THE ADVERSE EFFECTS OF REPEATED EVALUATIONS UPON SUBSEQUENT UNDERSTANDING

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ABSTRACT

A study by Dailey (1952) reports that early expressions of understand have an adverse effect upon the acquisition of understanding of a person. The problem of how to study the acquisition of clinical understanding then arises, since early expressions of understanding are often essential to such investigation.

The present study sought to (a) verify the adverse effects of early expressions of understanding, and (b) determine to what extent the effects of repeated expressions of understanding are dependent upon the mode of expression. The repeated use of personality sketches, check lists, and Q sorts were compared for their effects on subsequent understanding.

The hypothesis that repeated expressions of understanding have an adverse effect on subsequent understanding was confirmed when personality sketches, check lists, and Q sorts were used as the measure of understanding. However, this hypothesis was not supported when eleven multiple-choice questions, related specifically to the provided personality data, were used to measure understanding. Thus, the early expressions of understanding appeared to affect primarily a general understanding of a person. No clear differences were found among the three modes of expression compared, although there was some suggestion

that the personality sketch is the mode which least affects subsequent understanding.

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As early as 1912, Freud (2) commented, "As soon as attention is deliberately concentrated in a certain degree, one begins to select from the material before one; one point will be fixed in the mind with particular clearness and some other consequently disregarded, and in this selection one's expectations or one's inclinations will be followed. This is just what must not be done, however; if one's expectations are followed in this selection there is the danger of never finding anything but what is already known, and if one follows one's inclinations anything which is to be perceived will most certainly be falsified."

In a slightly different context, these comments find support in the work done by Dailey, (1952). Dailey has shown that an observer is affected by his own judgment about a person. Judgments have a rigidifying effect which makes new data harder to assimilate. Confident observers also tend to mistake their inferences for facts in ambiguous situations. Moreover, Dailey observed a "tendency for understanding to decrease as it is expressed". Thus, initial judgments appear to have an adverse influence upon the accuracy of subsequent judgments based on additional data about the same person.

Dailey's findings have particularly pertinent implications for a growing number of experimental efforts aimed at studying clinical assessment and therapeutic processes. Such studies typically seek to measure the development of clinical understanding by means of repeated judgments, and so the results

obtained may in part be artifacts of the experimental design. In other words, if the early judgments clinicians are asked to make in these studies affect their subsequent understanding, as Dailey suggests, such judgments distort the very thing being measured, namely the clinicians' understanding.

A few cases in point will serve to illustrate. Meehl (1959) had therapists evaluate clients by means of the Q-sort technique after their first, second, fourth, eighth, sixteenth, and twenty-fourth sessions with their clients in order to measure the growth of the therapists' understanding. Meehl reports obtaining a curve which reached an asymptote around the second or fourth sessions. In other words, itappeared that the therapists' understanding did not increase after the second or fourth sessions, at least as far as the items in his Q deck were concerned. Such a curve suggests the rigidifying phenomenon of judgments observed by Dailey, (1952).

In a study by Kelly and Fiske (1951), a slight increase in the validity of successive judgments was noted as the amount of material was increased up to a limited amount. After this point understanding appeared to decrease with subsequent expressions. Dailey's data (1952) again suggests this could be the simple result of repeated judgments.

A study by Sines (1959) is exemplary of efforts to measure the contributions of various sources of diagnostic data to clinical understanding by means of repeated Q sorting. Sines furnished biographical data, MMPI profiles, Rorschach protocols, and diagnostic interview data to five clinicians who performed

Q sorts after receiving each type of data. In addition to noting the rapid stabilization of understanding, Sines found that over-all agreement with his criterion group of therapists was dependent upon the order in which the materials were presented. This too, suggests that the clinicians' understanding was being affected by something extraneous to the information Per se.

Therefore, while such results are only suggestive in nature, it does seem possible that numerous studies concerned with measuring the development of clinical understanding are being confounded by the adverse effects of the repeated judgments of measurements required by such investigations. The problem of how to study the acquisition of clinical understanding then arises, however, since the earliest expressions of understanding are so essential to such investigations. The present investigation sought to cast some light on ways of circumventing or alleviating the adverse effects of such initial judgments inorder that the experimentalist might free himself of this methodological dilemma.

It seemed reasonable to suppose the degree of adverse influence might be related to the mode by which judgments are expressed since different modes have different "demand characteristics". For example, the Q-sort technique forces the user to make judgments as to the relative descriptiveness of every statement in the Q deck. A personality sketch, on the other hand, leaves the writer free to make any sort of inferences he chooses to make. The effects of these "demand characteristics" on later understanding seemed particularly worthy of investigation since

from Dailey's work (1952) one can infer the influence of early judgments would be most severe when early inferences are inaccurate.

Therefore, the present study sought to (a) verify the adverse effects of repeated judgments on subsequent understanding, and (b) determine to what extent such influence is dependent upon the mode used to express these early judgments. The Q-sort, personality check list, and the personality sketch were used as the modes of expression.

The "demand characteristics" of the Q sort and personality sketch have been pointed out already. The personality check list differs from both these modes of expression by demanding a rather "loose", dichotomous judgment on specified statements. This judgment is said to be "loose" because the failure to judge a statement as descriptive is seldom taken to imply the converse when such ratings are evaluated. Thus, the check list procedure was considered to be less demanding than the Q-sort procedure while being more restrictive than the personality sketch.

METHOD

Subjects and Instructions

One hundred and five male and female subjects who were taking an introductory course in psychology were used. The participation of these subjects was obtained by presenting this study in their discussion groups as an attempt to determine how much information about a person is needed before it is possible to understand something about him. They were told that they would be given a few statements about a man, and then would be asked to answer some questions about him. They were told this process would be repeated until they had a chance to use all the personality data.

The subjects were then read the following statement, "Build an image of this man as you get information about him, rather than completely reconstructing it from scratch each time new statements are distributed. To aid you in doing this try not to refer back to the previous information once you are given additional information. Do not be afraid, however, to change your image of this man, as you go along, if you think you are on the wrong track."

The subjects were randomly assigned to one of five experimental groups. Those in the Standard (S) group received the personality data as an integrated whole, and studied them without interruption. They were then asked to respond to eleven multiple-choice questions, a personality check list, a Q-sort task, and finally they were asked to write a personality sketch.

The subjects in the Personality Sketch (PS) group were asked to write a brief personality sketch after studying each

set of personality data, ie. after the statements of "low importance", "medium importance", and "high importance". In like manner, the subjects in the Check List (CL) and Q sort (QS) groups were asked to express their judgments by means of a check list and Q sort, respectively, after studying each set of personality data. The subjects in the Wait (W) group were simply asked to wait while those in the PS, CL, and QS groups made their judgments after each set of data was presented. After the personality data had been studied and all judgments were completed, the subjects in the PS, CL, QS, and W groups were given eleven multiple-choice questions about the person under consideration.

All the subjects received the personality data in exactly the same order. Four statements of "low importance" were presented first. Then, four statements of "medium importance" were presented, followed by four statements of "high importance". This particular order was used because the adverse effects of early expressions of understanding were found to be most profound under such conditions by Dailey (1952). The subjects were allowed to study the personality data and make their judgments at their individual work rates, although they were told before hand that about thirty minutes would be given for this task. Table 1 summarizes the experimental procedure.

Table 1
The five conditions under
which subjects received personality data

Groups (N = for all groups)				
PS	CL	QS	Wait	Standard
Study : Statements of "low importance "				Study: Statements of "low, "medium" and "high" importance
Write sketches	use check list	use Q sort	wait quietly	
Study: Statements of "medium importance"				Respond to multiple-choice questions
Write sketches	use check list	use Q sort	wait quietly	Use check list
				use Q sort
Study: Statements of "high importance"				Write sketches
Write Sketches	use check list	use Q sort	wait quietly	
Respond to the eleven multiple-choice questions				

Multiple-choice Questions

Forty statements were taken from the case of Earnst found in Murray's Explorations in Personality (5). Eleven of these statements were randomly selected, and used as the answers to eleven, four-alternative, multiple-choice questions which related to Earnst's life history and personality. The location of the autobiographical statement among the other three alternatives which were composed by the experimenter was determined randomly for each question. Success in selecting the autobiograp hical statement from among the four alternatives for each question was used as one indication of a high degree of understanding.

Measurement of Personality Data for Importance

From the twenty-nine autobiographical statements remaining after the eleven statements used for the multiple-choice questions were removed, twelve others were randomly selected. These were measured for "importance" as follows: (a) three copies of each statement were prepared, and thirty-six subjects were recruited from a freshman English course, (b) each of these subjects was given just one statement as the sole datum he had about Earnst, (c) the subjects were then presented with the eleven, four-alternative, multiple-choice questions, and asked to select the one statement in each set of answers which was most true of Earnst, (d) the number of questions correctly answered by the three persons with the same single statement was then totaled. Each statement thus received a score referring to the number of multiple-choice questions it implied, and representing the "importance" of that statement.

The twelve autobiographical statements were then arranged into three groups of four statements each to form "low importance", "medium importance", and "high importance" sets of personality data. Thirteen students in an introductory psychology course were then recruited and split into five groups. Three groups each composed of two subjects, received just one of the three sets of personality statements, while a fourth group, of two subjects, was given both the "low" and the "medium" sets. The five remaining subjects made up the fifth group and were given all three sets of personality data. All the students then responded to the eleven multiple-choice questions. This procedure gave further support to the relative importance of these three sets of personality data (see appendix A).

Q-sort and Check List Materials

One hundred descriptive statements were collected from various Q-sort and report-type arrays available to the experimenter. No statements using psychological terminology or words unlikely to be readily available in the vocabularies of college freshmen were included. From this collection thirty-five were randomly selected and presented to three judges who independently scored each statement true or false as it applied to Earnst. There was unanimous agreement concerning the truth of thirteen of these statements. These thirteen statements were then combined with fourteen of the statements considered to be false by all three judges to form a Q-sort array of twenty-seven items which were to be sorted into a 2-3-5-7-5-3-2 forced distribution. The same twenty-seven items were also organized to compose the personality check list.

RESULTS

The above procedure made it possible to test the hypothesis that repeated judgments have an adverse effect upon subsequent understanding using two different criteria of understanding. First, the final personality sketches of group PS, the final check lists of group CL, and the final Q sorts of group QS were compared with the personality sketches, check lists, and Q sorts of the Standard group.

Personality Sketches

The final personality sketches of group PS were randomly paired with those of group S. These pairs were then submitted to two judges who independently determined which of the sketches in each pair best described Earnst. The judges agreed on a total of seventeen pairs. Thirteen of the sketches judged to be superior were written by subjects in the Standard group. A sign test reveals this to be statistically significant at the .05 level for a two-tailed test.

Check Lists

Since the items on the check list were judged true or false, in terms of Earnst, at the time of their selection, an "understanding score" was derived by subtracting the number of false items checked from the number of true items checked. The check list scores of the CL group were then compared with those of group S by means of a test. As seen in Table 2, the scores of group S were again found to be significantly larger at the .02 level for a two-tailed test.

Table 2

Comparison of the final check list scores of group CL with those of the Standard group

	Group CL	Group S
No. of items checked	207	221
True items	120	145
False items	87	76
Score	33	69
n	21	69
Mean	1.57	3.29
S^2	5.26	4.81
Observed t ratio	-2.49*	

*significant at the .02 level for a two-tailed test.

Q sorts

In comparing the Q sorts of group QS with those of the Standard group, only the thirteen items judged true at the time of their selection were utilized. The seven columns in the 2-3-5-7-5-3-2- distribution were given scores of -3,-2,-1, 0,1,2,3, and each true statement was given the score of the column in which it was placed. These thirteen scores were then summed to yield an index of understanding.

When the Q-sort scores of group QS were compared with those of group S, by means of a t test, the scores of group S were found to be significantly larger at the .02 level for a two-tailed test (see Table 3). These results support the general hypothesis that repeated evaluations have an adverse effect on subsequent understanding.

Table 3

Comparison of the final Q-sort scores of group QS with those of group S

	Group QS	Group S
Total score	46	103
n	19	21
Mean	2.42	4.90
S^2	7.48	12.18
Observed t ratio	-2.48*	

*significant at the .02 level for a two-tailed test.

Since Dailey's (1952) results revealed a "tendency for understanding to decrease as it is expressed", the present data were next surveyed to see if such a tendency could be found. In the case of the PS group, the three sketches written by each individual in the group were randomly arranged, and presented to a judge who ranked them according to their descriptiveness of Earnst.

The resulting rank-totals did not reveal a tendency for understanding to decrease. An analysis of variance of these ranks also failed to confirm any positive change in understanding over the three repeated evaluations. Table 4 shows the similar results obtained when the first, second, and third check list and Q sorts were scored for understanding.

Table 4

Understanding scores of the three repeated evaluations done by groups PS, CL and QS

Groups	Evaluations		
	1st	2nd	3rd
PS	34[a]	38[a]	48[a]
CL	8	1	33[b]
QS	47	47	46

[a]scores represent rank-totals

[b]not statistically different from 2nd score at the .10 level.

Thus, the above data did not reveal any tendency for understanding to decrease as it is expressed. Rather, understanding appeared to simply stabilize after the first evaluation.

Next, the eleven multiple-choice questions were scored for all five groups. The results in Table 5 reveal that when the PS, CL, QS, and W groups were compared with the Standard group by means of Dunnett's procedure (7) for comparing all means with a control, no statistically significant differences were obtained.

Table 5

Comparison of the multiple-choice scores of groups PS, CL, and W with the Standard group's by Dunnett's procedure

	Groups				
	PS	CL	QS	W	S
Means	7.19	6.33	6.86	7.14	6.57
S^2	1.66	3.63	1.83	1.43	2.26
t ratio[a]	1.38	-.53	.64	1.27	*

[a]critical t at .05 level is 2.52

In fact, all but the CL group actually did better than group S. Obviously, the superiority of group S was not verified. This result is in marked contrast to that found earlier in this study as well as that found by Dailey (1952) when he used a new set of multiple-choice questions to measure understanding. An analysis of variance of multiple-choice scores of the five groups also failed to produce a significant F at the .05 level (see Table 6).

Table 6

Analysis of Multiple-choice scores for the five experimental groups

Scource of Variance	SS	DF	MS	F[a]
Methods	11.37	4	2.84	1.31
Experimental	216.19	100	2.16	

[a] critical F at .05 level is 2.46

DISCUSSION

When the final personality sketches, check lists, and Q sorts of group OS, CL, and QS, respectively, were compared with those of group S, it appeared that the repeated judgments made by groups PS, CL, and QS had an adverse effect on their subsequent understanding. Yet, when the eleven multiple-choice questions were used as the criterion of understanding, groups PS, and QS, as well as group W, actually had mean scores that were higher than the Standard group's.

This result suggests a number of possibilities. For example, the adverse effects of previous judgments demonstrated by the comparison between the final personality sketches, check lists, and Q sorts of groups PS, CL, and QS, respectively, and those of the Standard group could be the result of response fixation. This possibility was investigated by selecting the check list responses and Q sorts of all those subjects whose understanding scores seemed to remain stable after the first or second judgments. The check list responses were analyzed item by item. Discarded and novel responses were noted as were responses that were repeated. The results of this analysis can be found in Table 7.

Table 7

Item annalysis of repeated check lists

that yielded relatively stable scores

Subjects	Evaluations	Discarded Responses	Novel Responses	Repeated Responses
# 2	2nd	7	8	5
	3rd	11	9	2
# 4	2nd	7	5	8
	3rd	7	7	6
# 10	2nd[a]	1	3	11
	3rd	8	5	6
# 14	2nd	3	1	4
	3rd	3	3	2

[a]the only repeated evaluation where response fixation seems dominant

In the six instances where the Q-sort scores reflected little change in understanding from one sort to the next, the two sorts were correlated to get a rough picture of whether response fixation had played a magor role. Since only the statements in the deck that were judged true were utilized in the scoring of the Q sorts, the correlations included only these items. As shown in Table 8, two of the six correlations were significant at the .05 level.

Table 8

Correlations between Q sorts that produced relatively stable scores

Subjects	Evaluations	Correlations
# 3	1st-2nd	.51**
# 8	1st-2nd	-.15
# 10	1st-2nd	.23
	2nd-3rd	.92**
# 18	1st-2nd	-.28
	2nd-3rd	.39

** significant at the .05 level

However, when the Q sorts were further analyzed it was observed that in one of these sorts only two of the thirteen statements were identically placed, while in the other sort only three statements were sorted identically. Hence, it did not seem plausible that the discrepancy between the final personality sketches, check lists, and Q sorts of groups PS, CL, and QS, respectively, and those of the Standard group could be accounted for in terms of response fixation.

The possibility exists, of course, that answering the multiple-choice questions in advance of the check list, Q sort and personality sketch tasks had a positive effect on the understanding of the subjects in the Standard group which was reflected in their later performance. This is highly unlikely, however, in as much as the alternatives to the multiple-choice items allowed for a wide range of impressions about Earnst, and the content of

these questions was not closely related to the items on the check list and in the Q deck. Then too, it should be remembered that the Standard group did not do very well on the multiple-choice items. According to Dailey's findings (1952) such wrong responses should produce anything but a positive affect on subsequent understanding.

Still a third possibility exists. The personality sketch, check list and Q-sort items may require a somewhat broader understanding than do the multiple-choice items. It should be recalled that the "importance" of each personality statement was determined by the number of correct multiple-choice items it inferred. Thus, a high score on the multiple-choice items might conceivably demand a more specific use of each statement in the personality data. Such specific understanding might best be achieved by studying the personality in small sets with little interference between sets; the conditions under which the subjects in the PS and Wait groups studied the personality data.

The items on the check list and in the Q-sort deck, on the other hand, were not specifically related to the statements in the personality data. Thus, it it is conceivable that these tasks as well as writing a personality sketch might best be carried out with a general, integrated understanding of Earnst. Such understanding seemingly would best be achieved by studying the personality data as an integrated whole in the manner that the Standard group studied the personality date.

Thus, it appears that the discrepancy between the results obtained when the final personality sketches, check lists, and Q sorts were used as the criterion of understanding and the result s

obtained when the multiple-choice items were used as the criterion of understanding may best be explained by the breadth of understanding these two criteria measure. If this is the case, it appears that repeated evaluations have their primary, adverse effect on the more general, integrated understanding of a person.

This interpretation of the reported results is not in conflict with those reported by Dailey (1952). Although in Dailey's study the "importance" of each personality statement was also determined by the number of other autobiographical statements it inferred, these specific autobiographical statements were not used as the final measure of understanding. Thus, Dailey's criterion of understanding conceiveably measured a general understanding of Earnst similar to that of the personality sketches, check lists, and Q sorts in the present study.

Unfortunately, the present data do not furnish any adequate comparison of the effects of the repeated use of the personality sketch, check list, or Q sort on this general, integrated understanding. Table four, however, shows the developmental course of understanding for each mode of evaluation used in this study. Only when the personality sketch was used for repeated judgments, did understanding show any consistent tendency to increase with additional information. Understanding showed considerable fluctuation when the check list was used. On the other hand, understanding appeared to stabilize after the first evaluation when the Q sort was used to express understanding. While such results need to be interpreted very cautiously indeed, they suggest the effects of repeated evaluations on general under-

standing may be most severe when the Q sort is the mode used to express such evaluation.

Moreover, the multiple-choice date (Table five) suggest that the r epeated use of the personality sketch may actually enhance a more specific understanding of a person; that is understanding directly related to specific personality data. This may largely be due to the fact that it is easiest to recall the specific data with the repeated use of personality sketches.

The present study did not uncover a "tendency for understanding to decrease as it is expressed"; a phenomenon reported by Dailey, (1952). This difference might possibily be the result of a slightly different procedure used in the present study. While the present study employed Dailey's procedure in determining the "importance" of each personality statement, an additional check was made to insure that the combined statements or the sets of personality data also varied in "importance". This additional procedure was thought to be significent since four statements of "low importance", when combined to form a set of data, may contain as much information with respect to a given criterion of understanding as four statements of "high importance". For example, both the "low importance" set and the "high importance" set could lead to the maximum amount of understanding as measured by a given criterion of understanding. This is particularly true when the criterion of understanding is composed of a limited number of items.

While in the present study there was some evidence to support

the notion that each set of personality data was more "important" than the set which preceded it, it is possible that in Dailey's study (1952) the sets of personality data did not, in fact, vary to any great extent in terms of "importance". What is suggested, is that understanding is directly related to the "importance" of the personality data, and inversely related to the amount of data. As long as additional data brings a gain in the "importance" of what is known, understanding should tend to increase. If, however, additional data do not add to the "importance" of what is known, they only tend to make things more complex, and thus may bring about a decrease in understanding. This formulation is admittedly highly speculative, but may serve as a fruitful hypothesis for subsequent research.

SUMMARY AND CONCLUSIONS

Twelve statements were randomly selected from the case of Earnst found in Murray's Explorations in Personality (5), and combined to form sets of "low importance", "medium importance", and "high importance" personality data. These sets of personality data were then presented to five experimental groups composed of subjects in an introductory psychology class.

Three groups were asked to make evaluations of Earnst by means of personality sketches, check lists, and Q sorts, respectively, after receiving each set of personality data. A fourth group did not make such repeated evaluations, but simply waited while the above groups made their decisions. These four groups then responded to eleven multiple-choice questions relating to Earnst's personality and life history. The final group received the personality data as an integrated whole after which they responded to the multiple-choice questions as well as the check list, Q sort, and personality sketch procedures.

It was found that the personality sketches, check lists, and Q sorts of those who studied the personality data as an integrated whole reflected a more accurate understanding of Earnst than did the final personality sketches, check lists, or Q sorts of the first three experimental groups. The superior understanding of those who studied the personality data as an integrated whole was not verified, however, when the multiple-choice items were analyzed for the five experimental groups.

This discrepancy was further analyzed and discussed in terms of the breadth of the understanding measured by the

[5]Murray, H. A. Explorations in Personality, New York; Osford, 1937

personality sketches, check lists, and Q sorts as opposed to that measured by the mutliple-choice questions.

In addition, it was suggested that understanding may be directly related to the "importance" of the statements in any one pool of personality data while inversely related to the number of such statements. This speculation was offered as one possible account of the "tendency for understanding to decrease as it is expressed"; a phenomenon reported by Dailey (1952) that was not found in the present study.

Although further research is certainly needed, it appears that repeated evaluations have their greatest adverse effects on the general, integrated understanding of a person. Differences between the three modes of evaluation were not adequately measured in terms of such a understanding of Earnst. However, the data suggest the effects of repeated judgments may be most severe when the Q sort technique is employed to make evaluations. The data further suggested that the repeated use of the personality sketch is slightly better than either the check list or Q sort when specific understanding is required. In this case, the repeated use of the personality sketch may also be superior to receiving the data as one integrated whole. This result may largely reflect the fact that such specific understanding is closely related to the ability to recall the orginal personality statements.

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APPENDIXES

APPENDIX A

The twelve statements about Earnst which were used as the personality data:

"Low importance" set -

He wants to be a research engineer.

He has some of his father's traits, such as a bad temper, but they are not as extreme.

He does not particularly like animals.

His dad furnished the limitations and his mother supplied the ideas in his family.

"Medium importance" set-

He was born and raised on a farm in Wisconsin.

His dad was a harsh sort of man.

He is hardworking.

He was on the honor list in college.

"High importance" set-

As a boy he was attached to his mother who died when he was fourteen.

He now prefers to work for a large, impersonal organization.

In the first grade he was ashamed of being a coward.

He is somewhat feeble and extremely nervous.

Table a
Scores achieved on multiple-choice items by the thirteen subjects used to verify the relative importance of the three sets of personality data.

Low set	Medium set	High set	Low & High sets	All
5	5	6	7	9, 9,
5	7	8	10	10, 10, 10

APPENDIX B

The twenty-seven statements used for the personality check list and Q-sort deck:

He handles criticism quite well.

His aspirations typically exceed his performance.

He expresses a reasonable amount of confidence in his abilities.

He has achieved a comfortable separation from his parents.

He is direct and unemotional.

He admires his father.

He is markedly depressed by adverse criticism.

His range of expression of feelings is fairly wide.

He tends to blame his mistakes on others.

He is neat and orderly.

He was the youngest child in the family.

As a child he was overly active and energetic.

As a child he had sex play with a neighbor girl.

He is fairly religious.

He had difficulty in grade school with his classmates.

He gambles quite a bit.

He is self-reliant.

He has a definitely established gainful occupation.

He has deep seated feelings of inferiority.

His sexual needs are intense.

His first three years were relatively untraumatic.

His mother was a fairly stable, unexcitable person.

He relied on his father for guidance.

He has been on his own from a fairly early age.

He was generally disinterested in school.

He dated girls when he was in high school.

He possess much drive and determination.

APPENDIX C

The eleven multiple-choice questions relating to Earnst's personality and life history.

1. As a child he spent most of his spare time, (a) reading, (b) playing by himself, (c) playing with the neighbor children, (d) taking long walks in the woods with a friend.
2. As a boy he was, (a) often punished by both mother and father, (b) seldom punished by either parent, (c) punished often by his father, (d) punished often by his mother.
3. His work in school was, (a) of little interest to his parents. (b) encouraged by his mother, (c) encouraged by his father, (d) encouraged by both parents.
4. He completed college, (a) with a large personal debt, (b) with financial help from his parents, (c) with financial help from friends of the family, (d) by working at odd jobs.
5. He (a) makes friends easily with everyone, (b) has primarily older friends, (c) does not make friends readily, (d) has primarily younger friends.
6. In conflicts with his brothers, he (a) many times outwitted them, (b) usually got the short end, (c) would not fight back, (d) sought support from his mother.
7. Inorder to gain recognition for himself, he (a) concentrated on getting good grades in school, (b) became a social wit, (c) tried out for the college track team, (d) sought the editorship of the school paper.
8. He was (a) close to his father, (b) indifferent to his father, (c) proud of his father, (d) afraid of his father.

9. He is (a) unhappy with his work, (b) moderately enthusiastic about his work, (c) almost completely preoccupied with his work, (d) indifferent towards his work.
10. Physically, he is (a) short and stocky, (b) tall and slender, (c) of medium build, (d) tall and very masculine.
11. When in a new social setting, he (a) makes friends quickly, (b) joins civic organizations in order to meet others, (c) seeks out a few close friends on his own, (d) makes little attempt to meet others.