A comparison of oral and written feedback procedures in the assessment of normal personality.

Carmela Coletta
University of Windsor

Follow this and additional works at: https://scholar.uwindsor.ca/etd

Recommended Citation
https://scholar.uwindsor.ca/etd/557

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email (scholarship@uwindsor.ca) or by telephone at 519-253-3000ext. 3208.
A COMPARISON OF ORAL AND WRITTEN FEEDBACK PROCEDURES IN THE ASSESSMENT OF NORMAL PERSONALITY

by

Carmela Coletta

B.A. (Honours), University of Windsor, 1973

A Thesis
Submitted to the Faculty of Graduate Studies through the Department of Psychology in Partial Fulfillment of the Requirements for the Degree of Master of Arts at the University of Windsor

Windsor, Ontario, Canada 1974
ABSTRACT

Very little is known about the effects of communicating feedback of psychological test results to clients. It was the purpose of this study to investigate how written feedback would compare to oral feedback as measured by students' preferences and accuracy ratings. Form A of the Personality Research Form (Jackson, 1967; PRF) was administered to 16 male and 46 female volunteer undergraduate students in one group setting. Individualized feedback reports were prepared for each student utilizing his three highest and his three lowest scores obtained on the PRF. Feedback statements were derived from The Personality Research Form Interpretation Guide (Balance and Bringmann, 1971). Students were randomly assigned to either an oral feedback group or a written feedback group. Following feedback sessions, all individuals completed a questionnaire measuring their opinions regarding their preference for and accuracy of feedback mode of presentation. Chi-square analyses of the results demonstrated that: 1) individuals significantly preferred oral feedback than written reports; 2) individuals did not regard oral feedback significantly more accurate than written feedback; and 3) there was no sex difference regarding preference for and accuracy ratings of feedback presentation.
Implications of the results were discussed for the field of professional counseling and suggestions for future research in this area were offered.
ACKNOWLEDGMENTS

I take this opportunity to express my gratitude to the several people whose services have considerably contributed to this thesis. Of primary importance is Dr. Wolfgang Bringmann who not only initiated the ideas for this research proposal but as principal thesis advisor offered invaluable comments and criticisms throughout the completion of this project. Most treasured have been the many enjoyable hours of discussion with Dr. Bringmann, who has been a close, sensitive, and intelligent collaborator. Furthermore, I would like to thank Dr. William Balance and Dr. Mary Lou Deitz for their assistance and participation as committee members. It seems only appropriate to offer recognition to the students enrolled in Psychology 226 A & B for their co-operation in taking part in this research study. Finally, I would like to express appreciation to my family and friends for their support and encouragement which enhanced the pleasure of completing this thesis, and very special thanks to Robert for the many hours of love and understanding that he has shown.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>I INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Theoretical Views Concerning Feedback</td>
<td>2</td>
</tr>
<tr>
<td>Empirical Research Concerning Feedback</td>
<td>12</td>
</tr>
<tr>
<td>General Studies</td>
<td>12</td>
</tr>
<tr>
<td>Studies Employing Face-to-Face Feedback</td>
<td>15</td>
</tr>
<tr>
<td>Studies Employing Written Feedback</td>
<td>17</td>
</tr>
<tr>
<td>Face-to-Face vs. Written Feedback</td>
<td>20</td>
</tr>
<tr>
<td>Summary</td>
<td>24</td>
</tr>
<tr>
<td>II STATEMENT OF THE PROBLEM</td>
<td>26</td>
</tr>
<tr>
<td>Aims</td>
<td>26</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>28</td>
</tr>
<tr>
<td>Significance of the Problem Area</td>
<td>29</td>
</tr>
<tr>
<td>III METHOD</td>
<td>30</td>
</tr>
<tr>
<td>Subjects</td>
<td>30</td>
</tr>
<tr>
<td>Instruments</td>
<td>30</td>
</tr>
<tr>
<td>Procedure</td>
<td>32</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>33</td>
</tr>
<tr>
<td>IV RESULTS</td>
<td>34</td>
</tr>
<tr>
<td>V DISCUSSION</td>
<td>48</td>
</tr>
<tr>
<td>APPENDIX</td>
<td></td>
</tr>
<tr>
<td>1 Traits Measured by the Personality Research Form (PRF)</td>
<td>52</td>
</tr>
<tr>
<td>2 Sample Feedback Report</td>
<td>54</td>
</tr>
<tr>
<td>3 Feedback Questionnaire</td>
<td>56</td>
</tr>
<tr>
<td>4 Instructions Given to Subjects</td>
<td>59</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>61</td>
</tr>
<tr>
<td>VITA AUCTORIS</td>
<td>67</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description of Subject Samples</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>2</td>
<td>Year Ages of Subjects According to Sex and Code of Feedback Given</td>
<td>36</td>
</tr>
<tr>
<td>3</td>
<td>Subjects' Standard Deviation Score According to Sex and Code of Feedback Given</td>
<td>37</td>
</tr>
<tr>
<td>4</td>
<td>Chi-Square Analysis of Subjects' Ratings Regarding Preferred Mode of Feedback According to Feedback Code Given</td>
<td>38</td>
</tr>
<tr>
<td>5</td>
<td>Chi-Square Analysis of Male Subjects' Ratings Regarding Preferred Mode of Feedback According to Feedback Code Given</td>
<td>39</td>
</tr>
<tr>
<td>6</td>
<td>Chi-Square Analysis of Female Subjects' Ratings Regarding Preferred Mode of Feedback According to Feedback Code Given</td>
<td>40</td>
</tr>
<tr>
<td>7</td>
<td>Chi-Square Analysis of Subjects' Ratings Regarding Preferred Mode of Feedback According to Sex</td>
<td>41</td>
</tr>
<tr>
<td>8</td>
<td>Chi-Square Analysis of Subjects' Ratings Regarding Accuracy of Feedback Codes According to Feedback giver</td>
<td>42</td>
</tr>
<tr>
<td>9</td>
<td>Chi-Square Analysis of Male Subjects' Ratings Regarding Accuracy of Feedback Codes According to Feedback giver</td>
<td>43</td>
</tr>
</tbody>
</table>
10 Chi-square Analysis of Subjects' Ratings Regarding Accuracy of Feedback versus Absence of Feedback

11 Chi-square Analysis of Subjects' Ratings Regarding Accuracy of Feedback versus Absence of Feedback
CHAPTER I

INTRODUCTION

Up to the present time, the preponderant model regarding the etiology and treatment of psychopathology has been the medical model which views mental illness as a special variant of physical illness (Ullmann and Krasner, 1965). Criticism of this prevailing medical model of "mental illness" is articulate and widely spread (Fischer, 1970). The general inadequacies confronted when operating within such a closed, narrow framework have been repeatedly pointed out by various authors (e.g. Albee, 1968; Mariner, 1967; Szasz, 1960). Some of these inadequacies are definitely not of a minor nature and tend to considerably hinder psychotherapeutic treatment.

In the medical model the purpose of assessment is to diagnose the illness, which in turn, determines the treatment plan. In this model the patient is a passive recipient of the diagnosis being in no position to question the medical findings. Cause and effect relationships are prevalent. On the contrary in the psychological model there are no cause and effect relationships. An individual is never a passive recipient in his relationships, but instead co-constitutes their meanings. That is, he can ex-
perience 'things' only from his own perspectives" (Fischer, 1970). This implies that in order for psychological assessment to achieve its expected goal of pointing out to the client his strengths and weaknesses so that he may utilize the information constructively, the results must be interpreted to the client, and he in turn must integrate and accept them if they are to be of value. If psychodiagnostic is to continue to function within the narrow limits of the medical model, it must re-evaluate its purpose for existing.

Brim (1965) found that in a national sample of over 1500 adults five recurring points in the public's expression of animosity towards testing were: 1) records are inaccessible; 2) testing constitutes an invasion of privacy; 3) use of tests early in life of a person to determine his future is questionable; 4) I.Q. tests deny opportunity to people with different and possibly valuable talents; and 5) I.Q. tests are unfair to minority groups. Not only are we alienating our clients, but it appears that such alienation detrimentally affects the assessment procedure. As mentioned by Fiske (1965, 1967) there is a growing concern that opinions held by the examinee about tests and testing situations may have a significant influence on his test-taking performance.

Since we as psychologists are dealing with a human science, we must not become so involved and distanced
that we forget our purpose for existing. As noted in the preamble to the American Psychological Association Code of Ethics (1963), "the psychologist believes in the dignity and worth of the individual human being."

In summary, then, it seems that the traditional model, for the above-mentioned reasons, neglects to consider some major variables which are essential in any psychological assessment endeavor. Various authors, attempting to alleviate these difficulties, have explored the assessment method and proposed alternate working models incorporating some of the formerly disregarded elements.

Berdie (1954) defined psychological counseling as consisting of a series of well-outlined stages. The sequential process involves: 1) perception of the problem, 2) collection and consideration of relevant information, 3) discovery and evaluation of alternative solutions, 4) anticipation of possible outcomes of these alternatives, 5) selection of an appropriate alternative, 6) initiation of activity, and 7) evaluation of the outcome.

Recently, Bringmann, Balance, and Krichev (1972) have expanded on Berdie's model and presented a model of clinical assessment, analogous to the scientific model, which they have found to be particularly successful in a university counseling center. A flow chart illustrating all the major procedures involved in the model is found in Figure I. The details of this chart and its
INTAKE
Client or agent contacts secretary
Client or agent reads brochure
Client or agent completes application
Secretary makes appointment with staff member
Secretary assigns case number
Staff member conducts initial interview
Client decides whether to accept services or not
Discontinue — Staff member refers client for either — Continue to

(continue to)

ASSESSMENT
Client completes individual or group tests
Tests are scored and results returned to staff member
Staff member interprets results
Staff member writes report
Results are presented at staff meeting

FEEDBACK
Client is informed of relevant results
Staff member makes specific recommendations
Discontinue — Client follows up or discontinues

CONSTRUCTIVE ACTION
Habit remodelling
Self-help program
Tension control
Discussion groups
Counseling
Psychotherapy
Reading and study skills program
Behavioural mapping
Vocational guidance
Client's progress is evaluated
Client may be retested — Client maybe restaffed
Client receives progress report
Decision to terminate or not is jointly made

TERMINATION
Staff member writes case summary — Secretary removes file to storage

FIGURE 1: MODEL OF PROFESSIONAL SERVICES
comparison to the scientific framework will be more fully discussed under the following headings: 1) Referral, 2) Intake, 3) Assessment, 4) Feedback, 5) Constructive Action, and 6) Termination.

**Referral:** Clients may either refer themselves or be referred by other individuals concerned with their welfare. In the scientific model this would be equivalent to entertaining problems worthy of further investigation.

**Intake:** During this time data concerning the client's past and present behavior is gathered and an attempt is made to isolate particular problem areas which may be dealt with in future contacts. A test battery appropriate to the needs of the client is selected and possible consideration for further counseling is discussed. At this time in the scientific model a thorough review of the relevant research is conducted, specific hypotheses to be tested are formulated, and an appropriate experimental design is decided upon.

**Assessment:** The assessment phase deals primarily with the data collection. In the clinical model psychological tests are administered and in the experimental model the experiment is carried out.

**Feedback:** In the clinical model, during the feedback phase, the examiner initially interprets the test data and then discusses the findings with the client. Together they arrive at a mutual agreement as to whether the assess-
ment findings are accurate or inaccurate. It is at this time that the client has the opportunity to validate or refute any of the test data. As pointed out by Fischer (1970), "it is the client himself who is in the best position to confirm or clarify the evaluator's impressions." In the scientific model this is comparable to the statistical analysis performed in order to determine whether the results are significant or not.

**Constructive Action:** Following feedback, test results are reviewed and discussion of their implications for future course of action follows. In addition, the client receives clarification of any issue which may still be unresolved or need further elaboration. In the scientific model test findings are evaluated regarding their application to the particular field under investigation.

**Termination:** In this stage the client, in turn, offers feedback to the examiner on the assessment procedure, test findings, the examiner's interpretation of the results, and the general therapeutic value of the exercise. In the scientific model it is a common practice to discuss the strengths and weaknesses of the study, propose changes in methodology and alternate areas of investigation.

In practice the procedure would typically follow as such. Upon the completion of the test administration, the clinician, having obtained all the test scores, reviews them
thoroughly and formulates his own hypothesis concerning the client's personality and problems. He then meets and discusses the case with his co-workers. Integrating his initial hypothesis with those suggested by his colleagues he then proceeds to review his findings with the client in a feedback interview. At this time, each client is offered a summary of the relevant test results and has the opportunity "to confirm or clarify the evaluator's impressions." Should it be advisable the client is informed of the various constructive action programs available to him at the clinic and elsewhere. The testee is free to accept, reject, or postpone entry into any of these.

Thus, one can see that this conceptualization of psychological assessment procedure by Bringmann, Balance, and Krichev, which is analogous to the scientific model, successfully eliminates some of the previously mentioned points of contention.

It is apparent that there are other relevant variables, unrelated to any particular model one may choose, that may influence the testing situation and, thus, are worthy of further investigation. Some questions evolving from consideration of these variables are: 1) Do clients always prefer feedback? 2) Are there desirable characteristics that a good counselor should possess? 3) Is there a preferred mode of feedback? 4) Should feedback be force-
ful and emphatic or benign? and 5) Is the relationship present in live counseling so important that its absence in written feedback will result in poorer outcomes?

Unfortunately very little research investigating the reporting of psychological test results to the testee has been conducted. Not only is there very limited data available but it is also very ambiguous, at times even inconsistent and contradictory. In this brief review of the literature on psychological assessment the authors will attempt to present both the positive and negative criticisms of communicating test results to examinees.

Theoretical Views Concerning Feedback

Various authors have presented theoretical arguments in support of communicating test results to clients. Constance Fischer (1970) perhaps one of the most outspoken professionals in this area, suggests that the time has come for psychologists to change their assessment practices, and she advocates that they should now begin to share their impressions with the client. She contends that there is no longer a need for secrecy from the client, but rather a need for the candid presentation of the test findings. She believes that in order to understand his past behavior, predict his future behavior, or identify feasible possibilities, the client's perspectives must be understood. They must be understood as closely as pos-
sible as his experience in his relationships. "Pre-
conceived constructs are inapplicable and irrelevant to
the experiences in accordance with which he continues his
living" (Fischer, 1970, p.71). Thus, she maintains that it
is the client himself who can ultimately decide whether
or not the examiner's impressions are accurate. If the
client is to benefit from the psychological assessment,
he must be aware of the findings and must regard the com-
munication interchange as a positive mutual exchange. With
this purpose in mind the examiner should attempt to
create an atmosphere in which the client will assume
responsibility in assisting to confirm the test findings.
The testee should feel free to challenge the accuracy of
the test findings or offer pertinent material which may
help to clarify them.

Berdie (1965) also noted the recommendation that
"greater emphasis should be given to research on the effects
of communicating psychological information to parents,
teachers, and students" (p.146). As Fischer, he believes
that the providing of meaningful and relevant information
to the client is an important aspect of the assessment pro-
cess. "The counselor must attempt to help the person
discover the kinds of self-information he needs and the
methods available for obtaining such information, and then
assist him in the learning process itself" (Berdie, 1954,
p.49).
While means for feedback are limited, surveys conducted by the Russell Sage Foundation (1965) indicate, as did Berdie's survey (1954), that the inaccessibility of test data is one of the leading causes of criticism toward testing. Nearly all respondents said that they wanted specific, precise information about test performance. These sample respondents indicated that they seldom received this type of feedback and over one-third said they got no feedback at all.

The Educational Testing Service in presenting its view on this issue states, "our belief that the student should be told his test scores is indicated by the fact that our programs generally make scores available to the test-taker either directly or through his school." Finally the Ad Hoc Committee on Confidentiality of Records of the American Psychological Association (1962), officially representing the opinions of professional psychologists, agree with Berdie's proposal and recommend that research be undertaken on the effect of communicating psychological information.

On the other hand, warnings about the dangers of direct feedback of test results are also common in the counseling literature. As mentioned by Flock and Saggar (1968), it is sometimes the case that examination results suffer if students are at some earlier stage informed of their scores on tests of ability, aptitude or personality.
According to this argument, the low scorers become demoralized and the high scorers too complacent, so that the later academic performance of both is inferior to what it would have been had they been kept in ignorance of their test scores. Fiske (1965) contends that "regardless of the type of test, as the significance of the test results to the individual increased the greater the negative reaction to feedback not coinciding with the examinee's belief about himself" (p. 45). In response to this problem, Berdie (1965) pointed out that high school students who were given feedback regarding ability tests appeared to have methods for defending themselves against serious blows to their self-esteem. He suggests that clients are not as vulnerable as one may believe.

An alternate solution which has been considered is one that does not necessarily ascribe an inherently negative feature to feedback. Such an approach explains the clients' negative reactions as products of an inappropriate process of feedback presentation. Various authors have expressed opinions about what should be incorporated in the feedback communication model.

Rudikoff and Kirk (1959) suggested that test information should be communicated in a manner to permit the client to integrate it with what he already knows about himself. Dressel and Matteson (1950) believe that counseling should seek for the development of the client's
self-understanding, self-acceptance, and self-sufficiency. They emphasize that attention should be focused on the client's impressions and reactions more than on the test data. They hypothesize that in an ideal feedback interview the client is given the opportunity to ask questions, venture his own hunches, and in short, to develop the counseling session in the direction of his own interests and concerns. Bixler and Bixler (1946) outlined the responsibilities of a counselor as such, "the counselor is to give the client information, clarify his attitudes towards that information and towards his limitations and finally to assist him in implementing his plans" (p. 148).

Ohlsen (1963) and Goldman (1961) have each published guidelines for test interpretations which similar to Bixler and Bixler recommend the use of professional counselors who are able to deal with the emotional connotations of the information.

In summary, even though numerous opinions have suggested that test results be communicated to clients, especially by skilled and sensitive counselors, the majority of these have not been investigated empirically.

**Empirical Research Concerning Feedback**

I) **General Studies**

The facilitative effect of knowledge of results upon learning and performance is one of the best established
findings in the research literature (Ammons, 1956; Bilodeau and Bilodeau, 1961; Lock, Cartledge, and Koeppel, 1968). Meers (1973) reported that qualified directive information concerning subjects' performance resulted in higher psychomotor performance. Knowledge of results has been recognized to facilitate performance in psychomotor tasks in at least two ways: (a) by cueing or informing the subject regarding the type, extent, and direction of his errors; and (b) by its property of motivating the subject to try harder or persist longer at the task (Locke, Cartledge, and Koeppel, 1968).

The facilitative effect of feedback has also been demonstrated in general psychological test situations. Westbrook (1967) found that although pupils made no significant changes in occupational aspiration levels they made significant gains in self-knowledge after receiving test reports. Dealing with a junior high school population, Barrett (1967) found that self-estimates of interest, aptitude, and achievements were more accurate for students receiving test results than for those not receiving test findings.

Berdie (1954) found that after counseling college men were able 1) to estimate more accurately their vocational interests, 2) to predict achievement in college, and 3) to predict their own behavior, particularly in the area of academic performance. The results of the experiment, however,
did not demonstrate similar improvements in ability to judge one's self in terms of aptitude or measured personality characteristics. Failure to effect changes of this sort was hypothesized to be a function of the counseling in that the counselors were more experienced in dealing with the Strong Vocational Interest Blank as opposed to the Minnesota Multiphasic, Personality Inventory.

Studies have also demonstrated the negative consequences of offering feedback to subjects. Gibby and Gibby (1967) found that feedback regarding failure unfavourably influenced the subjects' opinion of themselves. They interpreted the results of a study employing a success-failure paradigm with academically superior children to mean that subjects in the failure group 1) regarded themselves less highly, 2) believed that others felt the same way about them, 3) did not wish to be different, and 4) also showed a decrement in intellectual productivity. In a test-retest situation, Truax and Martin (1957) found that failure feedback resulted in greater detrimental effects upon performance when retesting occurred immediately.

In summary, it does not appear unreasonable to assume that changes and adjustments in behavior are closely tied to the feedback process. "The adaptability of an individual is directly related to his ability to receive and process information about the effects of his behavior" (Forster, 1969, p.222). As the studies indicate, the re-
results of giving feedback are not necessarily positive, but at times, may be detrimental and cause adverse effects. The reasons for the observed differences may be clarified by exploring the techniques used in reporting test findings to the subjects. Traditionally, the two more common modes of giving feedback are either through a face-to-face interview or through a written report. A review of the literature concerning the use of these two techniques will now be presented.

II) **Studies Employing Face-to-Face Feedback**

Previous research (Arsenian, 1942; Robertson, 1960; Holmes, 1961) has shown that face-to-face counseling does result in changes in self-estimates of abilities or interests. Rogers (1954) also observed that psychological assessment feedback contributes to "improved self-understanding of college students, at least with respect to abilities and interests" (p.230). In addition, he observed that higher intelligence and active client participation were probably important factors contributing to the degree of self-understanding.

West (1969) in attempting to generalize the results of previous feedback research to a non-college population, compared samples of university students and firemen on self-report measures following evaluative feedback. Both samples were found to equally benefit from the feedback.
as measured by self-rating scales. Sweet (1969) found that oral feedback, presented during the administration of the Wechsler Intelligence Scale for Children, improved the performance of lower-class whites.

Dressel and Matteson (1950), having administered a uniform vocational test battery to forty college freshmen and having reported the test findings in individual face-to-face interviews, found that students who participated more gained most in self-understanding and were more secure in their vocational choices.

Bixler and Bixler (1946) expressed the fact that when receiving assessment feedback, especially if it is undesirable, face-to-face interviews are preferred. Clients should be free to give vent to their anxieties and disappointments if they are to accept the findings and grow from the experience; "the more a client feels free to discuss his reactions with the counselor, the more likely it is that he will come to a logical acceptance of their significance" (p.151). They also mention that clients find it necessary to distort or disregard information that they may find disturbing. Thus, they maintain that the presence of a sensitive counselor, who can filter the results and present them in a non-threatening manner, may effectively eliminate the amount of distortion.

Though face-to-face interview techniques appear to be an adequate solution controlling for the proper method of
relating psychological test interpretations, certain problems appear inevitable when one adopts this procedure.

A more realistic approach which would circumvent problems due to the present shortage of adequately trained counselors, the difficulty in properly training future counselors, and the high costs of employing counselors would be to offer written feedback reports. Empirical research dealing with the efficacy of a written mode of presentation will now be discussed.

III) Studies Employing Written Feedback

Page (1963) noted that already various universities of all sizes give students their test results without one-to-one counseling. Page further elaborated that when test scores are reported by universities using methods not requiring personal contact, the beliefs are held that: 1) such scores are not injurious; 2) some feedback to the students is a good idea; and 3) individual interviews are not, for practical reasons, available. As previously mentioned, the Educational Testing Service also condones giving written feedback to the student.

Gilbert and Ewing (1971) offered a plausible argument in favor of written or programmed feedback. They assumed that a human counselor has a limited number of responses in counseling, and that a written branching booklet incorporating these and even more responses might
accomplish many of the same ends; provided the personal relationship is not of overriding importance.

Other supporting data is offered by Rogers (1954). He observed that many college students, some time after testing and counseling, appear to have very hazy conceptions, distorted perceptions, or no particular recollection at all of the test results. This might imply that one trial learning, in other words one interview with the counselor, is not sufficient. It might be better if the testee is given a written report which he can review occasionally and incorporate at his own leisure.

Gilman (1967) conducted a study in which seventy-five university upperclassmen were taught thirty general science concepts by means of a computer-assisted adjunct auto-instruction program. Throughout the learning program, feedback was also presented through computer reports. He found that feedback facilitated learning in subjects who received it as opposed to control subjects who did not receive feedback.

Tauber (1971) investigated the difference in performance scores on secondary school science laboratory exercises among students who received differing amounts of teacher evaluations via written reports. At the end of twelve classes, he found that feedback facilitated learning for all subjects, and there were no significant differences in performance among treatment groups.
Gaudet and Moon (1970) investigated the effects of differential feedback on opinions of and responses to intelligence test. On two separate occasions, one hundred sixty college students were administered both an I.Q. test and a test opinion scale in counterbalanced orders. The subjects received differential feedback via written reports -- information presumably drawn from their earlier I.Q. test's performance -- before the second administration. Feedback consisted of reporting to subjects that they were in either in the low, moderate, or high I.Q. range in regard to intellectual level of functioning. The researchers found that the type of feedback resulted in differential performances on the second administration of the I.Q. test. High-feedback group showed a significantly higher I.Q. test change scores between first and second administrations than did the low-feedback group. Although all groups' I.Q. test scores increased on the second administration, the low-feedback group did not differ significantly from the control group or the moderate-feedback group. It was also found that the expressed opinions of all subjects about intelligence testing was affected in a negative direction.

In summary, these studies have shown that written reports are an effective means of presenting feedback information. It has been previously shown that face-to-face interviewing sessions have also been successful as a means of providing feedback presentation. Thus, it would now
seem appropriate to review studies comparing the effectiveness of written with face-to-face feedback modes.

IV) **Face-to-Face vs. Written Feedback**

A limited number of studies have been concerned with comparing written with face-to-face feedback. One of the most thorough research investigations concerning the use of a 'program method' of test interpretation was conducted by Gilbert and Ewing (1965). Using a 'scrambled' type program, they essentially found 'programmed counseling' and face-to-face counseling equally effective on a number of criteria, including changing significant attitudes toward self and self-estimates. In a later study (1971), the same authors used a branching booklet to communicate the results to the 'programmed counseled' group. The subjects were three hundred eighty-six male students who voluntarily participated in the interview during the summer prior to their enrollment in the University of Illinois. Gilbert and Ewing found that: 1) students preferred normal counseling but programmed counseling was also rated favorably; 2) coverage of student problems was higher for programmed counseling; 3) flexibility was somewhat greater for normal counseling; and 4) self-concepts changed appropriately and as much for programmed counseling. In addition, they concluded that contrary to all expectations, the direct personal relationship of client and counselor was not of great
importance in client acceptance of counseling. Their findings supported the use of programmed counseling as an adjunct to or substitute for face-to-face counseling.

The effects of these two methods of communicating test results were also studied by Forster (1969). In his study twenty-eight subjects received feedback about their performance on the Minnesota Scholastic Aptitude Test via a programmed manual and twenty-eight subjects received their test results during interviews with counselors. Measures of the accuracy of self-estimation were obtained before and after feedback and relaxation rates, based on skin conductance, were measured during the feedback process. Compared with students who used the programmed manual, students who received feedback from counselors demonstrated a greater rate of relaxation, although the accuracy of their self-estimations did not improve as much. It was difficult to discern whether the increased relaxation rates shown by the students who saw counselors were attributable to the students' adoption of a passive role, or to their preconceived notions that counselors are nonthreatening people.

Forster reported that counselors have the effect of calming down their clients in a threatening situation, although they fail to communicate factual information as can be communicated by written materials organized in a
programmed format. The author hypothesized that such a pattern may indicate the counselor's concern about making new information compatible with existing self-images of the recipient. This concern could easily cause the counselor to substantially alter the information he is trying to communicate.

Tipton (1969) found that when he reported to students their scores on the SCAT (School and College Ability Test) and MCET (Missouri College English Test) both methods of interpretation were initially successful and effective in changing the meanings of subjects' concepts as measured by a semantic differential. Unlike the counselor-interpretation group, however, the differences between the programmed-interpretation group and the control group diminished on all concepts between the immediate and delayed posttests. The results indicate that changes in meanings of concepts which are personal to subjects, may not be as great at first but are likely to be more lasting when the changes occur as a result of interaction with another person, rather than with a program.

Eventhough Tipton's results do not support giving written feedback, he has pointed out certain advantages to programmed tests interpretations: 1) the client can proceed at his own pace; 2) if the client misses a point, he can go back and pick up what he missed; and 3) instant feedback is given regarding the accuracy of the client's
perceptions of the interpretations.

Folds and Gazda (1966) reported that individual, group, and written test interpretations are all effective in increasing the accuracy with which self-estimates of test scores are made. He pointed out, however, that subjects receiving individual test interpretations expressed greatest satisfaction with the test interpretation procedure.

In summary, studies comparing these two modes of feedback, have dealt almost exclusively with measuring their effectiveness in changing attitudes towards self and in determining the accuracy of self-estimates on aptitude, achievement, and vocational tests. The results, thus far, have been inconsistent. Gilbert and Ewing (1965, 1971), Folds and Gazda (1966), and Tipton (1969) found that both techniques were equally effective. Forster (1969) reported program feedback to be more accurate, but subjects appeared to be more relaxed with personal interviews. Furthermore, it was discovered by Tipton (1969) that retention of feedback information was more lasting over a long period of time for those who had received face-to-face feedback. Overall, it was found that students not only preferred but experienced greater satisfaction with face-to-face interviews.
Summary

In reviewing the literature on feedback, empirical research has found that:

I) Feedback definitely affects changes in behavior. Generally, results are positive, but feedback regarding failure negatively influences subjects' opinions of themselves. Negative results, it has been suggested, may be corrected by proper feedback techniques.

II) It has been shown that face-to-face feedback has led to improved self-understanding with respect to abilities and interests. These results have been attained with both a college and non-college population. It has been emphasized that if feedback is of an undesirable nature, face-to-face interviews are preferred since they offer the advantages of having a sensitive counselor who can present the material in a non-threatening manner. Active participation by the client has been illustrated to be an important factor in determining the success of this method.

III) Written reports have been found to be a successful means of reporting test scores to a large number of students, especially by universities and educational testing services. The written reports circumvent problems due to the shortage of adequately trained counselors, difficulties in training counselors, and the high cost in employing them. Branching booklets have been devised which
avoid the number of limited responses available to a human counselor. Written reports also have the advantage of allowing recipients to review their test results at a later time if so desired.

IV. Neither technique has been found to be consistently superior in relating test results to clients as measured by accuracy of self-estimates on abilities and interests tests. The advantage of face-to-face interviews appears to be a more relaxing atmosphere which is preferred by the clients and, thus, offers greater satisfaction. It has also been demonstrated that information obtained in a personal counseling session is retained for a longer period of time.
CHAPTER II

STATEMENT OF THE PROBLEM

Aims

Most of the research thus far has shown that subjects readily benefit from feedback based upon psychological assessment whether it is in oral or written form. Up to this time, however, it has not been explicitly demonstrated whether one feedback technique is any more accurate, efficient, or preferred by testees. It is conceivable that methodological weaknesses have been responsible for the limited knowledge gained in this area.

Some of the methodological problems encountered in previous studies may have been due to the test battery selection. Most often, studies have involved interests and abilities tests on which performance feedback may not have been considered enlightening, relevant, or even desired by subjects whose performance was poorer than expected. As pointed out by Gibby and Gibby (1967), feedback regarding failure unfavorably influenced the subjects' opinions of themselves. On the other hand, a personality inventory, offering descriptive statements concerning normal functioning, would be more relevant to the client and would also eliminate any value judgments associated with their per-
formance. For this reason, the present study has employed the Personality Research Form (Jackson, 1967).

Another methodological error affecting the results may have been due to the fact that previous studies have not properly controlled for the amount and variability in the type of feedback given. As pointed out by Forster (1969), in face-to-face counseling the counselor's concern about making new information compatible with existing self-images of the recipient, may cause the counselor to substantially alter the information he is trying to communicate. In attempting to control for this variability, in this study, all feedback reports, depending upon test performance, consisted of standardized statements taken from The Personality Research Form Interpretation Guide (Balance and Bringmann, 1971).

Also, it is not unreasonable to assume that subject variables, which have not been previously investigated, may influence treatment outcomes, and consequently, should be considered in determining which feedback technique should be employed. One important subject variable, which has not been thoroughly investigated up to this time, is sex.

In reviewing the literature, it has also been observed that very few studies have been concerned with specifically determining which feedback technique subjects prefer. Of the limited number of studies that did attempt to assess
subjects' preferences, the majority used rating scales as a means of measure. As mentioned by Gilbert and Ewing (1971), "experience with student ratings has demonstrated that students seldom make unfavorable ratings of interviews" (p.415). In hopes of accurately assessing subjects' preferences, the present authors have sought subjects' opinions regarding preference using open-ended essay questions. It was felt that this method would encourage a freer, and therefore, a more accurate expression of their opinions.

Since previous studies have indirectly assessed accuracy of feedback by measuring changes in subjects' self-estimates on tests of abilities and interests, the present authors felt a more direct measure would be obtained through the use of, again, open-ended questions.

**Hypotheses**

With these considerations and proposed changes in mind, the following hypotheses were generated:

I) Subjects will significantly prefer oral rather than written feedback.

II) Subjects will regard oral feedback significantly more accurate than written feedback.

III) There will be no sex difference among subjects regarding preference and/or accuracy concerning feedback techniques.
Significance of the Problem Area

If written feedback reports are shown to be as acceptable and effective a means of reporting psychological test data as face-to-face interviews, significant progress may be made in solving the national shortage of adequately trained counselors. This, in turn, will encourage a more prolific use of psychological assessment by professionals, and thus, will make professional counseling available to a larger percentage of the population. Since this would also allow greater communication of test results, it will eliminate some of the present animosity felt by the public towards testing due to the fact that records are inaccessible. Should it be found that there is a sex difference, it would also assist counselors in determining the most appropriate method of relating feedback depending upon the sex of the subject.
CHAPTER III

METHOD

Subjects

The subjects (Ss) consisted of 62 undergraduate students enrolled in an Education Psychology course at the University of Windsor. There were 16 males ranging from 20 to 37 years with a mean age of 23.1 years. There were 46 females ranging from 18 to 29 years with a mean age of 21.1 years. The overall mean age of Ss was 22.1 years.

The Ss volunteered to participate knowing that they would receive feedback based upon the personality inventory and would also receive course credit for their participation in the research.

The Ss were randomly assigned to one of four groups: 1) males receiving written feedback; 2) females receiving written feedback; 3) males receiving oral feedback; and 4) females receiving oral feedback.

Three University of Windsor graduate psychology students who were asked to participate in the research served as judges.

Instruments

Form A of the Personality Research Form (Jackson, 1967; PRF) was the personality test employed in this study.
to provide personality descriptions of the subjects. Form A consists of 300 items which yields 15 trait scores. The traits measured by the PRF are listed in Appendix 1.

The items are presented in the form of statements which a person might use to describe himself. The subject answers true for each item which he feels is descriptive of himself and false for any item which he does not agree with.

The PRF was selected as the assessment tool since it mainly yields a profile set of scores descriptive of normal personality functioning as opposed to pathological functioning. Jackson (1967) presents a detailed explanation defending his theoretical construction of the trait items. The reliability and validity of the PRF have been demonstrated by Bentler (1964), Jackson (1966), Jackson and Gunthrie (1967), Jackson and Lay (1967), Kusyszyn and Jackson (1967), and Kusyszyn (1968).

An individualized personality description was composed for each S receiving written feedback and was based upon his PRF test scores. This report consisted of six statements (utilizing the three highest and three lowest scores attained) typed in paragraph form. The statements were taken from The Interpretation Guide for the PRF (Balance and Bringmann, 1971). A similar statement was prepared for the groups receiving oral feedback, as a means of eliminating
any discrepancy in the content of the feedback between oral and written feedback groups, and was presented in a fifteen-minute face-to-face interview. A sample feedback report is presented in Appendix 2.

Upon receiving assessment feedback, the Ss were requested to answer in brief paragraph form six questions indicating their opinions regarding the accuracy and the preferred mode of feedback. Questions asked to be completed by Ss are listed in Appendix 3.

Procedure

The PRF (Form A) was administered to all Ss in one supervised group setting. The subjects were given a standard set of instructions (see Appendix 4). If there were any questions asked by the Ss, instructions were repeated verbatim from the instruction sheet.

The PRF inventories were scored manually, and test profiles were plotted for each S. The three highest and the three lowest scores on the profile were selected by inspection and utilized in preparing an individualized feedback statement for each S. These statements were taken from The Personality Research Form Interpretation Guide (Balance and Bringmann, 1971), which provides statements representative of high and low scores for each of the personality traits measured by the PRF.

After a two-week interval, Ss were asked to register
for assessment feedback interviews. One week later, the Ss receiving written feedback were presented their individualized reports and escorted to an adjacent room where they were asked to read their report. The Ss receiving oral feedback were seen in a fifteen-minute face-to-face interview during which time the experimenter presented verbally feedback statements similar to those given in the written feedback reports. Upon receiving feedback, each S was requested to answer questions expressing his opinions regarding the accuracy of the feedback and its mode of presentation.

Shortly thereafter, the independent judges were asked to evaluate the opinions of the Ss regarding their accuracy ratings and their preferences of feedback mode.

**Statistical Analysis**

Due to the fact that all data collected were of a nominal nature, chi-square analyses, as outlined by Winer (1971), were conducted. Using this statistical procedure, it was determined whether Ss significantly preferred oral feedback rather than written feedback, whether Ss regarded oral feedback significantly more accurate than written feedback, and whether Ss differed according to sex in their opinions regarding preference and/or accuracy concerning the two feedback techniques.
CHAPTER IV

RESULTS

The description of Ss employed in this study, according to sex and mode of feedback given, is presented in Table 1. The mean ages of these subject samples can be found in Table 2. The standard deviations of the fifteen PAI trait scores for Ss, according to sex and mode of feedback given, are presented in Table 3.

Recalling Hypothesis I, it was predicted that subjects would significantly prefer oral feedback over written feedback. An examination of the results demonstrated that all subjects significantly preferred oral feedback over written feedback, as a means of receiving psychological test data. The results of the analysis of the subjects' ratings may be found in Table 4. As noted, this difference was significant at the .05 level (one-tail test).

The overwhelming majority of females in this study led the examiners to believe that perhaps the male opinions did not contribute sufficiently in the statistical analysis, and therefore, acceptance of this hypotheses was not representative of all Ss. In hopes of clarifying this issue, chi-square analyses, regarding preference for feedback presentation, was conducted for both male and female
TABLE 1

DESCRIPTION OF SUBJECT SAMPLES

<table>
<thead>
<tr>
<th>Sex</th>
<th>Oral</th>
<th>Written</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>31</td>
<td>62</td>
</tr>
</tbody>
</table>
TABLE 2

MEAN AGES OF SUBJECTS ACCORDING TO SEX AND MODE OF FEEDBACK GIVEN

<table>
<thead>
<tr>
<th>Sex</th>
<th>Oral</th>
<th>Written</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>23.7</td>
<td>22.5</td>
<td>23.1</td>
</tr>
<tr>
<td>Female</td>
<td>20.9</td>
<td>21.3</td>
<td>21.1</td>
</tr>
<tr>
<td>Total</td>
<td>22.3</td>
<td>21.9</td>
<td>22.1</td>
</tr>
<tr>
<td>Scales</td>
<td>M</td>
<td>F</td>
<td>M-O</td>
</tr>
<tr>
<td>--------</td>
<td>----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>Ac</td>
<td>3.23</td>
<td>3.11</td>
<td>3.17</td>
</tr>
<tr>
<td>Af</td>
<td>4.11</td>
<td>7.44</td>
<td>4.01</td>
</tr>
<tr>
<td>Ar</td>
<td>3.44</td>
<td>2.02</td>
<td>3.54</td>
</tr>
<tr>
<td>Au</td>
<td>3.94</td>
<td>3.62</td>
<td>3.92</td>
</tr>
<tr>
<td>Do</td>
<td>4.60</td>
<td>3.33</td>
<td>4.56</td>
</tr>
<tr>
<td>Dr</td>
<td>4.57</td>
<td>3.34</td>
<td>4.45</td>
</tr>
<tr>
<td>ex</td>
<td>3.42</td>
<td>7.38</td>
<td>3.56</td>
</tr>
<tr>
<td>nHg</td>
<td>4.79</td>
<td>4.04</td>
<td>4.89</td>
</tr>
<tr>
<td>Im</td>
<td>3.45</td>
<td>3.78</td>
<td>3.10</td>
</tr>
<tr>
<td>Nu</td>
<td>4.59</td>
<td>4.92</td>
<td>4.57</td>
</tr>
<tr>
<td>or</td>
<td>5.09</td>
<td>4.92</td>
<td>4.98</td>
</tr>
<tr>
<td>FL</td>
<td>5.11</td>
<td>3.33</td>
<td>3.95</td>
</tr>
<tr>
<td>Sr</td>
<td>5.04</td>
<td>3.66</td>
<td>5.01</td>
</tr>
<tr>
<td>Un</td>
<td>2.92</td>
<td>3.11</td>
<td>2.72</td>
</tr>
<tr>
<td>In</td>
<td>.99</td>
<td>1.55</td>
<td>.98</td>
</tr>
</tbody>
</table>

N = 46

M = Male  M-O = Male-Oral  M-W = Male-Written
F = Female F-O = Female-Oral  F-W = Female-Written
TABLE 4

CHI-SQUARE ANALYSIS OF SUBJECTS' RATINGS REGARDING PREFERRED MODE OF FEEDBACK ACCORDING TO FEEDBACK MODE GIVEN

<table>
<thead>
<tr>
<th>Feedback Preferred</th>
<th>Feedback Given</th>
<th>Oral</th>
<th>Written</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Oral</td>
<td>29</td>
<td>18</td>
<td>47</td>
</tr>
<tr>
<td>Not Oral</td>
<td>Oral</td>
<td>.2</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>Oral</td>
<td>31</td>
<td>31</td>
<td>62</td>
</tr>
</tbody>
</table>

N = 62

χ² = 8.79

df = 1

p < .05 (one-tail test)
groups. Results are presented in Tables 5 and 6 respectively. The results indicated that both males and females, as individual groups, significantly prefer oral feedback over written feedback. Again results were significant at the .05 level (one-tail test).

As a means of investigating part of Hypothesis III, that there would be no sex difference among Ss regarding preference for either feedback technique, a chi-square analysis was carried out. As noted in Table 7 no significant difference was found at the .05 level (two-tail test). Thus in light of the previous findings, it can be concluded that males and females equally prefer oral feedback over written feedback.

Hypothesis II stated that individuals would regard oral feedback significantly more accurate than written feedback. An analysis of the results, as illustrated in Table 8, led the examiners to reject this hypothesis at the .05 level of significance (one-tail test). Therefore, in this study, it was demonstrated that Ss did not regard oral feedback significantly more accurate than written feedback.

Again, for reasons mentioned previously, chi-square analyses were conducted for overall male and female groups. The results, found in Tables 9 and 10 respectively, showed that neither males nor females, as individual groups,
<table>
<thead>
<tr>
<th>Feedback Preferred</th>
<th>Oral</th>
<th>Written</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Not Oral</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>

\[ N = 16 \]

\[ \chi^2 = 4.65 \]

\[ df = 1 \]

\[ p < .05 \text{ (one-tail test)} \]

**TABLE 5**

CHI-SQUARE ANALYSIS OF MALE SUBJECTS' RATINGS REGARDING PREFERRED MODE OF FEEDBACK ACCORDING TO FEEDBACK MODE GIVEN
TABLE 6

CHI-SQUARE ANALYSIS OF FEMALE SUBJECTS' RATINGS REGARDING PREFERRED MODE OF FEEDBACK ACCORDING TO FEEDBACK MODE GIVEN

<table>
<thead>
<tr>
<th>Feedback Preferred</th>
<th>Oral</th>
<th>Written</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>21</td>
<td>15</td>
<td>36</td>
</tr>
<tr>
<td>Not Oral</td>
<td>2</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>23</td>
<td>46</td>
</tr>
</tbody>
</table>

N = 46  
\[ x^2 = 3.19 \]  
\( df = 1 \)  
\( p < .05 \) (one-tail test)
TABLE 7

CHI-SQUARE ANALYSIS OF SUBJECTS' RATINGS REGARDING PREFERRED MODE OF FEEDBACK ACCORDING TO SEX

<table>
<thead>
<tr>
<th>Feedback Preferred</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>11</td>
<td>36</td>
<td>47</td>
</tr>
<tr>
<td>Not Oral</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>46</td>
<td>62</td>
</tr>
</tbody>
</table>

N = 62

$x^2 = .18$

df = 1

p > .05 (two-tail test)
### Table 8

**Chi-Square Analysis of Subjects' Ratings Regarding Accuracy of Feedback Modes According to Feedback Given**

<table>
<thead>
<tr>
<th>Accuracy Rating</th>
<th>Oral</th>
<th>Written</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate</td>
<td>28</td>
<td>25</td>
<td>53</td>
</tr>
<tr>
<td>Not Accurate</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>31</td>
<td>62</td>
</tr>
</tbody>
</table>

N = 62

\[ \chi^2 = .52 \]

df = 1

p > .05 (one-tail test)
TABLE 9

CHI-SQUARE ANALYSIS OF MALE SUBJECTS' RATINGS REGARDING ACCURACY OF FEEDBACK MODES ACCORDING TO FEEDBACK GIVEN

<table>
<thead>
<tr>
<th>Accuracy Rating</th>
<th>Oral</th>
<th>Written</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate</td>
<td>8</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Not Accurate</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>

N = 16
\( \chi^2 = .41 \)
df = 1
\( P > .05 \) (one-tail test)
<table>
<thead>
<tr>
<th>Accuracy Rating</th>
<th>Oral</th>
<th>Written</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Not Accurate</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>23</td>
<td>46</td>
</tr>
</tbody>
</table>

N = 46

\[ X^2 = .13 \]

df = 1

\[ p > .05 \text{ (one-tail test)} \]

TABLE 10

CHI-SQUARE ANALYSIS OF FEMALE SUBJECTS' RATINGS REGARDING ACCURACY OF FEEDBACK MODES ACCORDING TO FEEDBACK GIVEN
rated oral feedback more accurate than written feedback as measured at the .05 level of significance (one-tail test).

Again, considering Hypothesis III, that males as a group do not rate feedback any more accurate than females as a group, a chi-square, yielding the results in Table 11, was performed. The obtained results led the examiners to accept this hypothesis at the .05 level of significance (two-tail test).
# TABLE 11

**CHI-SQUARE ANALYSIS OF SUBJECTS' RATINGS REGARDING ACCURACY OF FEEDBACK MODES ACCORDING TO SEX**

<table>
<thead>
<tr>
<th>Accuracy Rating</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate</td>
<td>13</td>
<td>40</td>
<td>53</td>
</tr>
<tr>
<td>Not Accurate</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>46</td>
<td>62</td>
</tr>
</tbody>
</table>

\[ N = 62 \]

\[ \chi^2 = .02 \]

\[ df = 1 \]

\[ p > .05 \text{ (two-tail test)} \]
CHAPTER V

DISCUSSION

This investigation was conducted to examine two methods (oral and written) of communicating psychological assessment feedback to individuals. Findings indicated that students preferred personal interviews instead of written reports as a means of obtaining feedback on non-pathological traits as measured by the Personality Research Form. The findings of this study are a consistent elaboration of the previous examination of Gilbert and Ewing (1971). Taken together, these researches provide striking evidence that individuals significantly prefer oral presentations over written presentations. The present study, however, went beyond the finding of Gilbert and Ewing (1971) by investigating the sex variable and establishing that both males and females equally preferred the face-to-face technique.

Though both techniques were regarded as accurate means of presenting feedback data, individuals did not consider either mode to be significantly more accurate than the other. As with preference, it was again found, that males and females did not differ in their accuracy ratings.

The results of the present study corroborated previous
research finding that both personal interviews and written reports are effective means of communicating feedback data. The authors regarded this study as a pioneer in the field, since it dealt with a test measuring personality traits, unlike all previous research in this area which employed tests of abilities, aptitudes and interests.

Both variables examined in this study were felt to be worthy of investigation, because of their implications in the fields of psychological assessment and counseling. It is universally accepted that accuracy of reporting test results is of primary importance if counseling sessions are to be of any value. For this reason, the authors felt that the rejection of Hypothesis II had greater implications for applied psychology. Since psychological assessment feedback is known to be desired by clients, and having established that both techniques are an equally effective means of accomplishing this task, the authors feel that it would be beneficial, for several reasons, to substitute written reports for face-to-face interviews when counseling clients. Doing so would circumvent many problems stemming from the shortage of adequately trained counselors. In addition, as mentioned before, this would also make records accessible to a greater number of individuals.

The results of this study seemingly support the views
of those researchers favoring oral presentation of feedback as opposed to written reports. They argue that the personal relationship of client and counselor is a major variable influencing treatment outcome. When considering the findings of this research, that individuals significantly preferred personal interviews rather than written reports as a mode of feedback presentation, the authors feel a note of caution is warranted. Though the present findings do not refute their contentions, it is felt that the results cannot be generalized to all testing situations.

One factor restricting the generalizability of the results would appear to be that the present study dealt solely with a personality inventory. It is felt that conclusions based upon this study cannot be applied to assessment situations employing tests of abilities, aptitudes, and interests. It is recommended that future studies use tests measuring pathological tendencies (e.g. MMPI) in hopes of expanding knowledge in this area.

At the same time, the results would not necessarily have been obtained using a non-college population. Thus, it is recommended that use of such a population be considered in future research studies.

It should also be noted that students who participated in this study volunteered their services, and for this reason, it was felt that active participation in face-to-
face interviews was of an optimal nature. For reasons previously stated, it was believed that this may have significantly contributed to the individuals preferring this mode of feedback presentation. It would be interesting to see how manipulating the variable of active participation will affect clients' preferences for face-to-face interviews in future research.

By the opinions expressed on the feedback questionnaires, it was learned that a primary reason for individuals preferring the face-to-face interviews was that they had the opportunity to ask for further clarification and/or elaboration of the feedback statements. It is suggested, perhaps, failure of the students to prefer written reports may have been due to the lack of this opportunity. It is suggested that a more comprehensive written report may have altered the results in favor of written feedback.

In summary, then, the results of this research showed that 1) individuals significantly preferred oral feedback rather than written feedback; 2) individuals did not regard oral feedback significantly more accurate than written feedback; and 3) no sex difference regarding preference for and accuracy ratings of feedback presentations was observed. It is felt that, perhaps, some of the mentioned suggestions and recommendations for future research may help further clarify the area of feedback communication.
APPENDIX 1

TRAITS MEASURED BY THE PERSONALITY RESEARCH FORM (PRF)
<table>
<thead>
<tr>
<th>Scale Number</th>
<th>Scale Name</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Achievement</td>
<td>Ac</td>
</tr>
<tr>
<td>2</td>
<td>Affiliation</td>
<td>Af</td>
</tr>
<tr>
<td>3</td>
<td>Aggression</td>
<td>Ag</td>
</tr>
<tr>
<td>4</td>
<td>Autonomy</td>
<td>Au</td>
</tr>
<tr>
<td>5</td>
<td>Dominance</td>
<td>Do</td>
</tr>
<tr>
<td>6</td>
<td>Endurance</td>
<td>En</td>
</tr>
<tr>
<td>7</td>
<td>Exhibition</td>
<td>Ex</td>
</tr>
<tr>
<td>8</td>
<td>Harmavoidance</td>
<td>Ha</td>
</tr>
<tr>
<td>9</td>
<td>Impulsivity</td>
<td>Im</td>
</tr>
<tr>
<td>10</td>
<td>Nurturance</td>
<td>Nu</td>
</tr>
<tr>
<td>11</td>
<td>Order</td>
<td>Or</td>
</tr>
<tr>
<td>12</td>
<td>Play</td>
<td>Pl</td>
</tr>
<tr>
<td>13</td>
<td>Social Recognition</td>
<td>Sr</td>
</tr>
<tr>
<td>14</td>
<td>Understanding</td>
<td>Un</td>
</tr>
<tr>
<td>15</td>
<td>Infrequency</td>
<td>In</td>
</tr>
</tbody>
</table>
APPENDIX 2

SAMPLE FEEDBACK REPORT
SAMPLE FEEDBACK REPORT

Name: John Doe

Your test results obtained on the PRF indicate that you accept people readily and make efforts to win friendships and maintain associations with people. You enjoy being with friends and people in general. You do many things just for fun. You spend a good deal of time participating in games, sports, social activities and other amusements. In social situations, you enjoy jokes and funny stories and generally maintain a light-hearted easy-going attitude toward life. You are strongly motivated by challenge and like competition. You are eager to excel others and are willing to put forth major effort to attain distant goals.

You enjoy adventure and are willing to take risks and expose yourself to danger. On occasion you may be reckless and show little regard for your personal safety. You prefer friendly relations and discussions and try hard to avoid situations which may lead to arguments and disagreements. If you feel that you have been harmed by someone, you will go to great lengths to avoid confrontations. You are hesitant to express disagreements and will do so only if you can do so very tactfully. You defer decisions to others. You prefer to accept life at face value. You are little given to searching for underlying meanings and explanations. You are more concerned with practical knowledge which you can apply than with abstract theoretical principles.

The above report was prepared utilizing this S's three highest scores, obtained on the achievement, affiliation, and play scales, and the three lowest scores, obtained on the aggression, harmavoidance, and understanding scales. Descriptive statements for the high traits were taken from the strong category, for the low traits were taken from the weak category, of the Interpretation Guide for the PRF (Balance and Bringmann, 1971).
APPENDIX 3

FEEDBACK QUESTIONNAIRE
FEEDBACK QUESTIONNAIRE

The Ss who had received face-to-face feedback were asked to complete the following questionnaire.

Name ____________________________ I.D. ____________________________

Instructions: Please answer the following questions as they pertain to the psychological assessment, which you have just received.

1) In my opinion the feedback was/was not accurate because....

2) The manner in which the feedback was presented was....

3) If I had a choice I would have preferred to receive written feedback (written report) as opposed to personal feedback (face-to-face interview).

4) I liked __________ about the way the feedback was presented.

5) I disliked __________ about the way the feedback was presented.

6) My general comments are....
FEEDBACK QUESTIONNAIRE (continued)

The Ss who had received written feedback were asked to complete the following questionnaire.

Name ______________________ I.D. ______________________

Instructions: Please answer the following questions as they pertain to the psychological assessment, which you have just received.

1) In my opinion the feedback was/was not accurate because....

2) The manner in which the feedback was presented was....

3) If I had a choice I would have preferred to receive face-to-face feedback (personal interview) as opposed to written feedback (written report).

4) I liked __________ about the way the feedback was presented.

5) I disliked __________ about the way the feedback was presented.

6) My general comments are .......
APPENDIX 4

INSTRUCTIONS GIVEN TO SUBJECTS
The purpose of the testing is for psychological research. Upon receiving test booklet, kindly read the instructions found on the front cover. You will be allowed ample time to finish the test. When you have completed the test kindly return all materials to the test proctor, who is seated at the front desk. In approximately two weeks, you will be asked to make an appointment at a convenient time during which you will receive personality feedback based upon your performance on this test.


Fischer, C. T. Paradigm changes which allow sharing of "results". *Professional Psychology, 1972, 3*, 364-369.


Horst, F. How information on test results should be given to students: Views of a research psychologist. *Journal of Counseling Psychology*, 1959, 6, 218-222.


1952
Born in Matrice, Italy to Giuseppe and Incoronata Coletta.

1957 - 1970
Educated at Holy Name of Mary, Elementary School, St. Anthony, Elementary School and St. Mary's Academy, High School, Windsor Ontario.

1970 - 1973
Attended University of Windsor, Windsor Ontario. Graduated with the degree of Honors Bachelor of Arts in May, 1973.

1973
Registered as a full-time graduate student in the Master of Arts program in Clinical Psychology at the University of Windsor, Windsor, Ontario.