals feebleminded then we must look for other factors in the explanation of the criminality. Similarly our treatment must be directed at something else than segregation and steriliation, useful as these devices may be for the small numbers involved.

3. Some Implications of this analysis

Limitations of time and space make it impractical to enter into any extensive analysis of the implications of what has already been said. My views may be briefly summarized but can not well be discussed in any detail.

My present feeling is that probably the best characterization of the institutional criminal population that present knowledge can give is to say that it is a fair cross-section of the general population which feeds the institution. Selective factors no doubt operate in numerous ways not well understood. Low intelligence would seem to make apprehension more likely, for example, and it is probable that in certain connections greater suggestibility may be a net result. Yet, with it all, there is probably no penal institution whose main problem is the burden of the excessively low intelligence group, any more than this same group is a burden to the community outside. Undoubtedly some communities have larger proportions of the population feebleminded than others, similar differences will therefore also appear when one institution is compared with another.

A few years ago it was common to decry the educational limitations of those in prison. Today we find increasingly less and less difference between the level of education in prison and without. The same should be said in regard to church and religious affiliations; in regard to occupations and professions; in the matter of political party affiliation; and so on.

Crime would seem to be an inevitable consequence of social organization. Organized society necessitates the curbing and controlling of the individual for the benefit of the many, or for what the politically important majority conceive of as desirable. Individual interests and group interests thus come into conflict; the interests of one group conflict with those of another group; each seeks to gain some advantage, to enjoy some of the limited bounties of life. Out of this situation grows law and law enforcement -- and non-conformity and the violation of law, and crime. Eliminating the feebleminded (if that is possible) does not seem to offer any particular contribution to the solution of the more fundamental problem back of the social conflicts which record themselves in our society as crime.

The practical problem of decreasing the number of feebleminded and decreasing the financial pressure of caring for them in an increasingly complex civilization is one with which we all can sympathize. But if we had a world of intellectual giants it is not probable that the problem of crime would disappear from organized society. Its form presumably would change, but the underlying factors of conflict in social organization would remain and with them would go rebellion, non-conformity, exploitation, and the obvious counter-gesture, coercion. That is the crime process that seems to have been going on in the perspective of all history.

DISCUSSION

Dr. Van Wagenen — Many of you have some questions you would like to ask. The discussion is open to the group.

Dr. Nielsen — Just assume for a moment that there would be any validity in the relationship of feeble-mindedness to criminology. Has anyone suggested that because our civilization has probably become more complex in the last generation that thereby there would be more persons of higher intelligence in the criminal group?

Dr. Vold. — Quite possible. The interesting thing, of course, is that the history of individual I. Q. tests studied show a striking decrease in the proportion diagnosed as feeble-minded.

Dr. Nielsen — I don't know. I questioned whether it would be sound to argue it. I was wondering if some one had raised that question seriously.

Dr. Vold — There is one point that may be considered. It is very obvious that during the period in which the studies reported covered, is also the period in which special institutions for the feeble-minded were being built throughout the country. In the latter period there has been an increase in the percentage of feeble-minded in institutions, which would mean fewer feeble-minded confined in criminal institutions. The relationship there is not easy to get at.

Mr. Hegerston — Mr. Chairman, I wonder if there is not some error in using the results of the army tests. It seems that they were group tests, standardized and used on school children in the first place and then on the drafted army. Second, group tests tend to show a lower score compared to individual tests when applied to adults. The difference is more striking than with individual tests. Would not that be part of the explanation for the large number of soldiers having an I. Q. under 75%, for example.
Then you take the tests of the prison population. Part of those were group tests and part were individual. Then also, the type of tests were different.
Dr. Kuhlmann, do you use the Kuhlmann Anderson test?

Dr. Kuhlmann — Yes.

Mr. Hegerston — The Kuhlmann Anderson test, to me, would show less variation between children and adults than the army alpha test. That is a point, I think, ought to be considered.

Mr. Vold — So far as the people out of school for a while showing a drop in their score, I think that would be perfectly true. I would not suggest that the army test is the last word in the testing of the population outside, but I am rather impressed with the fact that you have consistency in the mental age classifications with those reported in this state and the results from the army tests on a mental age basis.
No doubt the army testing program itself was rather a clumsy and blundering thing. Nevertheless, I think the biggest error is to assume that tests used primarily for children seem adequate when applied to adults. If it is true, we need to begin to investigate the adult population with these tests.

Dr. Kuhlmann — The thing I want to say about this matter of validity of comparing this data with the army test data is that the army draft was a highly selective one. Although all were called without discrimination, when it came to actually drafting them, there were so many who had to stay home because they were engaged in essential industries, professions, etc. The feeble-minded were not likely to be in essential industries. The professional and semi-professional were the ones eliminated in the drafts in high degree. I think the fact is that when you classify the army people into occupational groups that the score goes almost too high, but when you come to the unskilled labor group, it provides a big part to account for the army score coming down to our institution score.

I think there is more error in the army test data. In the first place, conditions for those examinations were deplorably poor. Drafted men were herded there by the thousands and rushed through those tests. There were a good many did not know where they were at when those army tests were shot at them. Just to illustrate how the scores were gotten up - two of the men in charge of the army tests were from Cornell. I am quoting one. One point he mentioned was that the men came off the trains by the thousands, were herded into camps and given the army tests. He made the statement that there was an instance in which an officer called for the scores on a certain group that were tested, by 6 o'clock on the evening of that day. This could not possibly be managed. Consequently, they just took names and wrote scores opposite the names and never looked at the test results at all. I don't know whether this sort of data was sent in or not, but the point I want to stress is that the army draft was highly selective and the chances of the unskilled getting out as being needed at home were very small while the professional and semi-professional were very high. I was drafted and insisted on going but they insisted I was too much needed at home and undoubtedly I would not have been allowed to go even if the armistice had not been signed too early.

Lastly, with reference to the quotation you gave from the Board of Control's report that if low mentality had not been a factor in getting cases into the reformatories and prisons, then the scores in institutions should run parallel to the scores in the school population. The comparison on that point I think was as close and as valid as anything you will find anywhere. The public school children were surveyed by certain tests from the first grade thru high school, and we found a certain distribution of scores. We took exactly those same tests, given by the same examiners, under conditions as closely the same as could possibly be made, and yet when you compare the results of Red Wing alone and the public schools results, there are about four times as many mentally defective in Red Wing Training School as in public schools.

Take the Red Wing school results alone and compare them with the data from the Prison and St. Cloud Reformatory. At Red Wing they are mostly children chronologically, not 20, 40, 50 or 60 as in prison. It is true that there is some difference in the mentality of the Red Wing children and the adults in St. Cloud, but it is not an essential difference.

Dr. Vold — Have you ever made that comparison relative to mental age and I. Q. alone? I think you would find different results.

Dr. Kuhlmann — I think you are likely to introduce more error when you go back to mental age than when you stay with the I. Q. Don't you think we would have pretty poor material that you call normal, if we draw the line between normal and mentally defective at mental

Dr. Kuhlmann (Continued) ago eight, as you had to do in order to make the frequency of mental deficiency in the army data agree with the frequency in reformatories?

Dr. Vold My point is that I think you can have perfectly good social individuals, capable of carrying on many activities, with very low mental ages.

Dr. Kuhlmann: That may be. I have heard Dr. Fernald say that some of the finest characters that he had ever associated with were inmates of his institution and undoubtedly could get along very well outside under proper circumstances but nevertheless, I think they were feeble-minded.

Dr. Vold I happened to have been in the draft and took the test at camp like a hundred thousand other individuals and I have taken intelligence tests at one time and another and would say that the army test compared quite favorably with those given at the University of Minnesota. We were taken out to deep ravines and the tests were given outside. We wrote the tests on individual cardboards held in our laps. We sat a considerable distance apart, in army formation. It was almost a perfect ampitheatre. It may be true that people did not take it very seriously. However, the general conditions impressed me favorably. One experience I encountered myself and I understand others have noted the same conditions, where they had little control over the people who had some of the data.

It is, of course, well known that over four million people went through the testing program. We have a record of the results of 93,000 tested. The essential error of the army test is probably rather from a technical standpoint than that it is not any good as a test. It is in error rather under the conditions in which it was given.

I do not consider myself a mental tester nor am I qualified to speak of the details of a testing program. Dr. Kuhlmann, however, has spent most of his life developing tests. I am interested, though in the significant proportion that Minnesota succeeds in finding of low mentality as compared with the institution population.

Dr. Kuhlmann Would you say that the comparison of children of school age with Red Wing inmates is less valid than the comparison between reformatory and army data?

Dr. Vold I don't know.

Judge Carroll Isn't there quite an error on the other side of this chart? You are speaking of criminals as a whole and you are examining those in institutions. I think the intelligence angle would rise when you consider, first, those who are placed on probation; second, those not convicted and third, those where crime is committed and no one is brought to trial, particularly among the higher people, fourth, those sent to prison.

I have to do with a group of young men in several universities in the northwest. Our experience has been that the qualities in all particulars have been higher where their financial affairs are taken care of in good order. Invariably their scholastic and general standing is higher than the others. Is there any test which would be true of people to determine their moral qualifications?

Dr. Vold — I don't know.

Dr. Nielsen — It has occurred to me that the results of mental testing in an institution for correction probably has more validity and more usefulness within the institution than it has in comparing that group with other groups, say as a group of unselected of the normal population, for the reason that the very fact you have a group under correction that are selected to begin with. The fact has already been brought out that you can't possibly have the entire group selected.

Dr. Vold — It makes very little difference what kind you use so long as you use the same test on the same kind and do not compare it with one of another group.

Miss Thomson — Do any of the studies refer to workhouses rather than prisons?

Dr. Vold — The summary table I gave was a mixture of all. In the bulletin much more elaborate studies have been made and the different kind of institutions, male and female, have been separated.

Miss Thomson — As a whole do the workhouse population have lower I. Q's?

Dr. Vold — Somewhat.

Dr. Kuhlmann — When we get, say 25 to 30% of the reformatory population below 75 I. Q., it does not necessarily imply that it is mental deficiency that has brought them to the institution directly. In all likelihood the social and home conditions usually associated with mental defectives, have been a factor in bringing them to the institution.

Dr. Vold — Dr. Rosenoff of New York finds a very high proportion in the group diagnosed feeble-minded. That is the conclusion that you come to when you read between the lines of half of these studies.