11-1964

Mastery, Motives and maturation

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MASTERY, MOTIVES, AND MATURATION

A Thesis

Presented to the

Department of Psychology

and the

Faculty of the College of Graduate Studies

University of Omaha

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

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November 1964

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ACKNOWLEDGEMENTS

This is to gratefully acknowledge the encouragement, assistance, and supervision of Dr. John M. Newton, who served as my thesis adviser. I am also especially indebted to Dr. William E. Jaynes whose advice and statistical assistance greatly facilitated the completion of my thesis. Mr. Richard W. Nicholson's assistance was also very much appreciated.

To Dr. D. T. Pedrini goes my gratitude for his ideas which helped develop the theme of said thesis.

The statistical computation would have been overwhelming if it had not been for the time, interest, and close cooperation of Mr. B. L. Byars of the University of Omaha Data Processing Center.

And finally my thanks go to the students involved in the study whose cooperation made this thesis possible.

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INTRODUCTION

Academic success and the variables that account for this success have long been a subject of conjecture for psychologists. The literature is replete with research investigating these relations.

Anderson (1953), Bent (1946), and Edds and McCall (1933) found intelligence (as measured by the Otis Self Administering Test of Mental Abilities) to correlate from .50 to .63 with grade point average (GPA). These studies are representative of the literature relating intelligence and grades.

Other investigators have examined the relation between the student's attitude and achievement. Jacob (1957) found a greater degree of tolerance for nonconforming ideas and behavior to correlate with both increasing age and achievement. Webster (1958, p. 116) stated that "increases in maturity are accompanied by more independence and hence by more freedom to criticize, more resentment of formalized authority, and better understanding of the kinds of adaptation which are necessary in complex situations . . ." Again the relation between attitudes and maturity (increasing age) is evident.

Wientge and DuBois (1963), however, found an

insignificant correlation of .038 between course grade and the student's appraisal of the instructor. Freedman (Webster, 1958), in an unpublished study, reported no significant difference in performance (as measured by personality inventory items) between those who remained and those who withdrew from college, evidence that attitudes may not relate to achievement if we define achievement as staying in or dropping out of college.

Interest measures were correlated with achievement by Mattson(1955), Rust and Ryan (1954), and Wientge and DuBois (1963). Mattson found that interests of college students increased with actual experience. Rust and Ryan found that congruency between stated occupational aims and interests as measured by the Strong Vocational Interest Blank does not appear to be related to academic achievement. Wientge and DuBois found that none of the interest measures of the Strong added anything to a multiple correlation coefficient. In all studies the correlations reported were less than .20.

Crandall (1963, p. 432) and Harris (1940) have examined the social factors involved in academic achievement. Crandall has stated that "outside of the family, the school is probably the most important social institution shaping children's achievement motivations and

behaviors." Harris rates social factors as being very close to intelligence and motivation as correlates of achievement.

Other investigators have devoted their research to the relation between study-habits and achievement. Carter (1950) found study-habits to be a more efficient predictor of academic achievement than intelligence. Correlations when corrected for intelligence between study-habits and achievement were reported between .29 and .36. Duncan, Bell, Bradt, and Newman (1951-52) found no significant differences in study methods between the highest scoring 50 students and the lowest scoring 50 students in a sample of 400.

Reeder (1935) reports serious inconsistencies between study-habits scores and the quality of student performance. He also found little relation between study-habits and intelligence. Gordon (1941,pp. 106-107) found little relation between study-habits and course grade. However, when readministering the study-habits inventory one month after the course had begun, she reported a correlation of .58. She felt that" . . . students may allow their own evaluation of study-habits to be markedly affected by the grade of work they are doing. Thus, a poor student may decide that her note taking techniques are poor and a good student may consider hers good simply because they feel that their

skill in these techniques in some way offers an explanation of their good or bad grades." Wrenn (1941) reports correlations of from .24 to .58 between study-habits and grade point average.

Still another problem has been the relation of age and achievement. Bent (1946) reported a correlation of .42 between age at entrance to college and grade point average, showing a tendency for the older student to make the best marks. Garrett (1949-50), in surveying the field, found that it is the younger student who does better academically, especially those below average age. However, most of the studies regarding college scholarship of returned veterans report the veterans doing above average work in college. Harris (1940, pp. 127-128), in his survey of the field, also reports that "findings on the age factor are overwhelmingly to the effect that the younger students get better grades; but it is worth noting that in most cases either no account is taken of intelligence or else, where intelligence is mentioned, the younger students are found to have the advantage." Pierson (1948) found that exservice students often make better grades than nonveteran students. He attributed this to the increased age and maturity of the exservice students.

Thus, many factors are involved in the student's

achievement. Intelligence, attitude, interest, social factors, study-habits, and age have all been shown to relate to the criterion of achievement. In general, these studies have reported positive correlations with few exceptions.

The present study investigates some of these variables as they apply to a psychology course taught at the University of Omaha.

PROBLEM

Representative Psychological Systems (Psychology 201) is an adaptation of the seminar approach applied to a sophomore level course. The students meet three times a week—once in a lecture section and twice in smaller sections. The student in the smaller section is required to disect and analyze assigned readings relating to such things as the philosophical origins of psychology and their evolution through behaviorism, plus a little deeper in depth approach to the theories of Sigmund Freud and of B. F. Skinner. The last portion of the course is devoted to several short psychological articles and reading Skinner's "Walden Two" with an attempt to analyze the novel from a Skinnerian and Freudian standpoint.

Some students earn better grades than others in Psychology 201. Many factors may be said to account for this variability—intelligence, motivation, interest, attitude, maturity or age, cultural and social influences, etc.

It was noted that "Bootstrappers" (military personnel who receive a leave of absence to complete the requirements for a college degree), as a group, earn higher grades in Psychology 201 than do those who are not.

The "Bootstrap" program at the University of Omaha provides an unusual addition to the student population. It was assumed (on the basis of grades earned and age) that they are a select group as far as both intelligence and maturity are concerned. The "Bootstrappers" (as a group) receive higher grades in Psychology 201 than do other students. Since they are older and assumably more mature, the purpose of this study is to determine whether success in the course is more a function of (1) intelligence or, (2) maturity, in terms of age.

In view of the nature of the Psychology 201 classes and of the previous research on the concomitants of academic success, the following hypotheses have been drawn and are stated in null form.

Hypotheses

(1) There is no statistically significant correlation between intelligence and achievement in Psychology 201. That is, the grade received in the course is not a function of the subject's intelligence.

(2) There is no statistically significant difference in intelligence between age groups. That is, if the sample is split between those above a certain age and those below a certain age,

the level of intelligence for the two groups would not be statistically different.

(3) There is no statistically significant interaction between sex-age and achievement in Psychology 201. That is, the variation in age does not play a part in the success a student has in the course.

These hypotheses would be rejected if an appropriate statistical test indicated differences significant at or beyond the .05 level.

Significance and implications of this research

Psychology 201 is a relatively new course and may still be considered to be in the experimental stage. The concepts dealt with in the course (emphasis on Freud and Skinner) may be threatening to certain people. If there is a significant relation between age and achievement in this course, that is, if the older students do receive higher grades, then this raises the question: do older students do better because they are less threatened by and thus have a greater acceptance of the material covered in the course? If this is true, then perhaps Psychology 201 should be raised from a sophomore level course to a higher level where the younger student would be eliminated or the techniques of instruction changed to reduce the threat.

Because it is obvious that more than just intelligence and maturity play a part in achievement, the following variables were investigated to determine their effect on the problem in question.

Dependent variables

The following measures were chosen as dependent variables: (1) achievement (course grade), (2) the Interest-Maturity scale of the Strong Vocational Interest Blank (SVIB)[1], (3) the psychology scale of the SVIB[1], (4) scores on attitude scales relating to Freud and Skinner, (5) attitude scores regarding the books utilized in the course, (6) attitude scores for discussion technique employed, (7) attitude scores relating to the instructor, (8) attitude scores in regard to the course per se, and (9) subject matter attitude scores.

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[1]Does not appear on the SVIB for women. Thus, applies to men only.

Independent variables

The following items were chosen as independent variables: (1) sex of subject, (2) age (maturity), (3) intelligence, and (4) study-habits (motivation).

METHOD

Operational definitions

For the purposes of this study the following operational definitions are offered.

(1) Achievement: the course grade obtained in Psychology 201 reported as Stanine scores.

(2) Bootstrapper: an individual who has a leave of absence from military service for the sole purpose of completion of the requirements for a college degree.

(3) Intelligence: the score an individual achieves on the Otis Self-Administering Test of Mental Ability, Higher Examination, Form A (Otis, 1954).

(4) Maturity: as defined by age, the older student being more mature.

(5) Motivation: the score an individual receives on the Wrenn Study-Habits Inventory; the more motivated student receives a higher score on this questionnaire.

(6) Regular student: anyone taking Psychology 201 who is not a bootstrapper.

(7) Older student: an individual falling within the age range of 21 to 50 years.

(8) Younger student: an individual falling within the age range of 18 to 20 years.

Subjects

The subjects were all students enrolled in Psychology 201 during the academic year 1962-1963. They ranged in age from 18 to 50 years with a modal age of 19 and a mean of 23.58. Their intelligence ranged from 87 to 135 points with a mean Otis IQ score of 112.90.

The original sample of 158 was reduced to 110 subjects (53 men and 57 women). This reduction was due to the following: two bootstrappers and 28 regular students were rejected for not following instructions or noncompletion of items; one bootstrapper and ten regular students were absent from class on the days tests were administered; and, two bootstrappers and five regular students withdrew from the course.

Materials

A seven-point evaluation scale consisting of 58 items was developed by the author in an attempt to determine the student's attitude toward concepts, books, discussion technique, and the course per se. The student was instructed to place check marks on the form

in the same manner as in Osgood's Semantic Differential (Osgood, Suci, and Tannenbaum, 1957). These check marks were given a quantitative value through the arbitrary assignment of, from left to right, values 1, 2, 3, 4, 5, 6, and 7 to the seven hatch marks on the scale. If a check mark was not placed directly on the hatch mark, it was judged as being the value of its nearest hatch mark. A sample of the Psychology 201 Evaluation Scale is found in Appendix A.

An Instructor Rating Form (Jaynes, 1959) developed at the University of Omaha consisting of 47 five-point scales was utilized to ascertain the student's attitude toward the subject matter, the course, and their instructor. A sample of the form is presented in Appendix B.

Procedure

Pearson product-moment correlations were computed between intelligence, study-habits, achievement, the Interest-Maturity scale of the SVIB, the psychology scale of the SVIB, attitude toward Freud and Skinner, text books, discussion technique, the instructor, Psychology 201, and the subject matter. The significant zero order relations were taken into consideration through multiple regression equations utilizing the Wherry-Doolittle test selection method.

Items 1, 2, 3, 4, 6, 7 and 8 on the evaluation scale for Freud and the comparable items for Skinner were examined by analysis of variance to determine if any sex-age differences in attitude existed. Items 24, 25, 27, and the comparable items dealing with text books were subjected to the same analysis as were items 43, 44, 46 and their counterparts for discussion techniques.

The other items not mentioned were not examined in the study for the following reasons: (1) comparable items did not exist; (2) combining of some scales was prevented by the position of "like" or "dislike" in the 7 point scales; (3) the overview of history was not applicable to both fall and spring semester students; and (4) the measure(s) did not apply to the hypothesis being tested. Their inclusion on the form, however, served to prevent stereotyping of the student's responses due to positions of "like" and "dislike" in the scales.

On the Instructor Rating Form (IRF) items 45 (poor instructor-good instructor), 46 (like to continue work with this subject-never again), and 47 (learned a lot-a waste of time) were rated on a five-point scale and utilized as criterion measures. The other items on the IRF were not utilized since the form was not designed for this project and said items were either

redundant or not applicable to the hypotheses. Analyses of variance were performed to determine if sex-age differences in attitude toward these items existed.

RESULTS

The hypothesis that therewas no significant correlation between intelligence and achievement in Psychology 201 is rejected at the .01 level of significance. The correlation matrix is presented in Table 1.

TABLE 1

Intercorrelations Between Predictor and Criterion Scores

	I. Q.	Study-habits	Achievement	IRF_{45}	IRF_{46}	IRF_{47}	Skinner-Freud	Books	Discussion
I. Q.		.11	.42**	-.04	-.01	-.08	.03	-.04	-.07
Study-habits			.35**	-.02	-.01	-.04	.01	.01	.00
Achievement				.00	.26**	.28**	.11	.07	.17
IRF_{45} [a]					.16	.33**	.30**	.22*	.25*
IRF_{46} [b]						.46**	.35**	.42**	.39**
IRF_{47} [c]							.40**	.25*	.42**
Skinner-Freud								.63**	.50**
Books									.59**
Discussion									

* Significant at .05 level.

** Significant at .01 level.

N= 110

[a] Attitude toward instructor

[b] Attitude toward subject matter.

[c] Attitude toward Psychology 201

Since the interest-maturity (IM) scale of the Strong Vocational Interest Blank is designed for men only, separate correlations were run for men utilizing the psychology and IM scales. None of the correlations was significant. This is in agreement with Stordahl (1954) who found little or no evidence that the IM scale is positively related to maturity, and with Rust and Ryan (1954) who found no relation between Strong scales and academic achievement. The correlations are presented in Table 2.

TABLE 2

Selected Intercorrelations Between Predictor and Criterion Scores For Men

	I. Q.	Age	Study-habits	SVIB-IM	SVIB-Psychol.	Achievement
I. Q.		.09	.22*	-.16	.21	.52**
Age			.42**	.04	-.27	.46**
Study-habits				-.08	.06	.44**
SVIB-IM					.00	-.05
SVIB-Psychol.						-.08

** Significant at .01 level.

N= 53

Correlations were computed between age, intelligence, and scores on the Wrenn Study-Habits Inventory responses. No correlation was found between age and intelligence thus supporting the hypothesis that there is no significant difference in intelligence between age groups. A significant positive correlation was found between age and study-habits indicating that the older student has better study-habits. The correlations are reported in Table 3.

TABLE 3

Intercorrelations of Age, Intelligence, and Study-habits

	I. Q.	Age	Study-habits
I. Q.		-.01	.11
Age			.33**

** Significant at .01 level. N= 110

Combining intelligence and study-habits by the Wherry-Doolittle procedure increased the two scores correlation with achievement to .52. Since it is indicated that intelligence and study-habits combine to raise the level of achievement, an analysis of variance

was performed to examine the sex-age predictor and achievement with the influence of intelligence and study-habits removed. The dependent variable in the analysis of variance was obtained by taking the difference between actual achievement and predicted achievement.

The hypothesis that "there is no statistically significant interaction between sex-age and achievement in Psychology 201" is rejected at the .01 level of significance. Hence, achievement (with the influence of intelligence and study-habits removed) does relate to sex-age in Psychology 201. The mean scores indicate that the sex-age difference in achievement operates in favor of the older student. This is in agreement with findings by Bent (1946) and Pierson (1948). Because of the unequal subcell sizes no further hypotheses were tested. The analysis of variance and mean scores are presented in Table 4.

TABLE 4

Analysis of Variance and Mean Discrepancy Scores of Sex-Age Predictor and Achievement, IQ and Study-Habits Held Constant

	df	MS	F
Between Sex-Age Groups	3	82.25	5.01**
Within Groups	106	16.40	
Total	109		

	Mean	N
Younger Men	6.46	26
Younger Women	8.79	48
Older Men	10.19	27
Older Women	11.22	9

** Significant at .01 level.

Since it is indicated that the sex=age predictor is significant it was decided to perform another analysis of variance in which the student's attitude toward the subject matter (IRF_{46}) and attitude toward Psychology 201 (IRF_{47}) were controlled in addition to the variables of intelligence and study-habits. As in the previous analysis of variance, the dependent variable was obtained by taking the difference between actual achievement and predicted achievement. Although it appears that these attitudes do have an influence on

achievement the hypothesis is rejected at the .05 level of significance. Analysis of variance and mean discrepancy scores are presented in Table 5.

TABLE 5

Analysis of Variance and Mean Discrepancy Scores of Sex-Age Predictor and Achievement, I. Q., Study-Habits, and Attitudes Held Constant

	df	MS	F
Between Sex-Age Groups	3	50.31	3.57*
Within Groups	106	14.10	
Total	109		
	Mean	N	
Younger Men	5.69	26	
Younger Women	8.88	48	
Older Men	9.89	27	
Older Women	10.11	9	

* Significant at .05 level.

Since the student's attitude appears to have an influence on achievement, analysis of variance was performed between the sex-age predictor and attitude toward the instructor (IRF_{45}). The interaction was significant at the .01 level. The mean discrepancy scores indicate that the younger women followed by the older women have the most favorable attitude toward their instructor and

the younger men the least favorable attitude.

This variance may be accounted for by the greater contact time which the instructor had with the younger female group (a graduate assistant handled discussion sections with the other three groups while the instructor had the younger women). The results are presented in Table 6.

TABLE 6

Analysis of Variance and Mean Discrepancy Scores of Sex-Age Predictor and Attitude Toward Instructor.

	df	MS	F
Between Sex-Age Groups	3	3.91	4.39**
Within Groups	106	.89	
Total	109		
	Mean	N	
Younger Men	2.46	26	
Younger Women	3.18	48	
Older Men	2.55	27	
Older Women	2.78	9	

** Significant at .01 level.

The student's attitude toward the subject matter (IRF_{46}) was examined by analysis of variance to see if the sex-age predictor would interact significantly with it. As Table 7 indicates, the interaction was

significant at the .05 level. The mean discrepancy scores indicate that it is the older women and younger men who have the most favorable attitude toward the subject matter and the younger women who have the least favorable attitude. The attitude of the younger women seems rather paradoxical in that while they have the least favorable attitude toward the subject matter, they also have the most favorable attitude toward their instructor.

TABLE 7

Analysis of Variance and Mean Discrepancy Scores of Sex-Age Predictor and Attitude Toward Subject Matter

	df	MS	F
Between Sex-Age Groups	3	3.25	3.10*
Within Groups	106	1.05	
Total	109		
	Mean	N	
Younger Men	.89	26	
Younger Women	1.35	48	
Older Men	1.19	27	
Older Women	.33	9	

* Significant at .05 level.

A further analysis of variance examined the interaction between the sex-age predictor and the student's attitude toward Psychology 201 (IRF_{47}). The interaction did not approach significance indicating that the sex-age variable does not play a part in the subject's attitude toward the course per se. The results are presented in Table 8.

TABLE 8

Analysis of Variance and Mean Discrepancy Score of Sex-Age Predictor and Attitude Toward Psychology 201

	df	MS	F
Between Sex-Age Groups	3	.23	.03
Within Groups	106	.71	
Total	109		
	Mean	**N**	
Younger Men	.85	26	
Younger Women	.90	48	
Older Men	.74	27	
Older Women	.67	9	

Because an individual's attitude toward the theories of B. F. Skinner or Sigmund Freud might be a potent force determining his success in Psychology 201, i.e., the deterministic leanings of Skinner and Freud

may prove to be threatening to the student, an analysis of variance was performed to examine the interaction between the sex-age predictor and attitude toward Skinner and Freud. Table 9 shows no significant interaction.

TABLE 9

Analysis of Variance and Mean Discrepancy Scores of Sex-Age Predictor and Attitude Toward Skinner and Freud

	df	MS	F
Between Sex-Age Groups	3	30.63	1.61
Within Groups	106	19.07	
Total	109		
	Mean	N	
Younger Men	13.16	26	
Younger Women	14.52	48	
Older Men	13.00	27	
Older Women	15.89	9	

Table 10 examined the interaction of the sex-age predictor and the student's attitude toward the text books utilized in the course. No significant differences were noted between groups indicating that this variable could not be held accountable for the variation in achievement between groups.

TABLE 10

Analysis of Variance and Mean Discrepancy Scores of Sex-Age Predictor and Attitude Toward Text Books

	df	MS	F
Between Sex-Age Groups	3	20.51	1.46
Within Groups	106	14.07	
Total	109		

	Mean	N
Younger Men	11.73	26
Younger Women	12.40	48
Older Men	10.52	27
Older Women	12.00	9

The discussion technique utilized in Psychology 201 is an adaptation of the seminar approach. Since this approach is more in keeping with upper division courses, it was decided to perform an analysis of variance to test the interaction between the sex-age predictor and discussion technique. Table 11 presents evidence that there is no significant interaction between the groups indicating that the discussion technique cannot be held accountable for the sex-age difference in achievement.

TABLE 11

Analysis of Variance and Mean Discrepancy Scores of Sex-Age Predictor and Discussion Technique

	df	MS	F
Between Sex-Age Groups	3	59.95	2.69
Within Groups	106	22.31	
Total	109		

	Mean	N
Younger Men	13.81	26
Younger Women	14.60	48
Older Men	12.63	27
Older Women	19.11	9

DISCUSSION

The first hypothesis that there is no significant correlation between intelligence and achievement is not supported--the correlation is significant beyond the .01 level. While the correlation of .42 is not as high as those found by Anderson (1953), Bent (1946), and Edds and McCall (1933), the variance would probably be accounted for by the achievement variable. That is, the correlation in this study is between intelligence and course grade per se while the other studies utilized the college cumulative grade point average.

The second hypothesis that there is no significant difference in intelligence between age groups is supported by the correlation of .09 which doesn't begin to approach significance.

The third hypothesis that there is no significant interaction between age an achievement was investigated by analysis of variance and rejected at the .01 level. The sex-age variable proved to be an important predictor of achievement. The older student did achieve significantly higher grades than did the younger student. This is in accord with findings by Pierson (1948) and Bent (1946).

Study-habits also proved to be an important predictor of achievement indicating that the older student is more motivated than the younger.

Harris (1940) and Garrett (1949) feel that most of the studies which have investigated the problem in the past have not provided adequate controls for intelligence which may account for the conflicting findings.

Just why the older student does better in Psychology 201 is not so easy to intrepret. Since their study-habits scores are higher it may be assumed that they are more motivated or it may be as Jacob (1957) has found that seniors express more uniformly than freshmen a greater degree of tolerance for nonconforming ideas and behavior, such as are found in Psychology 201. Webster (1958, p. 116) has said that "increases in maturity are accompanied by more independence and hence by more freedom to criticize, more resentment of formalized authority, and better understanding of the kinds of adaptation which are necessary in complex situations. . ."

Lehman (1953) has reported that older people probably have more transfer, both positive and negative, than do younger ones. As a result of positive transfer the older usually possess greater wisdom and erudition. But when a situation requires a new way of looking at things (i.e., learning a new response to an old stimulus), the old seem stereotyped and rigid. In general, it appears that Psychology 201 deals more with new stimulus-response relationships than the unlearning of old relationships. This would be assumed to work to advantage for the older student.

Perhaps what it all boils down to is the greater experience and stability that comes with increasing age and is often defined by the ambiguous term "maturity." Whatever the reason, there is a sex-age influence on achievement in Psychology 201.

SUMMARY

It was noted that the older students in Representative Psychological Systems (Psychology 201) achieve higher grades as a group than do the younger students. The younger students were defined as those within the age range of 18 to 20 years inclusive, the older students as those 21 years of age and older. The "Bootstrap" population at the University of Omaha swelled the ranks of the older group so that there was not a great discrepancy in N sizes.

It was felt that the older group achieved higher grades because of one of two major variables: (1) they were a more select group and thus had a higher level of intelligence and/or (2) they are a more mature group and thus are likely to be less threatened by, and more accepting of, the theories brought forth within the course.

Three hypotheses were postulated in an attempt to answer the questions.

(1) There is no significant correlation between intelligence and achievement in Psychology 201.
The hypothesis was not supported in that a correlation was found that was significant beyond the .01 level.

(2) There is no significant difference in intelligence between age groups.

This hypothesis was supported in that no significant correlation was found to exist between age and intelligence.

(3) There is no significant interaction between age and achievement in Psychology 201.

Utilizing analysis of variance and removing the influence of intelligence and study-habits from achievement, the hypothesis was rejected at the .01 level of significance. Age is a prime variable in achievement within the framework of the course. Possible reasons for the variance between age and achievement were discussed and the factor of maturity arose as the most logical reason for variance.

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APPENDIX A

Psychology 201 Evaluation Scale

(Representative Psychological Systems)

Instructions: Place a check mark (✓) on the portion of the scale which best represents your opinion of the section being evaluated. For example, if you consider the Oldsmobile to be a "good" car but not "excellent", you would check the item approximately as follows:

Oldsmobile:

Very poor ——+——+——+——+——✓——+——+—— Excellent

Now proceed with the scale - record your first impressions and work rapidly.

FREUD:

Do not accept ——+——+——+——+——+——+—— Accept

Bad ——+——+——+——+——+——+—— Good

Dirty ——+——+——+——+——+——+—— Clean

Nonscientific ——+——+——+——+——+——+—— Scientific

Asexual ——+——+——+——+——+——+—— Sexual

Illogical ——+——+——+——+——+——+—— Logical

Lack of feeling for his fellow man ——+——+——+——+——+——+—— Deep feeling for his fellow man

Unethical ——+——+——+——+——+——+—— Ethical

CONCEPT OF ID:

Disagree ——+——+——+——+——+——+—— Agree

Illogical ——+——+——+——+——+——+—— Logical

CONCEPT OF THE UNCONSCIOUS:

Disagree ——+——+——+——+——+——+—— Agree

Illogical ——+——+——+——+——+——+—— Logical

CONCEPT OF THE DEFENSE MECHANISMS:

Disagree ——+——+——+——+——+——+—— Agree

Illogical ——+——+——+——+——+——+—— Logical

SKINNER:

Do not accept	——+——+——+——+——+——	Accept
Bad	——+——+——+——+——+——	Good
Dirty	——+——+——+——+——+——	Clean
Nonscientific	——+——+——+——+——+——	Scientific
Asexual	——+——+——+——+——+——	Sexual
Illogical	——+——+——+——+——+——	Logical
Lack of feeling for his fellow man	——+——+——+——+——+——	Deep feeling for his fellow man
Unethical	——+——+——+——+——+——	Ethical

ANALYSIS OF BEHAVIOR (BOOK):

Too difficult	——+——+——+——+——+——	Too easy
Bad	——+——+——+——+——+——	Good
Boring	——+——+——+——+——+——	Interesting
Too concise	——+——+——+——+——+——	Too broad
Doesn't make sense	——+——+——+——+——+——	Makes sense

WALDEN II (BOOK):

Too difficult	——+——+——+——+——+——	Too easy
Bad	——+——+——+——+——+——	Good
Boring	——+——+——+——+——+——	Interesting
Too concise	——+——+——+——+——+——	Too broad
Doesn't make sense	——+——+——+——+——+——	Makes sense

PRIMER OF FREUDIAN PSYCHOLOGY (BOOK):

Too difficult	——+——+——+——+——+——	Too easy
Bad	——+——+——+——+——+——	Good
Boring	——+——+——+——+——+——	Interesting
Too concise	——+——+——+——+——+——	Toobroad
Doesn't make sense	——+——+——+——+——+——	Makes sense

OVERVIEW OF HISTORY (LECTURE) :

Too difficult ——————— Too easy

Bad ——————— Good

Boring ——————— Interesting

Too concise ——————— Too broad

Doesn't make sense ——————— Makes sense

DISCUSSION TECHNIQUE (FREUD):

Bad ——————— Good

Boring ——————— Interesting

Too difficult ——————— Too easy

Confuses ——————— Clarifies

DISCUSSION TECHNIQUE (SKINNER):

Bad ——————— Good

Boring ——————— Interesting

Too difficult ——————— Too easy

Confuses ——————— Clarifies

DISCUSSION TECHNIQUE (WALDEN II):

Bad ——————— Good

Boring ——————— Interesting

Too difficult ——————— Too easy

Confuses ——————— Clarifies

PSYCHOLOGY 201 (REPRESENTATIVE PSYCHOLOGICAL SYSTEMS):

Valueless ——————— Valuable

Too difficult ——————— Too easy

Doesn't develop self-understanding ——————— Develops self-understanding

Boring ——————— Interesting

APPENDIX B

LECTURE OR QUIZ SECTION EVALUATION

A. INSTRUCTOR

Answer every item. Mark "X" in appropriate box.

Poor knowledge of material...						1	Excellent knowledge of material
Poorly organized presentations						2	Well organized presentations
Not enough discussion.....						3	Too much discussion
Discussion well controlled...						4	Discussion poorly controlled
Class time interesting.....						5	Class time dull
Over everyone's head.....						6	Easy to understand
Talks too loudly.....						7	Speaks too softly
Takes a definite stand.....						8	Avoids controversial issues
Too critical of text, etc....						9	Not critical enough
Unenthusiastic.....						10	Enthusiastic
Impractical approach.....						11	Practical approach
Always available for help outside class.....						12	Never available for help outside class
Discourages originality.....						13	Encourages originality
Indifferent.....						14	Friendly
Easy-going.....						15	Impatient
No sense of humor.....						16	Good sense of humor
Plans ahead for tests, etc...						17	Seems to operate without a plan
Seems to have unfavorable attitude toward O.U.....						18	Seems to like O.U. very much
Class time wasted.....						19	Class time well used
Makes worthwhile additions to text material.....						20	Merely recites from text
Untidy appearance.....						21	Neat and well groomed
Unfair in grading.....						22	Fair in grading
Clearly explains grading system.....						23	Never explains grading system
Responds to improvement.....						24	Doesn't note improvement
Never mentions his own experiences.....						25	Dwells on his own experiences too much
Always on time.....						26	Late for class, runs overtime, etc.
Returns work promptly.....						27	Keeps papers too long
Inadequate test discussion, comments on papers, etc.....						28	Adequate discussion of tests, comments on papers, etc.
Doesn't motivate students....						29	Motivates students
Increases thinking skills....						30	Fails to develop thinking skills
Stresses important material..						31	Deals mostly with unimportant material

Comments: _____

_____

(over)

B. READING MATERIAL

32	Assignments not long enough.....						Assignments too long
33	Too easy.....						Too difficult
34	Impractical.....						Practical
35	Interesting.....						Dull

Comments: _____

C. OTHER MATERIALS (films, slides, etc.) IF USED

36	Over-used.....						Not used enough
37	Helpful.....						Confusing
38	Interesting.....						Dull

Comments: _____

D. EXAMINATIONS

39	Too objective.....						Too subjective
40	Too long.....						Too short
41	Not enough.....						Too many
42	Too easy.....						Too difficult
43	Covered only trivia.....						Covered important points
44	Hard to cheat.....						Easy to cheat

Comments: _____

E. OVERALL

45	Poor instructor.....						Excellent instructor
46	Like to continue work with this subject.						Never again
47	Learned a lot.....						A waste of time

Comments: _____

_____

F. PRE-REQUISITES (circle answer) a More should be added. b Adequate as is c Present pre-requisites unnecessary.

G. BACKGROUND INFORMATION (circle answer or write in)

1. Your College:
   a Arts and Sciences
   b Applied Arts
   c Education
   d Business Administration
   e Adult Education

2. Major area (if declared):

   _____

3. Your year in school:
   a Freshman
   b Sophomore
   c Junior
   d Senior

4. Service status.....
   a Veteran
   b Non-Vet.

5. Grade you expect.... _____