A Study of the Generality of the Herzberg Two-Factor Theory of Motivation to Elements of the Chronically Underemployed and Unemployable Population

John R. Murray III
Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/masters_theses

Part of the Psychology Commons

Recommended Citation
https://scholarworks.wmich.edu/masters_theses/3075
A STUDY OF THE GENERALITY OF THE
HERZBERG TWO-FACTOR THEORY OF MOTIVATION
TO ELEMENTS OF THE CHRONICALLY UNDEREMPLOYED
AND UNEMPLOYABLE POPULATION

by

John R. Murray III

A Thesis
Submitted to the
Faculty of the School of Graduate
Studies in partial fulfillment
of the
Degree of Master of Arts

Western Michigan University
Kalamazoo, Michigan
July 1969
ACKNOWLEDGMENTS

The investigator wishes to express his sincere gratitude to Dr. Robert Vermeulen, formerly of the Portage Michigan School Systems, for his assistance in making the facilities and personnel of the Lincoln School Skill Center available to the investigator.

Special thanks are due to the trainees who gave freely of their time and experiences to assist those who may follow in their footsteps.

The investigator is grateful for the continued guidance and assistance offered by Dr. Frank Fatzinger and also for the help and advice offered by Dr. John Nangle and Dr. Peter Couch. In addition, the investigator is appreciative to Dr. Robert House for his valuable comments on the data of the study.

John R. Murray III
MURRAY III, John Ralph

A STUDY OF THE GENERALITY OF THE HERZBERG TWO-FACTOR THEORY OF MOTIVATION TO ELEMENTS OF THE CHRONICALLY UNDEREMPLOYED AND UNEMPLOYABLE POPULATION.

Western Michigan University, M.A., 1969
Psychology, general

University Microfilms, Inc., Ann Arbor, Michigan
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1</td>
</tr>
<tr>
<td>II</td>
<td>7</td>
</tr>
<tr>
<td>III</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
<tr>
<td>IV</td>
<td>19</td>
</tr>
<tr>
<td>V</td>
<td>36</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>38</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>41</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
INDEX OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RACE AND AGE DISTRIBUTION OF SAMPLE POPULATION</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>NUMBER AND PERCENTAGE OF FIRST LEVEL FACTORS MENTIONED WITH HIGH AND LOW ATTITUDE (Trainee Population)</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>PERCENTAGE OF FIRST LEVEL FACTORS APPEARING IN HIGH AND LOW ATTITUDE SEQUENCES [Herzberg, et al. (1959), population]</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>HIGH AND LOW SEQUENCES DISTRIBUTED BY DURATION OF FEELINGS CATEGORIES</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>PERCENTAGE OF EACH SECOND-LEVEL FACTOR APPEARING IN HIGH AND LOW JOB-ATTITUDE SEQUENCES (Trainee population)</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>PERCENTAGE OF EACH SECOND-LEVEL FACTOR APPEARING IN HIGH AND LOW JOB-ATTITUDE SEQUENCES [Herzberg, et al. (1959), population]</td>
<td>29</td>
</tr>
<tr>
<td>7</td>
<td>PERCENTAGE OF PERFORMANCE EFFECTS</td>
<td>31</td>
</tr>
<tr>
<td>8</td>
<td>COMPARISON OF MOTIVATION AND HYGIENE FACTORS (Trainee population)</td>
<td>34</td>
</tr>
<tr>
<td>9</td>
<td>COMPARISON OF MOTIVATION AND HYGIENE FACTORS [Herzberg, et al. (1959) population]</td>
<td>35</td>
</tr>
</tbody>
</table>
INTRODUCTION

The two-factor theory of job satisfaction as originally formulated in *The Motivation to Work* (Herzberg, Mausner, and Snyderman, 1959) and clarified and expanded by Herzberg in *Work and the Nature of Man*, (1966), has generated unprecedented interest in that area of industrial psychology concerned with job motivation.

From literature research and investigation conducted on the general subject of job attitudes Herzberg, et al., (1959) concluded that most previous studies purporting to investigate job attitudes had failed to investigate these attitudes within their total framework. They felt that a study of job attitudes as they exist in a factors-attitudes and effects complex (F-A-E) would yield meaningful insights into the industrial employee (Herzberg, et al., 1959, p. 11).

Using a more psychologically oriented adaptation of the critical incident technique developed by Flanagan (1954), Herzberg and his associates sought to obtain information about the F-A-E complex by asking individuals to tell an interviewer about a time when they felt either exceptionally good or bad about a job and to relate the associated factors and effects. The basic assumptions that need to be made are first, can the individual reliably rank his feelings on a continuum and then report their extremes of feelings, and second, would he be accurate in his incident reporting or would he tend to rationalize the events through verbal behavior.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
This latter assumption especially has drawn criticism on the basis that the individual will tend to claim credit for satisfying events to increase his esteem and avoid blame where things fail (Kahn, 1961; Vroom, 1964). Herzberg, (1966, pp 130-131) also mentions this bias but concludes that empirical observation indicates the reverse to be true. Further, Herzberg, et al., (1959, p 15) felt that by asking probe questions about actual events the subject would be less apt to distort the information.

Using a semi-structured interview technique similar to that presented in Appendix A, Herzberg and his associates asked 203 accountants and engineers employed in industry in Pittsburgh, Pennsylvania, to tell them about times when they felt either exceptionally good or exceptionally bad about a series of events of either short or long duration. Short duration events were described as having taken place in a period of time of less than three weeks; whereas the long duration sequences could be spaced from months to years in length. After the subject related one sequence he was asked to relate another sequence. However, if he had given a low sequence he was asked to give a high and if he had told a long sequence he was asked to give a short and vice versa. Herzberg, et al., obtained 2.4 sequences per subject, as many subjects went on to relate three or even four F-A-E sequences.

The interviews were analyzed using an a posteriori type of analysis so that the categories of analysis were delineated by the material itself. Categories were developed in this manner for first-level factors (events), second-level factors (attitudes
or feelings) and effects. The categories that evolved are presented in Appendix B, which is the analysis form developed by Herzberg, et al., (1959).

The criteria for the inclusion of a sequence into the analytical scheme required that the sequence revolve around an objective event or series of events, that these events be bound in time and that the feelings generated by these events be exceptionally good or bad. Further, sequences were limited to feelings directly associated with the subject's job and the events were limited to jobs the individual had had within the time limits of the sample, (Herzberg, et al., (1959, pp 40-41).

On the basis of the content analysis of the 228 high sequences and 248 low sequences obtained from the sample, Herzberg and his associates maintained that the traditional view of job satisfaction which maintains that if the presence of a variable contributes to satisfaction then the absence of the variable must be dissatisfying (Graen, 1968), was not upheld. Further, they found that a certain set of job factors led to satisfaction while yet another set of job characteristics led to job dissatisfaction and that neither contributed predominantly to any changes in the attitudes fostered by the other set of factors. The Herzberg study reported that the set of factors which contributed to job satisfaction were intrinsic in nature, that is, related to the actual doing of the job or the job content, while those factors related to dissatisfaction were extrinsic or related to the actual job environment or job context (Whitsett and Winslow, 1957; Centers and Bugental, 1966). The "satisfiers"
were called motivator factors, and the "dissatisfiers" were labeled hygiene factors.

The former term evolved because the motivators seemed to emit internal motivation toward self-actualization or ego fulfillment (Maslow, 1955). The latter term was coined because the factors were related to maintenance needs or deficiency motives (Maslow, 1955), and serve only to reduce or avoid pain.

The motivating factors were found to be Achievement, Recognition, The Work Itself, Responsibility, Advancement, Possibility of Growth, and in some instances, Salary. The hygienic factors were Interpersonal-relations, Supervision, Working Conditions, Company Policy and Administration, and Job Security. The crucial aspect of the theory is that the factors associated with dissatisfaction are separate and distinct from those factors associated with satisfaction (Whitsett and Winslow, 1967). Additionally, Herzberg, et al., (1959) maintain that "... satisfier factors are much more likely to increase job satisfaction than they would be to decrease job satisfaction, but ... the factors that relate to job dissatisfaction very infrequently act to increase job satisfaction (p. 80)."

Even though Herzberg, et al., do not specifically state that any of the factors are completely unidirectional, several studies have criticized the theory on this basis (Burke, 1966; Dunnette, 1965; Friedlander, 1964; Lindsey, 1965).

Although cautioning that the attitudes derived from the first-level factors tend to be more subjective and hence more vulnerable to bias, Herzberg, et al., go on to report that high associated
events produce a "... sense of personal growth and of self-actualization ... (p. 70)." For the low sequence, unfairness was the predominant attitude which is understandable in that any factor can be perceived as unfair.

Finally, Herzberg, et al., found that no first-level factor was more likely than another to produce an effect, although they do point out that satisfaction is more likely to produce behavioral effects than dissatisfaction (p. 95).

Regarding effects related to the motivation variables, Gordon (1965), found that satisfaction with these factors led to comparatively better performance than the relative absence of satisfaction with the motivators.

As mentioned earlier, the original study in 1959 generated a myriad of research and comment. Although the original study was limited as to the characteristics of the sample population, many studies have been done to test the generality of the theory. Many different studies have been conducted which at least partially support the motivator-hygiene (M-H) theory on different populations (Burke, 1966; Friedlander, 1963; Friedlander, 1964; Halpern, 1966; Lodahl, 1964; Myers, 1964; Saleh, 1964; Walter, 1964; Weissenberg, 1968). As many studies report serious exception to the theory (Ewen, 1964 and Smith, Hulin and Locke, 1966; Graen, 1966; Levine and Weetz, 1968; Rosen, 1963). In addition many of the studies testing the two-factor theory have been compared and contrasted by House and Wigdor (1967) who find the evidence against the M-H theory and Whitsett and Winslow (1967) who find roughly the same evidence supportive of the
theory. To further compound the controversy, the above mentioned studies were subjected to criticism by the authors of the opposing study (House and Wigdor, 1968; Winslow and Whitsett, 1968). In the final analysis, there is evidence to indicate that the M-H theory is situationally bound relative to the job or occupational level of the subject (Centers and Bugental, 1966; Dunnette, 1965; Friedlander, 1963; Friedlander, 1965; Malinovsky and Barry, 1965). It is from this point that the present research departs to seek information as to whether or not the Herzberg M-H theory can provide some insights into satisfying or dissatisfying aspects of the job environment for the chronically underemployed and unemployed individual.
PROBLEM

There is ample evidence to indicate that many of the traditional extrinsic motivators such as wage incentive and fringe benefits have failed to create any lasting positive effects on the job related aspirations of the chronically underemployed individual. Many of the attempts at skill training or job placement by government and industry have met with frustrating results due to high absenteeism, on-the-job behavior problems and abnormally high turnover (Sommerfeld, 1967). Interestingly enough, the motivator-hygiene theory would predict that this would be the case. As mentioned earlier, the theory would expect that dissatisfaction only would be decreased by attention to the maintenance needs of the individual and would have little effect on the individual's satisfaction with his job. As Herzberg, et al., state, an individual whose intrinsic or ego fulfillment needs (Maslow, 1954) are not met is an essentially under-motivated individual (pp. 131-132).

Centers and Bugental (1966), and Myers (1964), report that the motivator-hygiene theory as applied to a comparative analysis of job satisfaction among blue and white collar type workers indicates that the blue collar workers place greater emphasis on hygienic factors as a source of satisfaction than do their white collar counterparts. Nonetheless, both studies also found that the blue collar workers still report motivator factors as a source of satisfaction.
It would seem reasonable to predict that the motivator-hygiene theory would generalize further to predict the job related attitudes of the chronic underemployed. If the effectiveness of the motivators holds true for the unemployable, then providing him with basic extrinsic factors such as job related opportunities and standard wage incentives is only satisfying a portion of his need structure. Generally speaking, the motivator-hygiene theory would predict that that portion is not apt to motivate appropriate job behavior.

The hypothesis of this study is that the M-H theory of job satisfaction advanced by Herzberg, et al., (1959) is applicable and generalizes with only minor qualification to the need structure of the chronically unemployed or unemployable individual. Thus, for this class of individuals, job satisfaction and motivation are related to intrinsic needs, while the satisfaction of extrinsic needs primarily serves to keep him from becoming more dissatisfied.
METHOD

Sample

The total enrollment of the secretarial training program at the Lincoln School Skill Center in Kalamazoo, Michigan, was voluntarily enlisted as subjects for the project. When the research was initiated, the enrollment of the secretarial program consisted of 38 women and two men; however, one of the men accepted a job before there was an opportunity to interview him, leaving a total subject population of 39 individuals. These subjects were distributed according to race and age as indicated in Table 1.

The mean age of the 19 negro trainees was 31.9 years with a mean of 33.2 years for the twenty white trainees. The mean age for the total sample was 32.6.

Of the total sample only three of the subjects had been employed full-time at one job for more than four months and only five of the subjects had attained high school or high school equivalence degrees.

It would probably be misleading to assume that the subjects were representative of the pool of individuals known as the hard-core unemployed for two reasons. In the first place most of these women had not been previously unemployed in the traditional sense although for the most part they were in fact unemployable when they entered the program. This seeming contradiction is due to the fact that over 65% of the trainees had recently found themselves faced with
Table 1
RACE AND AGE DISTRIBUTION OF SAMPLE POPULATION

<table>
<thead>
<tr>
<th>Age</th>
<th>Negro</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 - 25</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>26 - 30</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>31 - 35</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>36 - 40</td>
<td>4</td>
<td>5&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>41 - 45</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>46 - 50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>51 - 55</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>

<sup>a</sup>includes one male
the loss of the principal wage earner in their family unit due to death, abandonment or divorce. While they had been engaged as wives and mothers they were now faced with competing in a labor market for which they were unskilled.

In the second place, the mere fact that these trainees were seeking and receiving training with the objective of job placement clearly takes them out of the realm of the true hard-core unemployed.

The fact still remains, however, that the subject population was drawn from a socio-economic class that is characterized by ghetto-type living, reoccurring job related failure and lack of marketable skills. The fact that these trainees were relatively new to the unemployment pool does not negate the fact that their attitudes, beliefs and actions were representative of the deprived environmental conditions that are the haunt of the hard-core unemployed.

Several researchers have noted that the degree of satisfaction and dissatisfaction which an individual articulates toward a given factor can be affected by age; Friedlander (1966), Wernimont (1966), Saleh (1964), and race; Bloom and Barry (1967).

In the present investigation no attempt was made to adjust for race and age for three reasons. In the first place the standard deviation of the distribution of ages was extremely small for both the negro and white trainees, with the great majority of the ages falling in an area where Saleh (1964) found little variation relative to job satisfaction.
Secondly, there appeared to be a marked homogeneity among the environmental variables of the trainees. They were roughly from the same locale in Kalamazoo, had the same educational level and, more importantly, all entered the Skill Center program at the same social and economic (wage) level, with each having the same job status at the Center.

Finally, Bloom and Barry (1967) point out that when white, blue-collar workers and black, blue-collar workers are compared relative to the two-factor theory, both groups relate high sequences to motivator variables although the black workers find satisfaction in a few hygiene factors.

Procedure

As mentioned earlier this research was concerned with testing the generality of the Herzberg two-factor theory of motivation in the hopes that analysis of the information obtained by rigorously adhering to his suggested experimental design would yield some insights into possible solutions to the social enigma that surrounds the lower class unemployable. The researcher was interested only in the internal consistency of the theory as opposed to any comparative theoretical investigation. It was felt that a more pragmatic approach than that evidenced by many of the studies replicating Herzberg's original study might be more beneficial than any additional comment on the theoretical controversy in which the theory is presently embroiled.
After several conversations with Skill Center administrators and consultants, the researcher was introduced to the teaching and counseling staff at the Center. At this time the teachers and counselors were given a broad description of the investigative program. Willingness to cooperate on the part of these individuals was wholehearted and unanimous.

Following these meetings, the researcher was introduced to the trainees in five different class related sessions. At this time the trainees were told that information was being sought on their attitudes about their jobs at the Center, with particular emphasis on those events that might have satisfied them or dissatisfied them. It was stressed that the researcher was in no way related to the Center and would report any information obtained in collective terms so as to avoid the possibility of reprisals against individuals who spoke against specific parts of or people in the Skill Center program. The subjects were further told that during the next several weeks the researcher would call upon each subject individually to discuss the satisfying and dissatisfying aspects of the program. They were also asked to be thinking about the specific events that most affected their feelings.

The actual interviewing was started one week after the conversations with the trainees. Each trainee was interviewed separately in a vacant room well removed from the Skill Center section of the Lincoln School. The interviews were semi-structured with the probe questions taken directly from the form suggested by Herzberg, et al., (1959). The probe questions are presented in Appendix A.
Each interview was started with general conversation in an attempt to develop at least a modicum of rapport with the subject. This was followed by a reiteration of the broad purposes of the investigative program. At this time it was pointed out that the questions that each individual would be asked would treat the present training program as an actual job since she was paid a wage on the basis of attendance and was expected to perform specific tasks adequately. The subjects were asked to confine their discussion of satisfying or dissatisfying job events to occurrences during their tenure at the Skill Center, but were told that they could mention other outside events if they helped clarify the feelings expressed in the particular sequence.

To start the interview proper, each subject was asked to "think of a time when you felt exceptionally good or exceptionally bad about your job here at the Center. The sequence can be either good or bad, but it must center around a time when you felt especially satisfied or dissatisfied about your job. Just tell me in your own words what happened."

At the termination of each sequence, the subject was asked to indicate on a twenty-one point graphic scale to what extent her feelings were affected by the event. The lower end of the scale indicated little or no effect while the upper end of the scale denoted events of great importance to the individual.
Analysis Procedures

As each interview progressed, it was recorded on tape. The taped interviews were then typed for analysis in their entirety. Each typed interview was evaluated using the analysis form developed by Herzberg, et al., (1959). Only minor changes were made in the analysis form so as to insure that the items were relevant to the range of possible experiences of the Skill Center trainees. The analysis form used is presented in Appendix B. It should be mentioned that despite the investigator's close association with the Skill Center, conscious effort was made to analyze each sequence entirely on the basis of what the subject had said. The dangers in allowing rater bias to creep into an analysis of this type of data have been noted by House and Wigdor (1968), Vroom (1964) and by Herzberg himself (1959, 1966). In the hopes of holding this bias to a minimum, the following procedures were observed:

I. The principle investigator went through each sequence twice to familiarize himself with the contents of the sequence. On the first pass, the sequence was judged first as to whether or not it met the criteria of a sequence and second as to whether it was high or low, that is, a time when the individual was either satisfied or dissatisfied.

The criteria for incorporation were only slightly modified from those developed by Herzberg (1966) and are as follows:
1. The sequence must revolve around an object, event or series of events, indicating that something identifiable must have happened.

2. The events of the sequence should be identifiable within a time space unless the events are still in progress.

3. The events must have triggered attitude changes that were characterized by relative extremes of satisfaction or dissatisfaction.

4. The events must have occurred during the subject's tenure at the Center.

5. The sequence of events and feelings must in some way be related to the subject's job at the Skill Center.

On the second pass, the duration of the first level factors was established along with the duration of the effects generated by the factors.

Following Herzberg, et al., (1959), long-range sequences were those during which the events of the sequence were spaced over a period of time ranging from two weeks to months, while short-range sequences were less than two weeks in duration. The duration of the effects of feelings generated by the factors had four possible forms they could take.

First, the feelings could be associated concomitantly with the events so that the feelings did not last after the events had occurred. Secondly, feelings or attitudes could persist long after the initial event. Finally, there were those feelings that died down after the first level factors occurred but were periodically aroused by an appropriate stimulus. An example of this type of feeling duration was typified by the trainee who, "... felt good all over again any time
anyone mentioned my paper." (A paper written as a class project and praised by the teacher in front of the class.) In addition, there were those sequences that generated intense emotional feelings that later dropped in intensity, but never completely returned to normal.

While the above classification of sequence-feelings follows that developed by Herzberg, et al., (1959), it should be pointed out that he did not apply the four-fold analysis to the long-range sequences as this researcher did. While Herzberg (p. 41), felt that virtually all feelings associated with long-range events were coincidental with the events, it seemed reasonable to this investigator that the four types of feeling sequences described above could easily follow from the events indicated as first level factors. Nonetheless, it obviously follows that feelings associated with long-range sequences are by nature long-range in the quantitative sense and as such, not necessarily comparable to those feelings in the same category of duration and associated with the short-range sequences.

In the final analysis, results were reported in terms of the practical duration of the feelings, that is to say, they were assessed as either long or short as opposed to the four categories previously mentioned.

II. After an analysis of each sequence had been completed by the principle investigator, every fifth interview was then analyzed by two associates, both of whom were familiar with the Herzberg technique. Each sequence was then discussed and any variance in evaluation was debated until satisfactorily resolved by all three investigators. It should be noted that only seven differences in
analysis of factors and effects occurred for all of the interviews reviewed by the three investigators. With the exception of one item, disagreement was the result of one of the investigators having failed to observe a portion of the information in the sequence. The one remaining item variance was the result of semantic differential and was satisfactorily resolved.

III. After note was made of the type of item selection errors uncovered by the three person comparative item analysis, the principle investigator then reviewed each sequence again to avoid the type of errors indicated. Following the final analysis, the data were tabulated and double checked. Differences between the number of times a factor was mentioned in high or low sequences were judged significant at the .05 level of confidence using a two tailed confidence interval analysis (Dixon and Massey, 1957).

The raw data as collated from the analysis form appears in its entirety in Appendix C.
RESULTS

In all, the 39 trainees at the Skill Center responded to the interviews with a total of 71 sequences, with an average of 1.97 sequences per individual. Only one individual was unable to think of any sequence at all while two sequences failed to meet the criteria previously mentioned. A total of 69 sequences was submitted to analysis and all results recorded were taken directly from those sequences. Further, after the initial presentation of data related to first level factors in Table 2, only those factors that were significantly different in high and low form at the .05 level of confidence are included in the subsequent results and discussion.

Table 2 shows the relative ranking of the first level factors in terms of their frequency of selection in both the high and low sequences. For example, in 34.4% of the high sequences, the first level factor of recognition was described as emitting feelings and attitude changes associated with job satisfaction whereas in 59.4% of the low sequences, Skill Center Policy and Administration was causally related to job dissatisfaction.

For comparison, the data obtained from the original Herzberg, et al., (1959) study is presented in Table 3. As the table indicates, Achievement, Recognition, The Work Itself, Responsibility, and Advancement, in that order, were the leading first level factors contributing to high sequences. This compares with Recognition, Achievement, Possibility of Growth and Advancement, for the trainee sample. The
Table 2

NUMBER AND PERCENTAGE OF FIRST LEVEL FACTORS MENTIONED
WITH HIGH AND LOW ATTITUDE

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>%</th>
<th>Low</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Recognition</td>
<td>11</td>
<td>34.4 *</td>
<td>22</td>
<td>59.4 °</td>
</tr>
<tr>
<td>2 Achievement</td>
<td>10</td>
<td>31.2 *</td>
<td>10</td>
<td>27.0 °</td>
</tr>
<tr>
<td>3 Poss. of Growth</td>
<td>9</td>
<td>28.1 *</td>
<td>7</td>
<td>18.9 °</td>
</tr>
<tr>
<td>4 Advancement</td>
<td>6</td>
<td>18.7 *</td>
<td>6</td>
<td>16.2</td>
</tr>
<tr>
<td>5 Work Itself</td>
<td>5</td>
<td>15.6</td>
<td>5</td>
<td>13.5 °</td>
</tr>
<tr>
<td>6 Inter.-Teacher</td>
<td>3</td>
<td>9.4</td>
<td>4</td>
<td>10.8</td>
</tr>
<tr>
<td>7 Inter.-Peers</td>
<td>2</td>
<td>6.2</td>
<td>4</td>
<td>10.8 °</td>
</tr>
<tr>
<td>8 Teacher-formal</td>
<td>2</td>
<td>6.2</td>
<td>4</td>
<td>10.8</td>
</tr>
<tr>
<td>9 Work Conditions</td>
<td>2</td>
<td>6.2</td>
<td>4</td>
<td>10.8</td>
</tr>
<tr>
<td>10 Personal Life</td>
<td>2</td>
<td>6.2</td>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>11 Salary</td>
<td>-</td>
<td>-</td>
<td>Inter.-Teacher</td>
<td>3</td>
</tr>
<tr>
<td>12 Responsibility</td>
<td>-</td>
<td>-</td>
<td>Advancement</td>
<td>1</td>
</tr>
<tr>
<td>13 Policy &amp; Admin.</td>
<td>-</td>
<td>-</td>
<td>Responsibility</td>
<td>-</td>
</tr>
<tr>
<td>14 Status</td>
<td>-</td>
<td>-</td>
<td>Status</td>
<td>-</td>
</tr>
<tr>
<td>15 Job Security</td>
<td>-</td>
<td>-</td>
<td>Job Security</td>
<td>-</td>
</tr>
<tr>
<td>16 Inter.-Subs</td>
<td>not relevant</td>
<td>Inter.-Subs</td>
<td>not relevant</td>
<td></td>
</tr>
</tbody>
</table>

*Factor mentioned significantly more often in high sequences than in low sequences (.05 level of confidence).

°Factor mentioned significantly more often in low sequences than in high sequences (.05 level of confidence).
Table 3

PERCENTAGE OF FIRST LEVEL FACTORS APPEARING IN HIGH AND LOW ATTITUDE SEQUENCES
(Herzberg, et al., 1959)

N = 228

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Total %</th>
<th></th>
<th>Low</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Achievement</td>
<td>41 *</td>
<td></td>
<td>Policy &amp; Admin.</td>
<td>31 *</td>
</tr>
<tr>
<td>2</td>
<td>Recognition</td>
<td>33 *</td>
<td></td>
<td>Supervision-tech</td>
<td>20 *</td>
</tr>
<tr>
<td>3</td>
<td>Work Itself</td>
<td>26 *</td>
<td></td>
<td>Recognition</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>Responsibility</td>
<td>23 *</td>
<td></td>
<td>Salary</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Advancement</td>
<td>20 *</td>
<td></td>
<td>Inter-supervisor</td>
<td>15 *</td>
</tr>
<tr>
<td>6</td>
<td>Salary</td>
<td>15</td>
<td></td>
<td>Work Itself</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>Poss. of Growth</td>
<td>6</td>
<td></td>
<td>Advancement</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>Inter-sub.</td>
<td>6</td>
<td></td>
<td>Work Conditions</td>
<td>11 *</td>
</tr>
<tr>
<td>9</td>
<td>Status</td>
<td>4</td>
<td></td>
<td>Poss. of Growth</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>Inter-supervisor</td>
<td>4</td>
<td></td>
<td>Inter-peers</td>
<td>8 *</td>
</tr>
<tr>
<td>11</td>
<td>Inter-peers</td>
<td>3</td>
<td></td>
<td>Achievement</td>
<td>7</td>
</tr>
<tr>
<td>12</td>
<td>Supervision-tech</td>
<td>3</td>
<td></td>
<td>Responsibility</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>Policy &amp; Admin.</td>
<td>3</td>
<td></td>
<td>Personal Life</td>
<td>6 *</td>
</tr>
<tr>
<td>14</td>
<td>Work Conditions</td>
<td>1</td>
<td></td>
<td>Status</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>Personal Life</td>
<td>1</td>
<td></td>
<td>Inter-sub.</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>Job Security</td>
<td>1</td>
<td></td>
<td>Job Security</td>
<td>1</td>
</tr>
</tbody>
</table>

*Factor mentioned significantly more often in high sequences than in low sequences (.01 level of confidence).

°Factor mentioned significantly more often in low sequences than in high sequences (.01 level of confidence).
only major difference between the leading first level factors in the high sequences of the two samples is the Possibility of Growth factor which was mentioned significantly more often in the high sequences than the low sequences for the training sample.

Recognition, the most frequently appearing factor, was mentioned in 34.4% of the high sequences compared with 33% for the Herzberg study. The events associated with recognition tended to revolve around classroom work. Good grades were the most frequent sources, but verbal praise from teachers and classmates also were mentioned as a source of recognition.

Achievement was mentioned as a first level, high feelings associated factor in 31.2% of the high sequences compared with 41% for the Herzberg sample. High feelings were mentioned as stemming from such tangible achievements as increased typing speed or shorthand writing speed. In addition, several of the trainees mentioned the passing of the high school equivalency test as tangible evidence of achievement.

The third factor most often mentioned in the high sequences was the Possibility of Growth, which occurred in 28.1% of the high sequences as opposed to 6% for the Herzberg study. Typical of this type of sequence was the girl who said that the skills she was acquiring would allow her to obtain a job where before none had been available.

Fourth in the list of factors in the high sequences is Advancement which was mentioned in 18.7% of the high sequences for the trainees and 20% of the time for the Herzberg sample.
In the present study, Advancement was associated with some sort of change in the job environment as opposed to any actual promotion within the Skill Center. Advancement was mentioned when the program went from a basic education format early in the program to specific skills education in the middle of the program. This is not a relative promotion since the entire secretarial enrollment of the Center was advanced at the same time. Nonetheless, the individuals who singled this factor out clearly felt that they were advancing as evidenced by the changes in their task structure.

Again, referring to Tables 2 and 3, it is apparent that for the Skill Center sample the factors of Skill Center Policy and Administration, The Work Itself, Interpersonal Relations with Peers, Achievement and Formal or Technical Teacher relations were the most frequently mentioned of the first level factors associated with low feelings. Herzberg, et al., (1959), found that for the same type of sequences, Company Policy & Administration, Technical Relations with the Supervisor, Recognition, Salary and Interpersonal Relations with the Supervisor were mentioned most.

For the most part, the two sets of factors associated with the low sequences tend to correlate with the exception that the Skill Center trainees did not associate their feelings of dissatisfaction with interpersonal relations with their teachers (supervisors) to the extent expressed by the Herzberg, et al., (1959) sample. This was probably due in part to the fact that students rarely spent more than two or three hours per day in proximity to a teacher and this occurred in the more supportive classroom setting. Further
the high turnover of teaching personnel generally left room for only
the more formal type of relationship. Interestingly enough, it was
this fact that accounts for most of the comments related to low
sequences produced through formal teacher-student relationships. In
this regard, several trainees mentioned dissatisfaction because the
communication in the classroom tended to be one way, or too structured
to allow them access to information that they needed or should have.

Taking the factors that were associated with the low sequences
individually, it is interesting to note that Skill Center Policy and
Administration was mentioned as causing dissatisfaction in 59.4%
of the low sequences. This rather high tendency is in great part
explained by the uniformity of conditions that all of the trainees
were faced with. During the early part of the program there were
many staff changes as well as the fact that the class was without
primary texts for two weeks. During this time many of the trainees
felt that their time and energies were being wasted and they saw the
hope that the Center had generated for them being withdrawn. The
second fact that produced dissatisfaction relative to Policy and
Administration was the loose discipline policy of the teachers and
counselors, which many trainees felt resulted in both inequities
and in disruptive behavior by those who were not mature enough
to provide their own controls.

As far as The Work Itself (the second most mentioned factor) is
concerned, most of the trainees who mentioned this as a first level
factor mentioned it in connection with having had difficulty with
a given subject or area within a subject.
As might be realized from the discussion of the peer problems mentioned above in the Policy and Administration related low sequences, dissatisfaction in this area stemmed almost entirely from unruly classroom behavior on the part of others. This is opposed to any direct alienation on the part of the group in general.

Achievement, a factor which was reported to have led to dissatisfaction occurred in 16.2% of the low sequences. This is significantly different from the Herzberg, et al., (1959) sample in which it was mentioned in only 7% of the low sequences. This factor was generally mentioned in what can best be described as a learning plateau series of events. These individuals felt dissatisfied because they were unable to push their abilities beyond a certain point even though they felt that new goals were within their reach.

In terms of the feelings or attitudes generated by each sequence of events, the tendency was toward short-term feeling durations for both high and low, long-range and short-range sequences, as indicated in Table 4. Further there does not appear to be any marked tendency for either high or low sequences to be associated with long or short durations of attitude changes. As Table 4 shows, in both high and low sequences, the feelings generated by the first level factors tend to be closely related in time with the occurrences themselves. This is partially in contrast with the Herzberg, et al., (1959) study in that they found short-range, high sequences to produce long-term attitudinal changes. The low sequence associated feelings, like
Table 4

HIGH AND LOW SEQUENCES DISTRIBUTED BY DURATION OF FEELINGS CATEGORIES

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-range short-term feelings</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Short-range long-term feelings</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Long-range short-term feelings</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Long-range long-term feelings</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>32</td>
<td>37</td>
</tr>
</tbody>
</table>
those of the present study, tend to be closely associated in time with the precipitating events.

Table 5 indicates the percentage of times that each second level factor appeared in high or low sequences and the duration of that particular attitude change. Feelings of Possibility of Growth and Achievement occur most frequently in the high sequences, 56.2% and 53.1% of the time respectively, with Pride and The Work Itself following, 31.2% and 12.5% of the time. For the low sequences, Possibility of Growth was mentioned as an attitude change 45.9% of the time with Unfairness, 27%; The Work Itself, 21.6%; and Group Feelings, 21.6%. Comparative data for the Herzberg, et al., (1959) study is found in Table 6. They found that Recognition occurred most for the high sequences, followed by Achievement, Responsibility and The Work Itself. For the low sequences they found Unfairness mentioned most, followed by Possible Growth and Recognition.

As far as duration is concerned, in the high sequences Advancement and Pride tended to produce attitude changes of long duration, while Possibility for Growth produced predominantly shorter attitude changes. In the low sequences, Possibility for Growth again tended to produce short-term attitude changes. On the other hand, feelings of Unfairness, Group Feelings, and The Work Itself emitted long-range attitude changes.

The investigator felt that while the above results are interesting, they lack an appreciable amount of cross-situational validity due to the fact that this type of data entail highly subjective information which is therefore apt to be less resistant to situational variable influence.
Table 5

PERCENTAGE OF EACH SECOND-LEVEL FACTOR APPEARING IN HIGH AND LOW JOB-ATTITUDE SEQUENCES

<table>
<thead>
<tr>
<th>Factor</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Recognition</td>
<td>3.1</td>
<td>2.7</td>
</tr>
<tr>
<td>2 Achievement</td>
<td>53.1</td>
<td>8.1</td>
</tr>
<tr>
<td>3 Poss. of Growth</td>
<td>56.2</td>
<td>45.9</td>
</tr>
<tr>
<td>4 Advancement</td>
<td>15.6</td>
<td>--</td>
</tr>
<tr>
<td>5 Responsibility</td>
<td>3.1</td>
<td>--</td>
</tr>
<tr>
<td>6 Group Feelings</td>
<td>6.2</td>
<td>21.6</td>
</tr>
<tr>
<td>7 Work Itself</td>
<td>12.5</td>
<td>21.6</td>
</tr>
<tr>
<td>8 Status</td>
<td>9.4</td>
<td>5.4</td>
</tr>
<tr>
<td>9 Security</td>
<td>6.2</td>
<td>2.7</td>
</tr>
<tr>
<td>10 Fairness-Unfairness</td>
<td>--</td>
<td>27.0</td>
</tr>
<tr>
<td>11 Pride-Shame</td>
<td>31.2</td>
<td>5.4</td>
</tr>
<tr>
<td>12 Salary</td>
<td>12.5</td>
<td>2.7</td>
</tr>
</tbody>
</table>
# Table 6

**PERCENTAGE OF EACH SECOND-LEVEL FACTOR APPEARING IN HIGH AND LOW JOB-ATTITUDE SEQUENCES**

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Recognition</td>
<td>59</td>
</tr>
<tr>
<td>2</td>
<td>Achievement</td>
<td>57</td>
</tr>
<tr>
<td>3</td>
<td>Possible Growth</td>
<td>38</td>
</tr>
<tr>
<td>4</td>
<td>Advancement</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Responsibility</td>
<td>30</td>
</tr>
<tr>
<td>6</td>
<td>Group Feeling</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Work Itself</td>
<td>29</td>
</tr>
<tr>
<td>8</td>
<td>Status</td>
<td>18</td>
</tr>
<tr>
<td>9</td>
<td>Security</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Fairness-Unfairness</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Pride-Shame</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>Salary</td>
<td>19</td>
</tr>
</tbody>
</table>
The final area that was explored in the interviews was that of the effects of the factors that occurred as a result of the attitude changes that took place.

As mentioned earlier, in order for an incident to meet the criteria of a sequence, it must among other things have behavior effects or consequences associated with it. Essentially the type of effects that could occur were: performance, turnover, mental health, interpersonal relations and attitudinal.

Those effects associated with performance included changes in rate or time spent on the job and changes in quality or quantity of output. Turnover effects ranged from specific statements of having no desire to quit to taking actions to quit or actually quitting. Mental health effects centered around psychological signs of tension and psychosomatic symptoms. Interpersonal relations effects could be positive or negative on the subject's relations with friends, family, co-workers, etc. Finally, attitudinal effects included changes in attitude toward the Center, toward a secretarial career, toward specific individuals or general postures of being discouraged or encouraged.

Results are discussed as they occurred in each of the effect areas.

As indicated by Table 7 performance effects were much more likely to occur in relation to high sequences which supports the Herzberg, et al., (1959) study. It was interesting to note that in many of the low sequences, the first level factors produced a positive increase in time and effort spent on the job.
Table 7

PERCENTAGE OF PERFORMANCE EFFECTS

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-range</td>
<td>50.0</td>
<td>10.8</td>
</tr>
<tr>
<td>Long-range</td>
<td>18.7</td>
<td>8.1</td>
</tr>
</tbody>
</table>
Turnover was not as reliable an effect gauge as would have been desired, in that no access was possible to those individuals who had dropped from the program prior to the start of this investigation. Nonetheless, 35% of those individuals reporting low sequences thought of quitting, took actions to quit or were increasingly absent or tardy.

Of the eight sequences in which mental health effects were mentioned, seven were related only to low sequences. Five of the seven reported only tension effects tending toward frustration.

Regarding the effects that the factors produced on interpersonal relationships, most of the trainees specifically stated that they did not expect others to bear their problems any more than they wanted to bare someone else's. High feelings tended to have a more general effect on interpersonal relations than did low sequences.

The specific attitudinal effects that were expressed indicated that low sequences were just as likely to produce negative attitudes toward the Center as high sequences were to produce positive attitudes. However, high sequences were much more likely to emit positive confidence effects than were low sequences to have negative effects on confidence. This is in contrast to the fact that low sequences were much more likely to discourage the individual than high sequences were to encourage her.

Discouragement, which was listed as an attitudinal effect in almost 25% of the low sequences, deserves special comment. As the researcher reviewed the interviews it became apparent that there was a despair and demotivating attitudinal change associated with many
of the factors which tended to block the individual from her goal. This type of effect was characterized by the expression of feelings of hopelessness of ever obtaining a job or ever achieving a certain goal. It was as if the opportunities were being withheld from the individual in a situation over which she had no control. It is interesting to note that Herzberg, et al., (1959, 1966) did not find this effect in any of the studies he conducted. Further, no mention was made of this rather serious behavior change in any of the studies read that sought to test the two-factor theory of job satisfaction.

Finally, the significantly different factors in the high and low sequences are presented graphically by percentages for comparison of the satisfiers and dissatisfiers. Table 8 shows the factor percentages for the trainee sample while Table 9 represents the factor strength for the Herzberg, et al., (1959) sample.
Table 8

COMPARISON OF MOTIVATOR AND HYGIENE FACTORS

<table>
<thead>
<tr>
<th>Low</th>
<th>40%</th>
<th>30%</th>
<th>20%</th>
<th>10%</th>
<th>0</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td>40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40%</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Table 9

<table>
<thead>
<tr>
<th>Low</th>
<th>40%</th>
<th>30%</th>
<th>20%</th>
<th>10%</th>
<th>0</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>High</th>
<th>40%</th>
</tr>
</thead>
</table>

- Achievement
- Recognition
- Work Itself
- Responsibility
- Advancement
- Company Policy and Administration
- Supervision - Technical
- Salary
- Inter. - relations - Super.

(From Herzberg, et. al., 1959)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
DISCUSSION

The results of the study indicate that as far as the Skill Center sample is concerned, the motivator-hygiene theory advanced by Herzberg, et al., (1959) is sufficient to account for the job attitudes verbalized by the 39 trainees interviewed.

The one important exception that occurred in the area of attitude effects was that in nearly 25% of the low sequences the respondents reported that the first level factors produced a distinctly de-motivational effect which was verbalized as discouragement or the like. Typically, the trainee indicated that as the environment produced blocks to her goals that appeared insurmountable she would insulate herself from further frustration and failure by giving up interest in that goal activity and related efforts. As this effect was not closely correlated to any specific first level factor it seemed to the investigator to be a general response to any events which are perceived as leading to the frustration of the individual's efforts toward a given goal.

The investigator feels that this finding in no way detracts from the overall generality of the M-H theory to the subjects of the study. Rather it adds a new dimension to the depths that dissatisfaction can ultimately go when individuals are deprived of access to self-fulfillment. Although the difference was not significant, it was
interesting to note that more negro than white trainees reported the
de-motivational effect.\(^1\)

Although the subject sample of the present study is unique in
many respects, the results of the study suggest that programs seeking
to encourage appropriate job related behavior in groups of chronically
underemployed individuals should re-interpret their observations
about the nature of the job attitudes of these individuals in that by
using traditional preventive techniques, these attempts only succeed
in alleviating dissatisfaction. Rather, these programs could seek to
respond to those needs that can foster satisfaction and potentially
a multiplicity of other highly desired manpower efficiency effects
(Herzberg, 1966). Further, efforts should be made to avoid frustrating
features until the individual has experienced a balance of reinforcing
or motivator type stimuli.

It is hoped that this study can serve as a pilot study for other
studies which may evaluate the predictive value of the two-factor theory
relative to the underemployed from two additional standpoints:

First, the feasibility of systematically manipulating the motivator
factors so as to achieve optimum satisfaction and related positive
behavioral effects.

Second, the ability of the motivator-hygiene theory to predict
job performance effects from the articulated attitudes of the under-
employable while he is involved in a training or orientation program
for a significant time.

\(^1\)The investigator is grateful to Dr. Robert J. House for his
assistance in formulating the discussion of this phenomenon.
REFERENCES


Weissenberg, Peter and Gruenfeld, Leopold W., "Relationship Between Job Satisfaction and Job Involvement." *Journal of Applied Psychology*, LII, No. 6 (1968), 469-473.


Appendix A

PROBE QUESTIONS FOLLOW SEQUENCE NARRATIVE

1. How long ago did the event occur?
2. a. How long did your feelings last?
   b. What caused the change of feelings?
   c. When (specific time) did those feelings stop?
3. (For short-range sequence only) Was what happened typical of what was going on at the time?
4. Why did you feel the way you did at the time?
5. What did these events mean to you?
6. a. Did these feelings affect the way you worked at the Center?
   b. How long did this go on?
7. Can you give me an example of how your work was affected? (Only when 6 is unclear).
8. a. Did what happened affect you personally in any way?
   b. How long?
   c. Did it affect the way you got along with people in general or your family?
   d. Did it affect your sleep, appetite, digestion or general health?
9. Did what happened basically affect the way you felt about working at the Center, or did it make you feel (good, bad) about the occurrence itself?
10. Did the consequence of what happened affect your desire to complete the secretarial program?
11. Did what happened affect the way you felt about actually going into a secretarial career?
12. On this scale, indicate how much your feelings were affected by the events you have described.

<table>
<thead>
<tr>
<th>little</th>
<th>average</th>
<th>greatly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3</td>
<td>4 5 6 7</td>
<td>8 9 10 11 12 13 14 15 16 17 18 19 20 21</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Appendix B

SAMPLE

ANALYSIS OF FACTORS

First Level

1. Recognition
   0. Not mentioned
   1. Work praised - verbal
   2. Work praised - grade or tangible reward
   3. Work noticed - no praise
   4. Work not noticed
   5. Creative thinking ignored
   6. Inadequate work blamed or criticized - verbal
   7. Inadequate work blamed or criticized - low grade
   8. Successful work blamed or criticized - verbal
   9. Successful work blamed or criticized - low grade
   R. Credit for work taken by teacher or other
   X. Idea accepted by Center

2. Achievement
   0. Not mentioned
   1. Successful completion of job or aspect of it
   2. The having of a good idea - insight into lessons
   3. Saving of money for the Center
   4. Vindication - demonstration of rightness to doubters or challengers
   5. Failure in job or aspect of it
   6. Seeing results of work - progress
   7. Not seeing results of work

3. Possibility of growth
   0. Not mentioned
   1. Growth in skills - objective evidence
   2. Growth in status (advancement) - objective evidence
   3. Lack of opportunity for growth - objective evidence
   4. Opportunity for growth by coming to Center

4. Advancement
   0. Not mentioned
   1. Received unexpected advancement
   2. Received advancement
   3. Failed to receive expected advancement
   4. Demotion

5. Salary
   0. Not mentioned
1. Received wage increase
2. Received unexpected wage increase
3. Did not receive expected wage increase
4. Received wage increase less or later than expected
5. Amount of salary (comment on)
6. Wages compare favorably with others doing similar or same job
7. Wages compare unfavorably with others doing similar or same job
8. Decrease in wage

6. Interpersonal relations-teacher-counselor
   0. Not mentioned
   1. Friendly relations with teacher-counselor
   2. Unfriendly relations with teacher-counselor
   3. Learned a great deal from teacher-counselor
   4. Teacher went to bat for her
   5. Teacher did not support her
   6. Teacher-counselor honest
   7. Teacher-counselor dishonest
   8. Teacher-counselor willing to listen to suggestions
   9. Teacher-counselor unwilling to listen to suggestions
   R. Teacher-counselor gave credit for work done
   X. Teacher-counselor ignored subject

7. Interpersonal relations-subordinates
   (Not relevant)

8. Interpersonal relations-peers
   0. Not mentioned
   1. Liked people she worked with
   2. Did not like the people she worked with
   3. Had cooperation of people she worked with
   4. Lacked cooperation of people she worked with
   5. Was part of a cohesive group
   6. Was isolated from group

9. Teacher-counselor relations - formal or structured
   0. Not mentioned
   1. Teacher competent
   2. Teacher incompetent
   3. Teacher ignored classroom feedback - impersonal
   4. Teacher sought and used classroom feedback
   5. Teacher consistently critical
   6. Teacher showed favoritism

10. Responsibility
    0. Not mentioned
    1. Allowed to work without supervision
2. Responsible (for her own efforts)
3. Given responsibility for the work of others
4. Lack of responsibility
5. Give new responsibility - no formal advancement

11. Skill Center policy and administration
   0. Not mentioned
   1. Effective organization of work
   2. Harmful or ineffective organization of work
   3. Beneficial personnel policies
   4. Harmful personnel policies
   5. Agreement with Center goals
   6. Disagreement with Center goals
   7. High status reputation of Center
   8. Low status reputation of Center

12. Working conditions
   0. Not mentioned
   1. Too isolated in classroom
   2. Socially well located in classroom
   3. Good physical surroundings
   4. Bad physical surroundings
   5. Good facilities
   6. Bad facilities
   7. Too much class work
   8. Not enough class work
   9. Right amount of work

13. The work itself
   0. Not mentioned
   1. Repetitious - dull
   2. Varied
   3. Creative (challenging)
   4. Too easy
   5. Too difficult
   6. Opportunity to complete whole sections
   7. Prevented from completing sections

14. Factor in personal life
   0. Not mentioned
   1. Family problems
   2. Community and other outside situations
   3. Family needs and aspiration wage wise

15. Status
   0. Not mentioned
   1. Signs of appurtenances of status
   2. Having a given status
   3. Not having a given status
16. Job security
   0. Not mentioned
   1. Tenure or other objective signs of security
   2. Lack of objective signs of security

Second Level

17. Recognition
   0. Not mentioned
   1. First-level factors perceived as source of feelings of recognition
   2. First-level factors perceived as source of failure to obtain recognition
   3. First-level factors perceived as source of disapproval

18. Achievement
   0. Not mentioned
   1. First-level factors perceived as source of achievement
   2. First-level factors perceived as source of failure

19. Possible growth
   0. Not mentioned
   1. First-level factors perceived as leading to possible growth
   2. First-level factors perceived as blocking growth
   3. First-level factors perceived as evidence of actual growth

20. Advancement
   0. Not mentioned
   1. Feelings of advancement derived from changes in job situation
   2. Feelings of demotion derived from changes in job situation

21. Responsibility
   0. Not mentioned
   1. First-level factors leading to feelings of responsibility
   2. First-level factors as source of feelings of lack of responsibility or diminished responsibility

22. Group feelings
   0. Not mentioned
   1. Feelings of belonging - because of actions of others
   2. Feelings of isolation - because of actions of others
   3. Feelings of belonging - sociotechnical
   4. Feelings of isolation - sociotechnical
   5. Positive feelings toward group
   6. Negative feelings toward group

23. The work itself
   0. Not mentioned
   1. First-level factors leading to interest in performance of the job

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
2. First-level factors leading to lack of interest in performance of the job

24. Status
   0. Not mentioned
   1. First-level factors as source of feelings of increased status
   2. First-level factors as source of feelings of decreased status

25. Security
   0. Not mentioned
   1. First-level factors as source of feelings of security
   2. First-level factors as source of feelings of insecurity

26. Feelings of fairness or unfairness
   0. Not mentioned
   1. First-level factors perceived as fair
   2. First-level factors perceived as unfair
   3. First-level factors perceived as source of feelings of disappointment in others

27. Feelings of pride or shame
   0. Not mentioned
   1. First-level factors as source of feelings of pride
   2. First-level factors as source of feelings of shame
   3. First-level factors as source of feelings of diminished pride

28. Salary
   0. Not mentioned
   1. First-level factors perceived as source of ability to improve well-being
   2. First-level factors perceived as source of lack of ability to improve well-being
   3. First-level factor perceived as source of more money (need undetermined)
   4. First-level factor perceived as source of lack of more money (need undetermined)

ANALYSIS OF EFFECTS

1. Performance effects
   0. Not mentioned
   1. General statements regarding positive change in quality or output of work
   2. General statements regarding negative change in quality or output of work
   3. Positive changes in rate or amount of time spent in work
   4. Negative changes in rate or amount of time spent in work
5. Specific reports of positive changes in quality or nature of work
6. Specific reports of negative changes in quality or nature of work
7. Reports of positive changes in BOTH rate and quality of work
8. Reports of negative changes in BOTH rate and quality of work
9. Statement affirming lack of change in amount or quality of work

2. Turnover effect
0. Not mentioned
1. Quite Center
2. Took actions to quit
3. Thought of quitting
4. Increased absenteeism
5. No thought of quitting despite negative feelings
6. Would not quit now because of positive feelings
7. Would not quit despite specific offers
8. Factor in decision to quit at a later date

3. Mental-health effects
0. Not mentioned
1. Loss of sleep
2. Psychosomatic effects
3. Psychological effects of tension (anxiety, loss of appetite, etc.)
4. Psychosomatic effects and tension symptoms
5. Improvement in psychosomatic conditions
6. Improvement in tension symptoms
7. Improvement in psychosomatic conditions and tension symptoms

4. Interpersonal effects (relations)
0. Not mentioned
1. General statement regarding positive effects
2. General statement regarding negative effects
3. Positive effects on family
4. Negative effects on family
5. Positive effects on friends
6. Negative effects on friends
7. Positive effects on co-workers
8. Negative effects on co-workers
9. Many specific positive effects on interpersonal relations
R. Many specific negative effects on interpersonal relations

5. Attitudinal effects
0. Not mentioned
1. Positive toward individual (teacher)
2. Negative toward individual (teacher)
3. Positive toward Center
4. Negative toward Center

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
5. Positive toward profession
6. Negative toward profession
7. Encouragement
8. Discouragement
9. Positive effects regarding confidence
R. Negative effects regarding confidence
X. Multiple effects on attitude (positive)

6. Miscellaneous effects
0. Not mentioned
1. By products - effects of effects affecting other than job life
2. Direct effects of attitudes affecting other than job life

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
<table>
<thead>
<tr>
<th>FACTORS</th>
<th>SHORT</th>
<th>LONG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Item</td>
<td>1a</td>
<td>2b</td>
</tr>
<tr>
<td></td>
<td>1a</td>
<td>2b</td>
</tr>
<tr>
<td>1.</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
afeelings concomitant with events

bfeelings last at same level long after events occur

cfeelings die down but are periodically re-awakened

dinitial feelings taper off but never extinguish