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THE MEASUREMENT OF WORK FRUSTRATION TOLERANCE OF PARANOID PSYCHOTICS BY STRUCTURED AND PROJECTIVE TECHNIQUES

A dissertation submitted to the

Graduate School of Arts and Sciences
of the University of Cincinnati

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DOCTOR OF PHILOSOPHY

1953

by

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The idle man does not know what it is to enjoy rest. Hard work, moreover, not only tends to give us rest for the body, but, what is even more important, peace to the mind.

(Sir John Lubbock, The Pleasures of Life, p. 316)

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CHAPTER I

INTRODUCTION

Statement of the Problem

A mental hospital, through the various techniques at its disposal, tries to make it possible for the emotionally disturbed person placed in its charge, to become a self-sufficient useful citizen. A mental hospital's responsibility, unlike that of a general hospital, does not end when the patient leaves. The patient continues to need its support and guidance to make the type of adjustment which will prevent his return to the hospital.

Until the patient has been able to become reintegrated into the life of the community, the real purpose of a mental hospital has not been accomplished. It is now generally recognized that one of the more important factors contributing to a patient's return to a mental hospital is a poor work adjustment. Authorities in the field of vocational rehabilitation such as Rennie (40) stress the need for helping a patient who requires such assistance to find and keep the the kind of job which will not only satisfy his financial needs but meet the ego-centered drives which find satisfaction in work.

Dr. R. H. Felix, Director of the National Institute of Mental Health, in a recent address said (17): "We are beginning to realize more and more that there are a variety

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of therapies needed to treat and effect recovery of the mentally ill. Some of these are the therapies peculiar to the psychiatrist--but only some. In many cases they are necessarily the most important. But rehabilitation in its totality, and vocational rehabilitation specifically, is one of the vital, one of the essential therapies needed from the beginning, from the very beginning."

In most mental hospitals today, a patient is not completely discharged when he first leaves the hospital. He is given a trial period, usually a year, during which time he is still considered a patient, although he is not in residence. The medical staff permits an individual to leave the hospital when the doctors feel that he can adjust to the community life, including satisfactory attention to his job. During the series of interviews preceding this trial period away from the hospital, many patients can successfully verbalize their ability to adjust to a job but frequently are returned to the hospital because of poor adjustment, including job difficulties.

The reasons for this maladjustment to work given by returned patients, fall into different categories including: frustration due to lack of recognition by supervisors, discrimination in favor of other employees, poor relations with fellow employees, and other personality factors not related to job skills or ability to produce. Clinical experience has shown inability to do the job because of lack of skill,

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or dissatisfaction with the basic work itself are cited far less frequently by returned patients than personality factors which are incorporated in the total structure of the individual.

This study will deal with a specific type of mental hospital patient, the person diagnosed as paranoid schizophrenic. Patients with this diagnosis were selected because they represent a more serious problem in vocational rehabilitation than patients with other diagnoses.

Later discussion will show why paranoid schizophrenics, more often than other psychotics, find it difficult to make a satisfactory work adjustment. For the present, it is sufficient to quote from a study by Wittenborn and Nettler on the hospital adjustment of psychotic patients. The authors state (57): "It is commonly reported by institutional workers that paranoid patients are among the most useful around the hospital. It is probably because of this fact that many paranoid patients are released as competent when in effect they are still seriously ill."

A further reason for choosing paranoid schizophrenics is the large number of patients who are given this diagnosis by the medical staff. The writer's experience has shown that a sizeable majority of patients referred for vocational rehabilitation have been given this diagnosis.

The sheltered environment in which the patient has made a good adjustment, makes it difficult to evaluate his

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future adjustment in the more competitive, rigorous and traumatic post-hospital environment. If it were possible to make a prognosis as to how he would react to this more threatening environment, before he were permitted to leave, additional therapy could be instituted to help him gain insight and increased emotional stability to enable him to cope with the world outside the hospital.

The development of a technique which could serve as a prognostic measure is the objective of this present study.

Motivating Factors in Work

In our Western culture, satisfactory status is dependent on certain habits, personality characteristics and other components of behavior which have been accepted as meeting the group standards. An adequate work adjustment ranks high on the hierarchy of these culture-imposed values and our national heritage and literature is replete with examples of men who have reached the pinnacle of occupational success.

Work, which Gray (21) calls an "economically and emotionally significant segment of human behavior," represents such an important aspect of our mores because it occupies most of the major portion of the waking hours of the adult population. The average adult male spends more time on his job than with his family. In addition, many of his social activities such as clubs sponsored by his firm, union affairs, etc., are centered around his job. A man is usually

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considered as making a good global adjustment, primarily on the basis of how well adjusted he is vocationally.

Unemployment or poor work adjustment tends to have a serious effect on every other aspect of an individual's life. According to Stagner (51): "Maladjustments [in the work situation] are profoundly more disturbing and of more serious consequence to the worker, since his job is for him the focal point of his life. Unhappiness and failure here affect every other phase of his life demands and plans... status and a feeling of personal worth--fundamentals for a well adjusted personality--are seriously affected and lowered."

In discussing mental hospital patients, Rennie (40) stresses the importance of a satisfactory job in the total treatment and eventual emotional adjustment of persons discharged from a mental hospital. He points out that economic considerations are not the only grounds for helping a patient find a suitable job. "A man's worth in his own eyes, as well as in the eyes of his neighbors, is to a considerable extent determined by his ability to earn a living. Getting and holding a job is evidence to the patient that he has made a good recovery and strengthens his confidence. The job itself, if well chosen, holds many satisfactions." (40, p.10)

While the prestige factors and ego-needs involved in the type and level of work a person does is given serious consideration by his family, his associates and the individual himself, industry, on the whole, still places major stress

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on what Stagner calls the "dollar fallacy." In discussing the question of motivation and conflict in industry he states (29, p. 2): "A second common error in the field of the psychology of motivation as applied to industry may be called the 'dollar fallacy.' According to this view employers are motivated only by a concern for dollars and cents, and workers likewise are motivated only by what is in the pay envelope."

Stagner also refers to the U. S. Department of Labor Statistics which reported that 73.9 percent of all strikes in this country in 1948 involved higher wages or shorter hours as an issue. "No one knows better than the average personnel manager how fallacious these figures are. In many cases the workers first get angry and go on strike, then look around for something to demand. Higher wages and shorter hours are simple, neat and easy to formulate. It is thus likely that in many cases, they are secondary demands, made up to rationalize the fact that the workers are unable to state exactly what it is they want." (29, p. 2) Studies by the Twentieth Century Fund have also shown that wage disputes, the ostensible cause of industrial conflicts, are only secondary causes.

We have further evidence that other, perhaps more important factors operate in instances of worker dissatisfaction and strikes. In the recent coal disputes it has been estimated that it would take several years for the miners to

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compensate for the money lost during their long period of inactivity, even with the increased wages granted them. Stagner (50) speaks about the "irrationality of strikes" and cites a report from the Hind and Dauch Paper Company on a strike in one of their mills. This strike had cost their workers an amount in wages that would require five years, eleven months to recoup at the rate of theincrease won.

Strikes by Hollywood writers and technicians; airline pilots who can look forward to salaries of $10,000 per year or better; insurance salesmen whose earnings are not entirely dependent on the firm but to a certain extent on the individual's ability, all attest to the importance of non-economic motives in working. Stagner says (29, p. 4) "Having taken a job for purely economic reasons, the worker immediately begins trying to satisfy, on and through the job, his social and egoistic motives."

The earlier workers in the field of industrial psychology tended to overlook these non-economic motives. Taylor, who died in 1915, according to Viteles (54, p. 561) "recognized the existence of other motives, but, in practice, increased pay for increased work was employed as the sole inducement for encouraging maximum production." Most wage incentive plans have one common purpose: to increase the amount of production. While this purpose may be accomplished to a limited extent, it is questionable whether, in the long

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run, production actually is increased, since workers tend to regard incentive programs with some hostility and suspicion.

Again quoting Viteles, (54, p. 563) "Production is adjusted by the worker not only with respect to pay and speed of work, but as a means of postponing lay-offs, steadying employment and stabilizing earnings. In addition, such intrinsic factors as grievances, dislike, hard feelings toward management, and discouragement unquestionably interfere with maximum production."

The falsity of the assumption by industry that financial incentives are all-important in a worker's reaction to his job, was illustrated in the Hawthorne Plant Study conducted at the Western Electric Company. This study started out to investigate certain working conditions, such as the degree of optimum illumination, and their effects upon employee production. In the various investigations included in this study between 1927 and 1939, it was observed that, regardless of how good or how bad the working conditions were, productivity depended tremendously on the esprit de corps of the working group.

As part of the Hawthorne study, an experiment was conducted with five women assembling small electric relays. These women participated as a group in this experiment for about five years. The objective was to discover the different pay rates and other job conditions which resulted in the

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highest production and efficiency. Young (58, p. 609) in reporting on this phase of the study has this to say:

"There was a gradual but regular increase in productivity, regardless, to a large extent, of the conditions of the work imposed...there was no evidence that alterations in pay incentive played any special part...the most likely and probable explanation is that their improved industrial efficiency depended upon their psychological attitudes toward the work and toward each other. It was a matter of producing a freer, happier and more enjoyable life on the job itself."

As far back as 1873 Samuel Butler recognized that the individual as a worker could not be separated from the person with his ego-needs and basic problems. In his The Way of All Flesh he states: "Every man's work, whether it be literature or music or pictures or architecture or anything else, is always a portrait of himself, and the more he tries to conceal himself, the more clearly will his character appear in spite of him."

Bills, in discussing motives, has this to say, (6, p. 171): "Money rewards have a rather universal appeal, but only because money can satisfy several motives at once. The gradual standardization of wages and collective bargaining are removing the effectiveness of this appeal in the lower brackets...[however] the longing for a sense of personal worth is stronger than ever. An opportunity given a worker

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to secure a feeling of his own importance or his own share in something big with which he can identify himself often outranks monetary rewards in its stimulating power." He also cites one study (p. 173) in which a factor which a large group of employers thought should rank first, namely, fair pay, was given third place by the workers themselves. They ranked credit for all work done in first place, while the employers ranked it seventh.

Other writers in the field of industrial psychology who recognize the complexity of motives and needs which go into a person's reaction and attitude toward his work are Anderson (3), Blum (7), Cantor (9), Katz (30), Tiffin (52), Viteles (54), and Young (58), who discuss the following factors: the significance of his job to the worker, the social satisfaction obtained from the work, the interest in the work, treatment on the job, a chance to show individual initiative, the type of person in charge, relations with fellow employees, feelings of discrimination, seeking psychological balances, recognition, extraneous problems related to a worker's home and family, and ego-centered motives.

Reynolds and Shister reflect the growing concern with non-financial motives when they say (41, p. 46): "The importance of non-economic motivation has, of course, been stressed by recent writers on industrial relations, but it seems almost impossible to emphasize it too strongly."

Katz, in discussing morale and motivation in industry,

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(30, p. 155) sums up the one-sidedness of the financial viewpoint when he says: "The central fact about the outcome of the studies of worker morale is that they do not corroborate the general philosophy of management which emphasizes the importance of external rewards. Workers place considerable value upon being a member of a congenial work group. They are favorably affected by a supervisor or boss who treats them as human beings."

Work and Frustration

It has been shown in the preceding pages that management is wrong when it disregards the emotional needs of workers and regards them simply as machines, whose efficiency can be improved. Industry has finally become aware of the importance of the mental health, mental attitude and emotional stability of the worker, together with his functioning as a member of a group. His relations with his fellow employees and his superiors, his aspirations and self-concept, all have a bearing on the employee's productivity and satisfaction on the job.

As Young (58) points out, work not only meets the fundamental needs to satisfy hunger and provide for bodily care and shelter; it also, in time, becomes closely associated with the need for ego security and ego recognition. Work also takes on a social aspect because it most usually involves interaction with others.

When an individual is blocked in satisfying these

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strong internal needs through what should normally be a satisfying medium, frustration is bound to occur. As Baxter puts it, (13, p. 125): "Today's tempo of industrial change is speeded by scientific and technical discovery. Jobs are broken into separate processes; jobs and whole industries even disappear...The groups in which the employee works and lives change ceaselessly. The result is that he...experiences a sense of void, of emptiness. In such a situation, his anxieties--many, no doubt, irrational or ill-founded--increase and he becomes more difficult both to fellow workers and to supervision."

The majority of workers can tolerate the frustrating aspects of their work. They do not generalize from a particular frustrating aspect of their total behavior until they become neurotic or psychotic individuals. As Hybl and Stagner express it (27): "The normal individual, we assume, does mobilize energy for the task at hand, and is frustrated by failure. He has, however, a considerable backlog of successful experiences, and consequently does not magnify this particular frustration as does the neurotic. Furthermore, he has enough leeway left between his normal operating tension level and his ceiling that he can tolerate more tension without material disruption of behavioral control."

Rosenzweig (43) points out that an individual does not usually distort the objective facts of a life situation even though it may be frustrating to him, but a neurotic

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cannot isolate such a traumatic experience without relating it to his entire experience. Menninger (36) believes that worker dissatisfaction, accident proneness, high turnover may grow out of difficulties in interpersonal relations, in attitudes to authority and in the psychological aspects of work itself.

The literature of industrial psychology contains many references to the positive relation of neuroticism and psychotic tendencies to work maladjustment, although most of the studies deal with the neurotic rather than the psychotic worker. Ling (32) cites a study by Fraser who estimates that one third of all sickness absence, in a sample of 3,000 workers, was due to neurosis and that 10 percent of the persons examined had suffered from disabling neurosis during the 6 months under review. Gray (21, p. 327) feels that "there is considerable evidence that a large percentage of time lost from work is due fundamentally to neuroses, i.e., emotional or mental illness of one kind or another." The same author (21, p. 366) reports Oakley, an English industrial psychologist, as saying: "The person with psychoneurotic tendencies is less likely to be successful in team work than in individualistic work...Some persons do appear to be more prone to psychoneurosis than are others. They would form obsessions in almost any workshop or office."

Other writers in the field who have discussed underlying emotional problems and their effect on work adjustment

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are: Anderson (3), Blum and Balinsky (8), Cantor (9), Deutsch (14), Fenichel (18), Gardner and Moore (19), Ghiselli and Brown (20), Karn and Gilmer (29), Rennie (40), and Rennie and Bozeman (39). Fenichel emphasizes the role that personality problems of long duration play in work maladjustment. Situational stresses which tend to re-activate childhood conflicts are potent in producing neurotic reactions in psychologically predisposed individuals. An adult, rejected in his childhood, may adjust satisfactorily until he feels his employer is not satisfied with him. This can arouse his old fears, insecurities, and hostilities in regard to rejection by an authority, in this case his supervisor or employer.

A survey of the literature reveals very few studies dealing with the vocational adjustment of psychotic patients from a mental hospital. The needs of these individuals have not been adequately recognized despite the help given them by the federal government in 1943. Prior to that date the vocational rehabilitation program, sponsored jointly by the federal and state governments and administered by the state rehabilitation bureaus, handled only those persons with physical disabilities which could be considered vocational handicaps. The passage of the Barden-LaFollette Amendment (Public Law 113) in 1943 permitted the state agencies to provide vocational rehabilitation to both the physically and emotionally handicapped citizens. In other words this

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law specifically recognized that an emotional disturbance could be a vocational handicap. Yet Rennie writing in 1950 (40) states that few professional people, even psychiatrists, are aware of the service which is available to persons with a psychiatric vocational handicap.

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CHAPTER II

THE PARANOID SCHIZOPHRENIC AND HIS WORK ADJUSTMENT

It has been stated previously (p. 3) that the paranoid person finds it difficult to make a satisfactory work adjustment. What are the characteristics of this psychotic disorder which causes more serious work maladjustment than is often encountered in dealing with other psychotic patients?

As has been shown (p. 3) the paranoid patient frequently makes a good adjustment to the sheltered environment of a hospital and is considered a good worker. Also, despite the systematized delusions characteristic of the paranoid, many aspects of reality are retained, making it difficult to evaluate the intensity of the disturbance. For this reason, paranoid patients, more often than patients with other psychotic disturbances, are released when they are still seriously ill, because they can, very often, give the impression of being in a more advanced stage of recovery than they actually are.

The most striking aspect of paranoid schizophrenia is projection based on a strong element of defensive hostility because of the patient's feelings of rejection by others. The systematized delusions of persecution, ideas of reference, compensatory strivings to obtain satisfaction by attributing hostility and aggressive motives to others, find a fertile field in the close personal and social contacts of the work

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situation, and the potential threat to the paranoid's very low self-esteem. He tends to exaggerate his troubles, to regard his misfortunes as due to moves on the part of others against him and becomes suspicious of everyone with whom he comes in contact.

In his need to protect the vulnerable aspects of his personality, in his craving for a recognition greater than he can accomplish, he resorts to blaming others in an attempt to relieve his own anxiety over self-guilt. Gardner and Moore (19, p. 247) describe what they call "Status Anxiety," as follows: "An individual expresses concern over his position, relative to others. He is disturbed if someone else gets more recognition from the boss than he does; he worries over status symbols...Anxieties may become so extreme that they develop into severe neuroses, accompanied by feelings of persecution, insomnia, inability to concentrate and other nervous disorders." These symptoms are similiar to the paranoid tendencies observed in patients.

Deutsch (14) describes somewhat similar symptoms of work maladjustment in his discussion of "job phobia developing from overcompensation neurosis."

The poor job adjustment of the suspicious, resentful, and dissatisfied worker is recognized in the literature of industrial psychology. Blum and Balinsky (8) attribute a large proportion of work failures to faulty ways of meeting situations, unhealthy preoccupations, fears, irrational

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attitudes and prejudices. "Work failure in a majority of instances is not due to lack of ability but to the presence of factors of a more dynamic nature that influence the total personality." (8, p. 508)

In a study by Sprol (48) on the occupational adjustment of the psychoneurotic veteran, inability of a veteran to get along with other employees was ranked second among the reasons why employers refuse to employ psychoneurotic veterans. Hoppock and Robinson (26) listed six major components of job satisfaction. The first one on this list was the way an individual reacts to unpleasant situations.

In this connection it is important to recognize that a paranoid patient will unconsciously exaggerate an unpleasant situation. A well adjusted worker does not consider that praise given to another worker rather than himself, represents a serious threat to his self-esteem. He can pass it off lightly and does not become frustrated as though he has been deprived of a major satisfaction. A paranoid patient on the other hand considers irritations in the work area as serious threats to his personality, because these irritations, to him, represent rejection, inferiority and lack of worth.

The paranoid patient, therefore, because of his ability to cover up feelings of inadequacy, resentment toward others, and irrational delusions concerning their motives toward him, represents a serious problem in his vocational

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rehabilitation. He is often let out too early into the traumatic, competitive work environment.When he fails to find the success and satisfactions that he craves more than others, he finds it difficult to tolerate the usual work frustrations. As a result he tends to widen the scope of his defensive reactions and generalize these feelings of hostility to include his home, family and other aspects of his behavior. In severe cases, this inability to adjust to the total environment may necessitate his return to the hospital.

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CHAPTER III

HYPOTHESES

The discussion in the preceding pages has shown that one factor differentiating the paranoid schizophrenic from the well adjusted worker is his inability to tolerate the run-of-the-mill frustrations occurring in the usual work situation.

This inability to tolerate work frustration is interpreted as stemming from feelings of rejection and low self-evaluation, and a need to protect vulnerable aspects of his personality by ascribing blame to someone else.

The paranoid schizophrenic's feelings of rejection lead to resentment and hostility which are projected onto others. He begins to envy the accomplishments of others and begins to believe that his fellow workers and his superiors are discriminating against him.

A paranoid schizophrenic is often capable of concealing or repressing underlying feelings of rejection by and hostility toward others. Structured methods do not always reveal those layers of the personality repressed or concealed. Projective methods, on the other hand, from their ambiguous and unstructured nature, can sometimes break through the defensive mechanisms of concealing or repressing impulses unacceptable to the self. These projective techniques are designed to elicit underlying personality dynamics involved

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in interpersonal relations.

The above considerations led the writer to formulate and test the following hypotheses:

HYPOTHESIS I

A WORK FRUSTRATION TOLERANCE SCALE (WFTS) can be developed to measure a person's frustration tolerance in a work situation.

1. Such a scale would differentiate between a well adjusted worker and a paranoid schizophrenic who has failed in his work adjustment.

2. Such a scale would differentiate between a paranoid schizophrenic who is making a satisfactory work adjustment and a paranoid schizophrenic who has failed in his work adjustment.

3. Such a scale would fail to differentiate between a well adjusted worker and a paranoid schizophrenic who is making a satisfactory work adjustment.

HYPOTHESIS II

A projective (non-structured) work frustration tolerance test, the Tomkins-Horn Picture Arrangement Test (PAT) will differentiate the above three groups more sharply than the structured test (WFTS).

1. Such a projective technique would differentiate more sharply than the WFTS between a well adjusted worker and a paranoid schizophrenic who has failed in his work adjustment.

2. Such a projective technique would differentiate more sharply than the WFTS between a paranoid schizophrenic who is making a satisfactory work adjustment and a paranoid schizophrenic who has failed in his work adjustment.

3. Such a projective technique would differentiate between a well adjusted worker and a paranoid schizophrenic who is making a satisfactory work adjustment.

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CHAPTER IV

METHODOLOGY

A comprehensive study of the literature reveals that there are two principal methods by which work frustration tolerance can be measured. These methods may be classified as structured and projective. This chapter will deal with a structured method developed by the writer and a projective method currently being validated for industry.

A Work Frustration Tolerance Scale

One method of determining frustrating factors in a work situation is to find out what individuals want most from their jobs. If their needs in these areas are blocked, frustration is bound to result.

Employee attitude surveys are used in industry to determine satisfactions and dissatisfactions among employees and to locate areas causing anxiety about their status and recognition. "...attitude surveys are designed primarily to mirror the thoughts and feelings of employees about their jobs, about the company -- its policies and practices, and about the people in the company...In some instances the aim is to determine employee attitudes toward specific conditions or practices relating to the job. But in most a wide variety of topics is explored." (37, p. 6)

Examination of various employee attitude surveys (7, 20, 21, 24, 29, 37, 51) reveals that workers attach great

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importance to the items listed below, as related to job satisfaction. These and similar factors, not necessarily in the order of importance, ranked high when included in employee attitude scales, that is:

"Good boss."

"Opportunity to use your own ideas."

"Fair adjustment of grievances."

"Being able to find out if your work is improving."

"Sure to get a fair hearing and square deal."

"Being told when you do a good job."

"Fair bosses and supervisors."

"The feeling that it makes a difference to the company that you are on the job."

"Employees here appreciate the credit that is gladly given by the management for good work."

"Company keeps you informed of their plans and policies."

"Made to feel that you really are part of the organization."

"Fellow employees are cooperative and friendly."

"Made to feel your job is important."

"The instructions given by the supervisors make sense and help you in your work."

"The company tries to keep the tools and material in good condition."

The above items usually included in employee attitude scales may be grouped into the following areas:

1. Relations with management and supervisors.
2. Relations with fellow employees.

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3. Opportunity for growth and advancement.

4. Working conditions.

5. Status and recognition.

6. Self-identification with the company.

7. Communication within the company.

8. Degree and type of supervision.

9. Pay and promotion.

A questionnaire type of survey consisting of 115 multiple-choice items, covering the topics included in the above 9 areas, was developed. The items deal with environmental and personnel factors, as shown by the following sample.

> Whom would you blame, if a machine you were working on broke down?
>
> ( ) The company for not giving you the proper working equipment.
>
> ( ) Yourself.
>
> ( ) Nobody; accidents can happen.

The items selected include statements made to the writer by admitted and returned patients, over a period of three years. These statements reflect the illogical suspicions, feelings of inadequacy and inferiority, and generally disturbed thinking and attitudes of the paranoid type of patient. Other items were adapted from those included in employee attitude scales and questionnaires. The present scale developed by the writer is novel in the sense that all the items relate to one specific area, the work situation.

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This step was taken deliberately since clinical observation has shown that success or failure in a patient's post-hospital work adjustment is a significant factor in his global adjustment after he leaves the hospital.

This list of 115 items was then administered to two groups: (1) a group of 100 well adjusted workers and, (2) a group of 25 mental hospital patients, with paranoid-schizophrenia included in their diagnoses, and a history of poor work-adjustment prior to their hospitalization. The subjects in both groups met the criteria described on p. 35 below.

Table 9 (p. 72) shows the percentage of subjects in each group selecting each choice of each item, and the resulting "t" value. The method used to derive the "t" value was the one developed by Lawshe & Baker (31).

According to this method, the percentages of the two groups selecting the same choice of an item were located on a nomograph. The omega (ω) value representing the difference between these percentages was then read from the calibrated scale on the nomograph and substituted in the following formula to derive the "t" value:

$$t = \omega \sqrt{\frac{2N_1 N_2}{N_1 + N_2}}$$

Since the object of this study was to develop a scale which would discriminate between well-adjusted workers and hospitalized paranoid-schizophrenics who had shown poor

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work adjustment, those items which did not satisfactorily discriminate between the two groups were eliminated.

It was obvious that the great majority of subjects in both groups express the feeling that "ability" (choice 1 of item 1) is the major factor when promotions are made, not "luck" (choice 2) or "being the foreman's favorite" (choice 3). In answering this item all well-adjusted workers and 96 percent of the patients checked choice 1. Only 4 percent of the patients felt that "luck" was the most important factor in promotions. This item was included in the final form of the WFTS but was not scored. It was included since it apparently reflects the thinking of most individuals and thus can serve as a sample item.

On the other hand, item no. 65 of the preliminary WFTS, (see Table 9, p.72) was chosen and scored because it did satisfactorily discriminate between the two groups. Every well-adjusted worker indicated that he would agree to instruct a new worker if requested to do so by his supervisor because "I would be happy to have my work recognized as superior" (choice 2). Only 72 percent of the patients selected this choice, while 16 percent would refuse to instruct a new worker because "I know that I'm not a good teacher" (choice 1), and 12 percent would refuse because "The boss might be doing this to check on how much I know about my own job" (choice 3). The subject choosing either of these atypical responses apparently was projecting his

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feelings of inferiority or irrational suspicions.

We see from Table 9 (p.72) that none of the well-adjusted workers selected choice 1 on this item while 16 percent of the patients with poor work adjustment selected this choice. The "t" value for the difference between these percentages is 3.78. In a similar manner, the "t" value for choice 2, for the differences between percentages of 100 and 72 for the two groups, is 5.04. The "t" value for choice 3, for the difference between percentages of 0 and 12 for the two groups, is 3.15.

Again on item 79 of the preliminary WFTS; (see Table 9, p.72) every well-adjusted worker indicated that he would react to a problem related to his job by trying harder to work it out by himself (choice 1.). Only 68 percent of the patients selected this choice (1) while 32 percent selected the choice which indicated they would give up and wait for help. (choice 2). No one in either group selected choice 3. Again there is a marked difference on both choices, between the two groups, and the resulting "t" values for choice 1, 2, and 3, respectively are 5.04, 5.05, .00.

Analysis of all the items resulted in a final selection of 60 items (Table 9, p.72 and Appendix, p.89), which discriminated between the two groups. Generally at least two of the three choices showed very significant "t's."

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The ω value representing the significance of difference between the two groups (in their selection of choices on each of the items) determined the weight assigned to each choice. A choice was assigned a plus weight when it was selected by more of the well-adjusted workers than by the patients. A choice was assigned a minus weight when it was selected by less of the well-adjusted workers than by the patients.

For example, 19 percent of the well-adjusted workers selected choice 1 of item 32 while 72 percent of the patients selected this choice. We see from Table 9 (p.72), that the difference between these two percentages is equal to a "t" of 5.04. This "t" was based on an ω value of -.8 "minus" because fewer well-adjusted workers than patients selected this choice. This choice was therefore given a weight of -8. (see item no. 16 of Table 10, p.76). Similarly choice 2 of this item was given a weight of -6. None of the well-adjusted workers selected this choice while 16 percent of the patients selected this choice. The third choice of this item was given a weight of + 11, since 81 percent of the well-adjusted workers selected this choice, while only 12 percent of the patients selected this choice.

A scoring key (Table 10, p. 76) was then developed using these weights and the test protocols of the two groups were scored.

The scores made by the subjects in these two groups and

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the inter-group differences are summarized and discussed in the chapter on RESULTS. (p.42).

Validation of the Work Frustration Tolerance Scale was accomplished by administering the scale to additional groups, namely, a group of 50 well-adjusted workers and a group of 25 hospitalized paranoid-schizophrenic patients with a history of poor work adjustment. The results are summarized and described in the chapter on RESULTS. (p.42).

Projective Techniques in Industry

Hypothesis II states that a projective technique will have a sharper discriminating ability than the structured WFTS. In considering this hypothesis, it might be well to describe the rationale and significance of projective tests in industry.

Industry today is no longer interested merely in measuring efficiency and aptitude of workers. Management is now also concerned with the emotional factors in job adjustment, recognizing that the total personality is involved in an individual's reaction to work. Crissey, speaking of tests in industry says: (13, p. 74) "The area of psychological evaluation, which, it is believed will eventually be most helpful is that of personal adjustment. The man who has all the attributes of a successful worker, but who is a constant trouble maker, who is immature, irritable, difficult or uncooperative, cannot always be identified by current selection methods unless his maladjustment is very obvious."

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To fill the gap in selection procedure, projective techniques have been introduced into industrial evaluation of workers because structured methods have not been considered too effective in measuring the complex interaction of personality components which determine how an individual will react to a given job situation. Interviews, rating scales, and the questionnaire type of personality tests have not been considered too effective in tapping the deeper unconscious layers of personality.

It is alleged that in a structured situation where a subject is permitted to choose between different methods of reaction he can select the most acceptable one. If this is true a paranoid-psychotic patient may be able to disguise latent and underlying tendencies through a well-preserved front. The ambiguous nature of the unstructured material in projective techniques supposedly does not permit him this defense.

The Tomkins-Horn Picture Arrangement Test

The writer decided to use The Tomkins-Horn Picture Arrangement Test (PAT) (see appendix p116) because it is a picture stimulus method designed specifically for use in industry. As described in Abt and Bellak (1) it attempts to explore an individual's reaction to work situations and to work frustration, and his attitudes toward his fellow employees and his supervisors. The test, as described by Tomkins (53):

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> ...consists of twenty-five plates, each containing line drawings of three different but related situations, with the same "hero" depicted in all plates. It is the subject's task to say or write in what order these three situations should be placed to make the most reasonable sequence. He is asked to indicate this order by means of three symbols (a triangle, a rectangle, and a circle) that appear in each plate at the bottom of each line drawing and which are to be reproduced in the appropriate order on three successive lines at the bottom of each page. The three drawings are shown at angles of 120 degrees apart, so that one drawing is always upside down. The plate must therefore be rotated to be completely inspected, and no particular sequence of drawings is favored. It is hoped that position factors have been randomized in this way...The subject is also required to write a sentence on each of the three bottom lines of each page explaining briefly what is going on in each situation.

The sequence selected by the subject for each plate can be scored for a variety of "elements" or personality areas. From those described by the author of the test, the following elements, analyzed by Tomkins in dichotomies, were chosen for the purpose of this study:

1. Work interest - high
2. Work interest - low

3. Affect - strong
4. Affect - weak

5. Thinking as a solution to the problem
6. Thinking as the end result

7. Sociophilia - interested in working with people
8. Sociophobia - interested in solitary work

9. Aggressive press - strong
10. Aggressive press - weak

11. Optimism
12. Pessimism

13. Self-confidence - own efforts lead to success
14. Lack of self-confidence - own efforts lead to failure

15. Energy - high
16. Energy - low

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17. Activity
18. Passivity

19. Physical anxiety - weak
20. Physical anxiety - strong

21-22. Continuity of behavior and environment
23-24. Discontinuity of behavior and environment

Preliminary work by the writer with this test, using hospitalized and released patients, and workers in industry, revealed a variety of responses, indicating different degrees and methods of reacting to work situations. The following examples (TABLE 1, p. 33) taken from this preliminary study, illustrate, among other personality mechanisms: self-directed aggression, low self-evaluation, and dependence on others.

A scoring sheet (TABLE 2, p. 34) was developed by the writer to permit quick analysis of the entire protocol, on one sheet. For administrative ease Tomkins assigned "V" to represent the triangle symbol; "O" to represent the circle symbol; and "L" to represent the rectangle symbol.

As the scoring sheet indicates each plate can be scored for a number of different elements and each element is covered by several plates. For example, Plate 1 can be scored in elements 1-2, 17-18, 21 and 23. Plate 18 can be scored in elements 1-2, 3-4, 7-8, 17-18.

There are six possible sequences in each plate: VOL VLO OVL OLV LOV LVO. Using the scoring keys developed by Tomkins, it is found that sequence OLV on Plate 1 is scored as indicating high work interest, while VOL represents low work interest. Similarly, VOL, OVL, and LVO represent strong

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TABLE 1

RESPONSES OF THREE SUBJECTS ON THE PAT

SUBJECT A	SUBJECT B	SUBJECT C
	SITUATION 3 (see Appendix)	
All goes well.	Man is working.	Man is doing well.
Bugs in the machinery.	Machine breaks.	Man becomes confused because machine doesn't work.
Better call the repairman.	Feels too frustrated to do anything about it.	Man is waiting for repairman.
	SITUATION 7	
Man on night shift must have been curious.	Man's machine is broken.	Man is working on machine.
Puts machine back together.	Man is repairing machine.	Machine out of order; he takes it apart to see what's wrong.
Goes to work.	Man's machine fixed and now doing his part.	Machine apart; man doesn't know how to put it together.
	SITUATION 9	
That machine, it's broken again.	Man using machine.	Waiting for repairman.
Waiting for the repairman.	Asks repairman to fix it.	Repairman explains what is wrong.
Just a few extra nuts and bolts.	Feels badly that he didn't do it himself.	Machine repaired, man working again.
	SITUATION 13	
Gets a reprimand.	Working.	Man working at machine.
Works off aggression.	Scolded by boss.	Foreman complains about him.
Back to work.	Thumbs nose at his boss.	Man thumbs nose at foreman.
	SITUATION 15	
Bad hangover, doesn't want to work.	Working at machine.	Man is happy at work.
Still pretty hung over.	Day dreams.	Man becomes sad while working.
After lunch, feeling better.	Happy to be back at work.	Man stops work altogether.

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TABLE 2

Score Sheet for Analysis of PAT Elements

Areas	Plate No →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
1	Work Interest - High	OLV LOV		LOV OLV		VLO LVO	VLO LVO	LVO VLO		OLV LOV				OLV		VOL OVL	LOV OLV	LVO	LOV OLV		LVO VLO	LOV OLV				OLV LOV	
2	Work Interest - Low	VOL OVL		VOL OVL		LOV OLV	OLV LOV	OVL VOL		VLO LVO				VLO LVO		LOV OLV	VLO LVO VOL OVL		VLO LVO VOL OVL		OVL VOL OVL	VLO VOL OVL				VLO VOL OVL	
3	Affect - Strong		LOV VOL OLV OVL		VOL LOV OVL OLV							LOV OLV	OLV VLO LOV LVO	VLO LVO					VOL OVL							VOL OVL	
4	Affect - Weak		LVO VLO									VOL OVL VLO	VOL OVL	OLV LOV					LOV OLV LVO								
5	Thinking - Solution to problem			OLV OVL LOV			VLO LVO	VLO LVO		LOV						OVL VOL											
6	Thinking - End result			VLO LVO		DLV		OVL VOL		VLO LVO											OVL					VLO OLV	
7	Sociophilia		VOL LVO		LOV	VOL OVL	VOL OVL		LVO VLO	VOL OVL	VOL OVL							OVL VOL OLV	VOL OVL			VLO	OVL OLV VOL	VLO VOL			
8	Sociophobia		LOV VOL		VOL				OVL OLV	VLO LOV LVO	OLV							VLO LVO	VLO LVO LOV				VLO LVO	OLV LOV			
9	Aggressive Press Strong				VOL OVL					VLO VOL OVL				VOL OVL OLV						VLO LVO LOV					OLV OVL VOL		
10	Aggressive Press Weak				LOV									LVO LOV						OVL VOL					LOV LVO VLO		
11	Optimism		LOV OLV	LOV OLV				LVO VLO				OLV LOV	OLV LOV		LOV OLV	VOL OVL	LOV			VOL OVL		LOV			LVO VLO		
12	Pessimism		VOL OVL	VOL				OVL VOL					LVO VLO		VOL OVL	LOV LVO OLV VLO	VLO LVO OVL VOL			LOV VLO OLV LVO		VOL OVL			OVL VOL		
13	Self Confidence Excess Expenditure of effort			LOV OLV				LVO VLO							LOV OLV					VOL OVL					LVO VLO		
14	Lack of self confidence over efforts due to failure			VOL				OVL VOL							VOL OVL					LOV VLO OLV LVO					OVL VOL		
15	Energy - High		LOV OVL				VLO LVO	LVO				OLV LOV	LOV OLV			VOL OVL					LVO OLV						
16	Energy - Low			VOL			OLV OVL		OVL			VOL VLO LVO				LOV					OVL LOV						
17	Activity	OLV LOV		OLV LOV		VLO LVO	LVO VLO		OLV LOV	OLV LOV	LOV OVL					OVL VOL LVO	LOV OLV		LOV OLV		LVO OLV VLO	LOV OLV		VLO		OLV LOV	
18	Passivity	VLO VOL		VOL OVL		LOV OLV	OLV OVL		OVL	VLO LVO						LOV OLV	VLO		VLO LVO		OVL VOL	VLO		VOL OVL		VLO LVO	
19	Physical Anxiety - Strong		VOL VLO		LOV								VLO VOL	VOL OVL OLV		LOV	VOL OVL LVO				OVL VOL	VOL OVL					
20	Physical anxiety - Weak		LOV LVO		VOL LVO OVL								OLV	VLO			LOV					LOV						
21	Discontinuity of behavior	OVL LVO OLV VLO		OVL OLV LVO VLO		VOL OVL LVO LOV	OVL VOL LOV LVO	LOV OLV VOL VLO	VOL VLO LOV OLV	OVL VOL LOV LVO				VOL LVO LOV OVL							OLV LOV VOL VLO		VOL VLO OLV LOV	OLV OVL LVO VLO			
22	Discontinuity of environment							VOL							VLO LVO OLV OVL		VOL OVL			LVO VLO OLV OVL		VOL OVL			VLO VOL LOV LOV		
23	Continuity Behavior	VOL LOV		LOV VOL		VLO OLV	VLO OLV	LVO OVL	OVL LVO	OLV VLO				VLO OLV							OVL LVO		OVL LVO	VOL LOV			
24	Continuity of Environment														LOV VOL		VLO			VOL LOV		VLO			OVL LVO		
	Plate No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
	TOTAL																										

a. Jacobs
1-3

physical anxiety on Plate 16, while LOV represents weak physical anxiety, and so on.

Again quoting from Tomkins (53) "There are fourteen plates in which such a situation (a man shown working) occurs. Any subject who in all of these widely different plates always ends with his hero working, or never ends with his hero working may confidently be supposed to have an unusually strong or weak work interest, or to be unusually active or passive...It may be assumed that any person who imagines that another person would always return to work, no matter what the circumstances, is himself strongly work oriented."

Subjects

All subjects in this study were selected on the basis of the following common criteria:

Sex: Males were selected because satisfactory work adjustment is more important in the post-hospital adjustment of male patients in a mental hospital than in the post-hospital adjustment of female patients. Men, more often than women, support a family. Work, to male-patients, satisfies not only a financial need but also provides an ego-strengthening activity in having others depend on them.

Age: The majority of patients released from a mental hospital, who are employable, are between the ages of 18 and 45. Job applicants below and above that age find it more difficult to secure permanent employment, as evidenced from

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rehabilitation work with patients in a mental hospital, and from statistics quoted by public employment agencies.

Work Area: The Dictionary of Occupational Titles, prepared by the Division of Occupational Analysis of the United States Employment Service, classifies more than 40,023 job titles into 9 major divisions. Areas, 4, 5, 6, and 7 cover skilled and semi-skilled occupations and include machine operation, mechanical repair, machining, other skilled repairing and maintenance of machinery and equipment. As defined in the Dictionary, such work involves the skillful use of hands, tools and equipment, controlling processes, and the disassembly, repair, reassembly, installation and maintenance of machines and equipment. In the less skilled areas, the work usually involves testing and inspecting.

These areas were selected because the majority of male patients who have gone through a vocational rehabilitation program in a mental hospital have either previously worked in these occupational areas or plan to enter one of them for the first time.

The subjects of this study were distributed among the following groups:

A. Groups used in developing the scoring system of the WFTS.

1. A control group of 100 well-adjusted workers, with no previously reported mental hospital history.

2. An experimental group of 25 hospitalized patients, with a history of poor work

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adjustment prior to their hospitalization, and with the factor of paranoid schizophrenia included in their diagnosis. (TABLE 11, p. 78)

B. Groups used in validating the WFTS and in testing the hypothesis.

1. A group of 50 well-adjusted workers, with no previously reported mental hospital history.

2. A group of 25 hospitalized patients with a history of poor work adjustment prior to their hospitalization, and with the factor of paranoid schizophrenia included in their diagnosis. (TABLE 12, p. 79)

3. A group of 25 mental hospital patients with the factor of paranoid schizophrenia in their diagnosis, who were currently making a satisfactory work adjustment away from the hospital. (TABLE 13, p. 80)

Description of the Groups

Well-Adjusted Workers:

All subjects in these two groups were volunteers.

In addition to meeting the common criteria of sex, age, and work area, all subjects in the two groups of well-adjusted workers had been working on the same job, or similar jobs with the same firm, for at least six months prior to the date of this study. They had maintained satisfactory work adjustment, based on supervisor's written reports, or verbal statements to the writer by their supervisors. Satisfactory work adjustment, as defined in this study, includes satisfactory relations with fellow employees and supervisors, no absenteeism except for excusable reasons, and other factors indicating a satisfactory emotional adjustment to their job.

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In some organizations, a meeting was held with the section heads, where the purpose of the study, the testing procedure and the time element were discussed. Each section head then selected a number of the men working under his supervision, to act as subjects. These potential subjects were then screened to make certain they met the established criteria.

It was not possible to secure I.Q. ratings for these subjects. However, all of them had at least an eighth grade education and were employed in jobs which required some understanding of written directions. Neither the WFTS nor the PAT presented any difficulty in exploratory use of these tests. The subjects were able to understand the test directions and test content. All testing was initiated with the writer in attendance so that explanations were available when needed. The terminology and vocabulary of the WFTS were on a level understandable to the subjects.

Hospitalized Patients with a History of Poor Work Adjustment:

The subjects who were patients in the hospital at the time of the study, in addition to meeting the common criteria of sex, age, and work area, had been returned or admitted to the hospital with a history of poor work adjustment. Their social history, and personal interviews with these patients, indicated that they had illogical ideas of discrimination, persecution, feelings of inferiority, and other paranoid symptoms related to their work adjustment. In many instances,

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these patients had been permitted a trial visit away from the hospital, to evaluate their work adjustment. Failure to make a satisfactory work adjustment resulted in their return to the hospital.

At the time of this study no subject in these two groups had received treatment during the present admission which might have resulted in a lessening of the severity of their emotional disturbance.

While it was not felt necessary to determine the I.Q.'s of the well-adjusted workers, the situation was somewhat different with the hospitalized patients. In order to make certain that they were capable of responding to a test situation, Wechsler-Bellevue I.Q.'s were obtained for these subjects. This testing showed that these subjects were capable of understanding and following test directions and content and that they had sufficient intelligence to cope with the simple items of the WFTS and the PAT.

Mental Hospital Patients Making a Satisfactory Work Adjustment Away from the Hospital:

The subjects in this group, in addition to meeting the common criteria of sex, age, and work area, had left the hospital sufficiently prior to the date of this study, to enable them to have worked for at least six consecutive months at the date of this study.

Their work adjustment was checked through interviews with the patients when they reported to the hospital for a follow-up interview, and verification by their supervisors as

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to their satisfactory work adjustment as defined on p. 37. These patients had not yet been discharged from the hospital and close follow-up of their work adjustment was possible.

Test Administration

Following preliminary discussion with the president, director of public relations, or plant manager, who acted as company representative in this study, one of the following methods was used in administering the WFTS and PAT to the selected workers:

The men were called in, either in the company cafeteria, or other organization-determined meeting place. The purpose of the study and the test procedure were explained to them and they were told that their anonymity would be respected (no name was to appear on either of the tests) and the two tests were administered by the writer, with the WFTS given first.

Depending on the operational methods of the company, the tests were administered either on company time, or before, or at the conclusion of each shift.

In other companies, all the men of a particular section or sections were called in and volunteers requested. Those who signified their willingness to participate in the study were then checked with the appropriate company officer and only those meeting the criteria were selected. Those who were not chosen were told that the agreed upon number of subjects from that company had been selected and they were not

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needed.

In testing workers, the WFTS was distributed to the group and the directions were read aloud to the subjects while they followed by reading the directions to themselves. After assurance that the questions were understood the subjects answered the items.

A similar procedure was followed with the PAT, after the WFTS had been collected. In administering both tests, the writer circulated through the group at the beginning of each test to make certain that test directions were being properly followed.

The patients currently in a mental hospital were tested individually, utilizing an interview room on their ward. In most instances, both the WFTS and the PAT were administered in a single session with the PAT following the WFTS. Where meal time or other routine hospital procedure interfered with this schedule, the WFTS was administered at one session and the PAT was administered either that same day or the following.

Patients currently away from the hospital were either called in during weekends, so as not to interfere with their work, or were seen on the day when they made their regular Convalescent Status visit.

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CHAPTER V

RESULTS

This chapter will deal with the preliminary WFTS and the results obtained in developing its scoring key. This discussion will be followed by a comparison of the groups used in validating the WFTS and testing hypothesis I. Finally we will discuss the results obtained from the administration of the PAT in testing Hypothesis II.

The Preliminary WFTS

Before discussing in detail the results obtained in developing the WFTS scoring key, a word of explanation is in order as to the meaning of the conformity and divergence scores. As previously explained (p.28), weights were assigned to each choice, of each item, based on the significance of difference this choice showed between the well-adjusted worker and the hospitalized patient. For each item of the WFTS there is a plus weighted choice, indicating that more of the well-adjusted workers selected this choice than did the hospitalized patients. There are also two negatively weighted choices.

On 62 of the 115 items on the WFTS, there was 75 percent or higher agreement in the group of well-adjusted workers as to the choice selected. Since 75 or more of the 100 subjects selected the same choice, we can say with some degree of assurance that a person giving this choice tends to conform to the group thinking of this special population.

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Conversely we may assume that selecting one of the other two choices indicates some divergence from the group thinking, whether the selection is made by a well-adjusted worker or by a hospitalized patient. Because so many of the items show 75 percent or higher agreement by the control group as to the choice selected, the other two choices on these items have a minus weight indicating that more of the paranoid patients selected one or the other of these divergence choices.

For this reason, namely, that the divergence scores show atypical thinking or attitudes on the part of the paranoid psychotic patients, the major differences between this group and the group of well-adjusted workers, will be related to their divergence scores. However, there are other striking differences between other score components, which are listed in Table 3 (p. 44). This table shows the range of the conformity scores, the range of the divergence scores and the mean divergence score of the two groups used in developing the WFTS and the three additional groups used in validating the scale and testing the hypothesis.

The lowest conformity score made by a well-adjusted worker was 182, while the highest score attained by a subject in this group was 282. (Tables 3 and 4, pp. 44 and 46). In contrast to this, the lowest conformity score made by a paranoid patient with a poor work adjustment was 18, while the highest score attained by a subject in this group was

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TABLE 3

RANGE OF CONFORMITY SCORES, DIVERGENCE SCORES, CONFORMITY PLUS DIVERGENCE SCORES, AND THE MEAN DIVERGENCE SCORE ON THE WFTS

SCORE COMPONENT	GROUPS*				
	PRELIMINARY		VALIDATION		
	1	2	3	4	5
Range Conformity	182-282	18-235	182-286	24-231	221-278
Range Divergence	7-74	44-234	10-72	45-212	11-52
Range C + D	108-275	216-191	110-272	180-186	177-267
Mean Diverg. Score	29.69	121.00	32.12	128.00	34.00

* The various groups are defined as:

1. Well-adjusted workers (N=100) used in developing the WFTS scoring key.
2. Hospitalized patients (N=25) with a poor work adjustment, used in developing the WFTS scoring key.
3. Well-adjusted workers (N=50) used in validating the WFTS.
4. Hospitalized patients (N=25) with a poor work adjustment, used in validating the WFTS.
5. Mental hospital patients (N=25) making a good work adjustment away from the hospital, used in testing the hypothesis.

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only 235. (Tables 3 and 15, pp. 44 and 84). If the conformity score indicates conformity to the group thinking and attitude, as we have stated, then we can say that the normal worker with the lowest degree of conformity (a score of 182) is not too far removed from the paranoid patient with the highest evidence of conformity (a score of 235).

The difference between well-adjusted workers and paranoid patients, is even more strikingly evident when the divergence scores are considered. (Table 3, p. 44). The lowest divergence score made by a well-adjusted worker was 7 while the highest divergence score in this group was 74. This is in contrast to the paranoid patient group, where the lowest divergence score was 44 while the highest was 234. (Table 3, p. 44). The well-adjusted workers not only do not reach the extreme scores shown by the paranoid patients, but they show a clustering tendency indicated by a S.D. of 14.5 which is compared with a S.D. of 62.2 for the paranoid schizophrenics (Table 4, p. 46.)

Following logically from the difference between the range of the divergence scores made by the well-adjusted workers and those of the paranoid patients, the difference between these two groups is also reflected in the mean divergence scores for each of these groups. The well-adjusted worker has a mean divergence score of 29.69 which is contrasted with a mean divergence score of 121.00 for the paranoid schizophrenic group (Table 4, p. 46).

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TABLE 4

SIGNIFICANCE OF DIFFERENCE BETWEEN MEANS OF THE GROUPS USED IN THE DEVELOPMENT AND VALIDATION OF THE WFTS

(a) GROUPS	M	SD	SE_m	SE_{dm}	t	p
1*	29.69	14.5	1.45	12.80	7.13	<.001
2*	121.00	62.2	12.72			
3**	32.12	13.8	1.97	10.25	9.35	<.001
4**	128.00	49.1	10.04			
1*	29.69	14.5	1.45	3.24	1.33	<.2>.1
5**	34.00	14.2	2.90			
1*	29.69	14.5	1.45	2.44	.99	<.4>.3
3**	32.12	13.8	1.97			
2*	121.00	62.2	12.72	16.20	.43	<.7>.6
4**	128.00	49.1	10.04			
2*	121.00	62.2	12.72	13.05	6.66	<.001
5**	34.00	14.2	2.90			

(a) The groups are defined as:

1. Well-adjusted workers (N=100) used in developing the WFTS scoring key.
2. Hospitalized patients (N=25) with a poor work adjustment, used in developing the WFTS scoring key.
3. Well-adjusted workers (N=50) used in validating the WFTS.
4. Hospitalized patients (N=25) with a poor work adjustment, used in validating the WFTS.
5. Mental hospital patients (N=25) making a good work adjustment away from the hospital, used in testing the hypothesis.

* Preliminary group
**Validation group

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Actually four extreme scores tended to distort the range and mean to some extent. Only one well-adjusted worker had a divergence score of 74, while all the others had scores of 64 or lower. One paranoid psychotic had a divergence score of 44, one had a divergence score of 47 and two had divergence scores of 53, all the other subjects had divergence scores of 60 or over. Discounting these extreme scores, for both groups, we would have a divergence score range for the well-adjusted workers of 7 to 64, and a range of 60 to 234 for the paranoid patients, which makes the difference between the two groups even more striking. Eliminating the extreme scores would still further reduce the overlapping between these two groups shown in Figure 1, p. 48).

In order to determine the level at which the WFTS discriminates between well-adjusted workers and paranoid patients with a poor work adjustment, the "t" ratio between the two divergence score means was derived. The results (Table 4, p. 46) show that the WFTS discriminates between the two groups at a level of significance equal to a "t" value of 7.13, which meets the .001 level of significance.

Comparison of the Groups Used in Validating the WFTS

The two groups compared above were used to develop a scoring key for the WFTS. In order to test the null hypothesis that the difference found between these groups of well-adjusted workers and hospitalized patients with a poor work adjustment was due to chance, the WFTS was administered to

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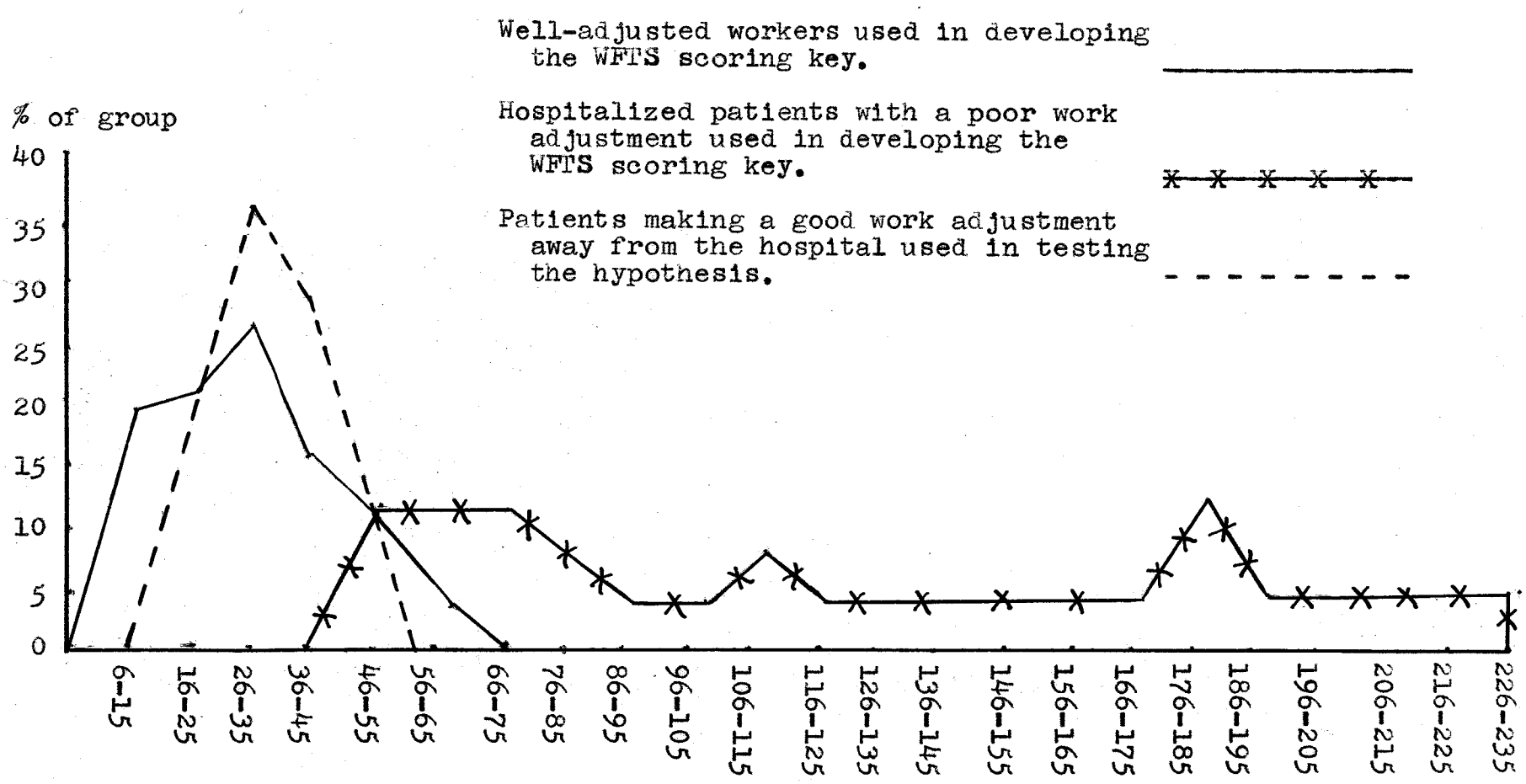
FIGURE 1

DISTRIBUTION OF WFTS DIVERGENCE SCORES
BY PERCENTAGES OF PRELIMINARY GROUPS



three additional groups.

The first of these groups, composed of fifty well-adjusted workers, was selected according to the same criteria governing the selection of the initial group of well-adjusted workers.

The second of these groups, composed of 25 hospitalized psychotic patients with a history of poor work adjustment, was selected according to the same criteria governing the selection of the initial group of paranoid-psychotic patients.

The lowest conformity score by a well-adjusted worker in this group was 182, while the highest score attained by a subject in this group was 286. (Tables 3 and 16, pp. 44 and 85.) In contrast to this, the lowest conformity score made by a paranoid patient was 24, while the highest score attained by a subject of this group was 231. (Tables 3 and 17, pp. 44 and 87.)

The lowest divergence score made by a well-adjusted worker was 10, while the highest divergence score was 72. (Tables 3 and 8, pp. 44 and 60). This is in contrast to the paranoid patient group, where the lowest divergence score was 45 and the highest 212. (Tables 3 and 8, pp. 44 and 60.)

The mean divergence score for this group of well-adjusted workers was 32.12, with a S.D. of 13.8, (Table 3, p. 44), while the mean divergence score for the paranoid patients was 128.00 with a S.D. of 49.1. (Table 4, p.46).

The WFTS discriminates between this group of well-

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adjusted workers and the group of paranoid patients at a level of significance which is higher than the level of significance shown by the WFTS between the two groups of well-adjusted workers and paranoid patients used in standardizing the scale. (Table 4, p. 46). The "t" between the second two groups is 9.35, while the "t" between the first two groups of well-adjusted workers and paranoid patients is 7.13. (Table 4, p. 46).

In order to show that the WFTS does actually measure a real difference between well-adjusted workers and paranoid patients, it is not sufficient to show, as we have, that the test discriminates when it is given to two separate sets of groups. It is also necessary to show that the two groups of well-adjusted workers are homogenous groups and that the two groups of hospitalized patients are also homogenous groups.

The fact that the groups are homogenous was proven by submitting them to the "t" test. Both groups of well-adjusted workers come from the same population, since the "t" ratio is only .99. Similarly, both groups of paranoid patients come from the same population, since the "t" between them is only .43. (Table 4, p.46).

We therefore can say that the WFTS does discriminate between well-adjusted workers and paranoid patients with a poor work adjustment, and that this differentiating ability has been verified through a process of retesting.

Hypothesis I states that the scale will differentiate between hospitalized patients with a poor work adjustment and

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mental hospital patients who were making a good work adjustment away from the hospital. Table 4, p. 46 shows this to be so since the "t" ratio between these two groups is 6.66 which meets the .001 level of significance.

Finally, Hypothesis I states that the WFTS will fail to differentiate between well-adjusted workers and mental hospital patients who were making a good work adjustment away from the hospital. We find this to be so. The mean divergence score of the group of workers who are making a satisfactory work adjustment away from the hospital is 34.00 (Tables 4 and 18, pp. 46 and 88) which compares with a mean divergence score of 29.69 for the group of well-adjusted workers used in standardizing the WFTS and developing the scoring key. The standard deviation of these two groups are 14.2 and 14.5 respectively, and the "t" ratio between these two groups is 1.33 (Table 4, p. 46) which does not meet the .05 level of significance.

We therefore can say that the mental hospital patients who are making a good work adjustment away from the hospital are more closely similar to the well-adjusted worker, in respect to ability to tolerate the usual frustrations encountered in the work situation than they are to the hospitalized patient with a history of poor work adjustment.

Analysis of the Picture Arrangement Test (PAT) Responses

According to Hypothesis II, the PAT should show a greater difference than the WFTS between the well-adjusted workers

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and the hospitalized patients who have shown a poor work adjustment. If we are to compare the differential effectiveness of the two techniques, it is first necessary to determine whether or not the PAT does differentiate between the well-adjusted worker and the hospitalized patient with a poor work adjustment.

For purposes of this study, an attempt was made to determine whether the PAT does show this discrimination, in the personality areas listed above (p. 31). For example, the number of sequences representing high energy selected by the well-adjusted workers was compared with the number of sequences in this area selected by the hospitalized patients. Similar comparisons were made for the other areas.

In none of the various areas was there much indication that the PAT did differentiate between the well-adjusted worker and the hospitalized patient with a poor work adjustment.

For example (Table 5, p. 53), the average number of responses in Area 1 (Work Interest-High) for the patients was 4.04. The average number of responses in this area for the well-adjusted worker was 4.46. This difference is not significant at the .05 level as shown by a "t" value of 1.09 (Table 6, p. 54).

Several other areas were tested for significance, namely Area 3 (Affect - Strong), Area 21-22 (Discontinuity in Behavior and in Environment), and Area 23-24 (Continuity in Behavior and in Environment). Significant differences were

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TABLE 5

NUMBER OF RESPONSES IN EACH AREA OF THE PAT GIVEN BY WELL-ADJUSTED WORKERS AND BY HOSPITALIZED PATIENTS WITH A POOR WORK ADJUSTMENT

* AREAS	** GROUPS	Number of responses 0	1	2	3	4	5	6	7	8	9	10	11	Average No. of Responses
1	1	0	12	14	16	6	12	14	18	8				4.46
	2	1	3	3	3	5	3	3	2	2				4.04
2	1	0	0	0	4	18	14	6	20	14	16	4	4	6.70
	2	0	1	1	1	1	3	3	4	3	5	2	1	6.84
3	1	0	0	2	16	22	28	18	14					4.86
	2	0	0	1	1	6	8	6	3					5.04
4	1	26	34	32	8									1.22
	2	9	8	7	1									1.00
5	1	10	24	30	32	4								1.96
	2	2	4	9	8	2								2.16
6	1	30	22	32	16									1.34
	2	5	7	8	5									1.52
7	1	0	0	2	2	22	24	14	22	10	4			5.72
	2	0	0	1	1	2	5	8	5	3	0			5.80
8	1	0	6	18	22	38	10	6						3.46
	2	0	0	3	11	7	4	0						3.48
9	1	12	30	24	26	6	2							1.90
	2	3	7	7	5	3	0							1.92
10	1	22	50	24	4									1.10
	2	9	8	7	1									1.00
11	1	0	4	8	26	24	22	10	4	2				4.08
	2	0	1	3	4	6	6	3	1	1				4.34
12	1	0	0	4	14	18	36	18	8	2				4.82
	2	0	0	1	5	10	3	2	2	1				4.24
13	1	8	40	36	14	2								1.62
	2	2	7	11	3	2								1.84
14	1	0	6	32	38	22	2							2.82
	2	0	6	8	6	4	1							2.44
15	1	0	2	12	28	26	8	20	4					4.02
	2	0	3	4	5	5	4	4	0					3.60
16	1	0	18	30	30	18	4							2.60
	2	1	5	10	5	4	1							2.44
17	1	2	16	14	14	24	16	12	2	0				3.48
	2	0	5	5	4	5	3	2	0	1				3.28
18	1	0	0	2	10	22	18	20	12	8	2	2	4	5.62
	2	0	1	0	3	4	6	7	2	0	1	1	0	5.24
19	1	16	30	36	12	6								1.62
	2	4	5	10	5	1								1.76
20	1	2	16	18	38	22	4							2.74
	2	1	4	11	7	1	1							2.24
21-22	1	20	64	40	24	12	18	14	4	2	2			2.50
	2	4	11	9	6	7	4	1	4	2	2			3.26
23-24	1	0	4	8	36	48	24	22	8	24	10	12	4	5.37
	2	0	5	3	9	12	8	2	5	2	1	2	1	4.58

* See p. 31 for area names.

** 1 - Well-adjusted workers.
2 - Hospitalized patients with a poor work adjustment.

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TABLE 6

SIGNIFICANCE OF DIFFERENCE BETWEEN WELL-ADJUSTED WORKERS AND HOSPITALIZED PATIENTS WITH A POOR WORK ADJUSTMENT, ON AREAS 1 AND 3 OF THE PAT

AREA 1 (HIGH WORK INTEREST)

	WORKERS	PATIENTS
N	100	25
M	4.46	4.04
S.D.	2.51	2.21
σ_M	.25	.45
σ_{dm}	.55	
DM	.42	
t	1.09	

AREA 3 (STRONG AFFECT)

	WORKERS	PATIENTS
N	100	25
M	4.86	5.04
S.D.	1.32	1.14
σ_M	.14	.25
σ_{dm}	.30	
DM	.18	
t	.60	

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TABLE 7

SIGNIFICANCE OF DIFFERENCE BETWEEN WELL-ADJUSTED WORKERS AND HOSPITALIZED PATIENTS WITH A POOR WORK ADJUSTMENT, ON AREAS 21-22 AND 23-24 OF THE BAT

AREA 21-22 (DISCONTINUITY)

	WORKERS	PATIENTS
N	100	25
M	2.50	3.26
SD	1.86	2.33
σ_M	.18	.48
σ_{dm}	.51	
DM	.76	
t	1.47	

AREA 23-24 (CONTINUITY)

	WORKERS	PATIENTS
N	100	25
M	5.37	4.58
SD	1.24	2.41
σ_M	.13	.49
σ_{dm}	.51	
DM	.79	
t	1.07	

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not found between the two groups in any of these areas. (Tables 6 and 7, pp. 54 and 55)

If significant differences had been found between the two groups, in each dichotomized element, groups of elements could then have been investigated for significant differences; for example, a pattern representing high work interest plus high energy plus activity, contrasted with the pattern of low work interest, plus low energy plus passivity. Since significant differences were not elicited in the first analysis, this second step was not undertaken.

Comparing the results obtained from administering the WFTS and the PAT to groups of well-adjusted workers and hospitalized patients with a poor work adjustment, we see that the WFTS differentiated between the two groups at a very significant level (a p. less than .001 for "t" = 7.13), while the corresponding "t" values when the PAT was given to the same groups did not approach the .05 level of significance (1.09, .60, 1.47, 1.07).

However the PAT did reveal qualitative differences between the two groups and there are indications that the PAT can play a significant role where more intensive evaluation of work frustration tolerance is wanted.

For example, it was evident in analyzing the PAT responses that the paranoid psychotic had marked difficulty in integrating the three heroes as <u>the</u> one hero in each plate.

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In contrast the well-adjusted worker did not experience this difficulty. Several patients followed the pattern of one subject in this group who consistently referred to "this man," pointing to the hero in each drawing of the plates, as a different character. A typical sequence is the one he produced on Plate 25:

O* This man didn't get the raise.

V* This man didn't get it either, but he's still working to make the company a profit.

L* This man is thumbing his nose at the floor, while thinking of his loud-mouthed boss.

Another example of lack of integration or discontinuity in behavior and in environment was prominent in the responses made by the hospitalized patients, in contrast to the responses of the well-adjusted workers. An example of the discontinuity of sequence shown by a patient is the following on Plate 5:

O* Man is working.

V* Man loafs.

L* Man is praised by foreman.

Again in contrast to the well-adjusted worker, there was marked misperception on the part of the hospitalized patient. One patient described the hero as "taking a bath," in a drawing where the hero is depicted as dreaming of playing before a concert audience (Plate 13).

---

*Sss p. 32 for an explanation of these symbols.

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This same patient typified the large number of patients who showed varying degrees of perseveration in their stories. Despite the fact that this patient has a work history as a machinist, he consistently, in all fourteen plates showing a man at work, described the machine as an "adding machine" or "a man running an adding machine." He ignored the overhead pulleys which suggested a machine shop and he also ignored the clothing of the man which is not typical of an office machine operator. This same piece of equipment was described by most of the well-adjusted workers as "a lathe," "a grinding machine" and by other appropriate terms.

The hospitalized patients, again in contrast to the well-adjusted workers, exhibited a striking degree of dependence on the authority figure. Some examples were: Plate 5, "foreman is letting him go home." Plate 7, "Man is waiting for foreman to fix the broken machine."

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CHAPTER VI

CONCLUSIONS AND INTERPRETATION

Using the divergence score of the Work Frustration Tolerance Scale, we have empirically determined that a person with a score higher than 74 shows work attitudes and frustration tolerance markedly different from those of a well adjusted worker. Actually 98.5 per cent of the well-adjusted workers in this study made divergence scores lower than 64, while 96 per cent of the patient group made divergence scores higher than 47.

Since the WFTS may be considered an attitude and opinion type of scale, it is important to define carefully how the subject's response should be interpreted. The attitudes projected on this scale by the two groups of well-adjusted workers may not necessarily represent the basic underlying feelings of the individual subjects. The clustering tendencies (Table 8, p. 60, Figures 1 and 2, pp. 48 and 61) manifested by these groups do suggest that the subjects conform to the group thinking and group orientation in the work situation.

The paranoid psychotics, on the other hand, do not show this clustering tendency. (Table 8, p. 60, Figures 1 and 2, pp. 48 and 61). The wide range of divergence scores, shown by the high S.D. of 62.2 for the group of patients used in developing the WFTS scoring key, and the S.D. of

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TABLE 8

DISTRIBUTION OF DIVERGENCE SCORES
ON THE WORK FRUSTRATION TOLERANCE SCALE
BY PERCENTAGE OF EACH GROUP

	GROUPS**				
	PRELIMINARY		VALIDATION		
SCORES*	1 N=100	2 N=25	3 N=50	4 N=25	5 N=25
226-235		4			
216-225		4			
206-215		4		8	
196-205		4		4	
186-195		4		4	
176-185		12		12	
166-175		4			
156-165				4	
146-155				4	
136-145		4			
126-135				12	
116-125		4		8	
106-115		8		8	
96-105		4		8	
86-95		4			
76-85				12	
66-75	1	12	2	8	
56-65	4	12	4	4	
46-55	11	12	14		12
36-45	16	4	14	4	28
26-35	27		28		36
16-25	21		26		20
6-15	20		12		4

* High scores indicate poor work frustration tolerance

** The various groups are defined as:

1. Well-adjusted workers used in developing the WFTS scoring key.
2. Hospitalized patients with poor work adjustment used in developing the WFTS scoring key.
3. Well-adjusted workers used in validating the WFTS.
4. Hospitalized patients with poor work adjustment used in validating the WFTS.
5. Mental hospital patients making a good work adjustment away from the hospital, used in testing the hypothesis.

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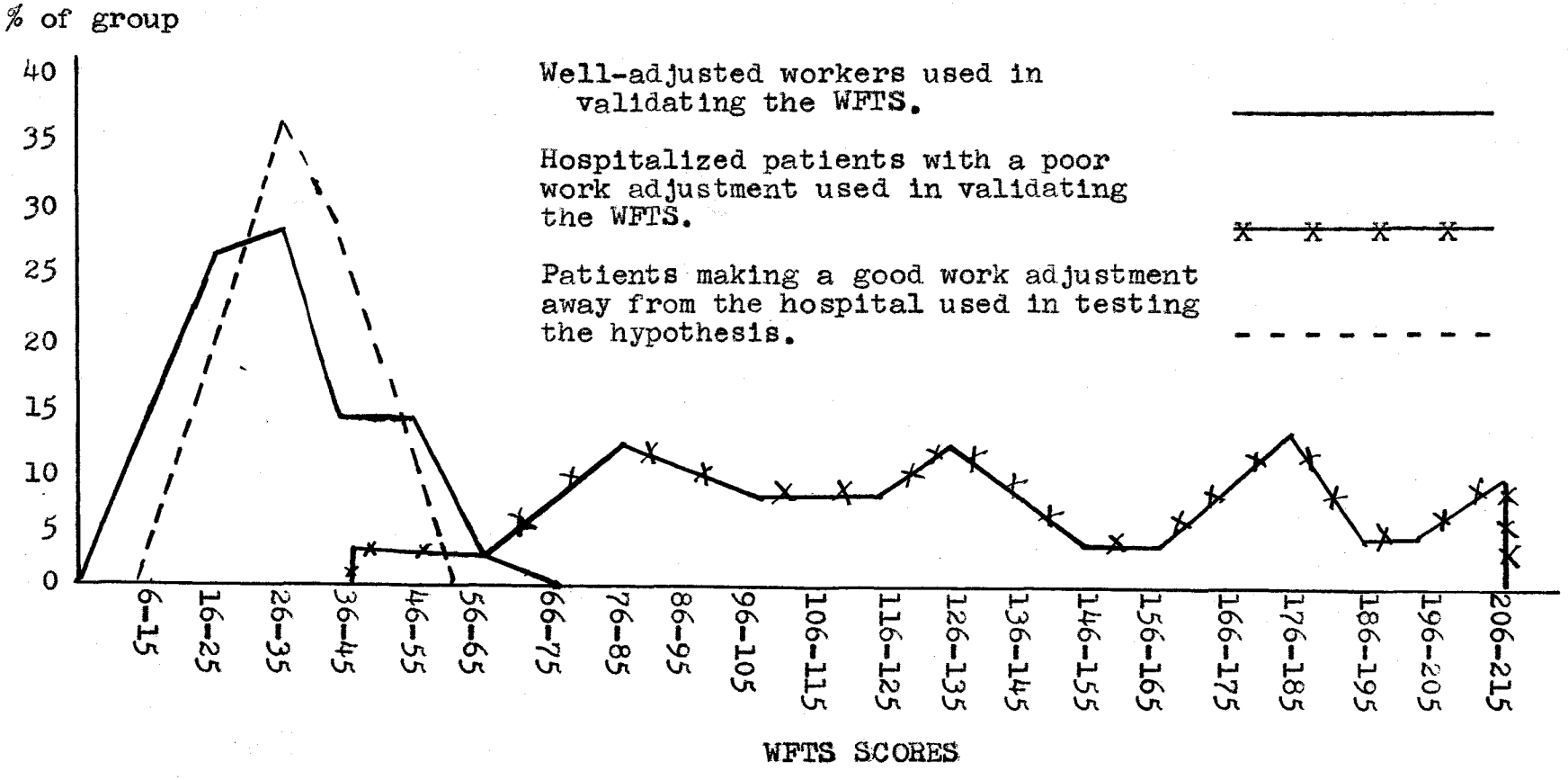
FIGURE 2

DISTRIBUTION OF WFTS DIVERGENCE SCORES BY PERCENTAGES OF VALIDATING GROUPS



49.1 for the group of patients used in its validation, suggest that the paranoid psychotic carries over his individual thinking into the work situation. He projects his autistic ideations, his feelings of inferiority, his delusions of persecutions and other personality characteristics typical of the paranoid psychotic, into the job area.

For example, it has been shown, in this study, that the paranoid patients choose responses on the WFTS which reveal these paranoid tendencies. The alternatives checked by patients, on the WFTS, indicate that they feel their work to be inferior when compared with the work done by others; that they do not trust the companies they have worked for; and that they feel fellow workers are talking about them. These responses are contrary to what the average well-adjusted worker selected and give us clues as to why the paranoid patient may make a poor work adjustment.

He thinks, according to his responses on the WFTS, that when fellow-workers are talking among themselves, they are talking about him. He would not instruct newer workers because he either feels his own work is inferior, or because the company is using this means to spy on his own work. He would blame himself if something went wrong with a machine on which he was working. Most of his jobs have been disappointing to him. He would blame his fellow workers if he couldn't get along with them.

In other words, the paranoid patient cannot inhibit the expression of his own unique, distorted thinking, and

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cannot function as a part of the typical work group. He cannot accept other workers and cannot feel that he himself is accepted by them. His unique, imbalanced and anxiety-producing needs and drives become predominant factors in influencing his behaviour and he approaches the picture of the maladjusted worker described on p.13. The present study has shown that some of these unrealistic and tension-producing autistic ideations are revealed through the WFTS. If they are present in sufficient intensity to produce a score above what has been empirically determined as the critical score (74), there is some reason for doubting the patient's ability to function in the usual work situation with its pressing inter-personal relations and problems.

The study also attempted to compare the discriminating abilities of the WFTS and a projective technique, the PAT. It has been shown that, unlike the WFTS, the PAT resulted in no significant difference between well-adjusted workers and paranoid patients with a poor work adjustment, when we used the areas and scoring key established by the test author. Qualitative analysis of the responses did elicit differences between these two groups. This test can be used in a hospital setting and should have value in an industrial evaluation or screening program.

We may take as an example a hospitalized paranoid patient who was a subject in the standardization group. He made a divergence score of 61 on the WFTS, which places him rather high when compared with the well-adjusted worker. He

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still falls within the overlapping range between the workers and patients. We cannot say, with a high degree of assurance, that he would not be able to adjust to a work situation outside the hospital, even though we do know, in examining his WFTS score, that his reaction to frustrating work situations is somewhat different from that of the average worker's. Since he does fall in the overlapping range of the WFTS, additional diagnostic data would be helpful.

We find this additional data in analyzing his PAT protocol. Analysis of the sequence of his responses would not be diagnostically significant since the number of responses in each area does not discriminate between the well-adjusted worker and the hospitalized patient with a poor work adjustment. We can examine the stories this patient has written about the situations depicted in the PAT plates. We find that he ends many of his "working" plates with such comments as "resting" or "dreaming." In Plates 13 and 15, the hero is left in a frustrated, hostile mood, rather than, as with many of the well-adjusted workers, in a state of activity, after having worked off his aggression. We also find a general trend of low self-evaluation ("audience walking out due to untasteful topic."), strong physical anxiety ("blood poison resulting from a cut finger") and passivity rather than activity.

Even though work with both the WFTS and the PAT is in the experimental stage, the assumption can be made that

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this patient, considering the rather high WFTS score and the significant mode of reacting to the PAT situations, should not be permitted to return to the typical work situation at the present time. If other considerations should produce his release from the hospital, special precautions seem indicated, if he returns to work. His strong physical anxiety, hostile attitudes toward supervision, lack of self confidence, all suggest that a special kind of job placement would be necessary for his eventual successful work adjustment.

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CHAPTER VII

SUMMARY OF THE STUDY

This study was undertaken to develop a prognostic technique which could help the medical staff in a mental hospital determine whether a patient was well enough to leave the hospital for a return to the work field.

As a preliminary step, a WORK FRUSTRATION TOLERANCE SCALE (WFTS) was developed using items of the type usually found in surveys measuring job satisfaction. Some statements which had been reported to the writer by returned or admitted patients were also included in this scale. The scale forces the subject to select one of three alternatives each indicating a different reaction to a potentially frustrating work situation.

The preliminary form of the WFTS was administered to a group of 100 well-adjusted workers and to a group of 25 hospitalized paranoid patients who had made a poor work adjustment. Through item analysis, those items which did not satisfactorily differentiate between these groups were eliminated. A scoring key was then developed, with appropriate weights assigned to each of the 60 items which had shown satisfactory differentation between the two groups.

The preliminary WFTS discriminated between the two groups at a very significant level equal to a "t" value of 7.13 which meets the .001 level of significance.

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The first hypothesis formulated for this study stated that the WFTS would: (1) differentiate between well-adjusted workers and hospitalized patients with a poor work adjustment, (2) differentiate between hospitalized patients with a poor work adjustment and mental hospital patients making a good work adjustment away from the hospital, (3) not differentiate between well-adjusted workers and mental hospital patients making a good work adjustment away from the hospital.

To test this hypothesis, and also validate the WFTS, the scale was administered to a second group of 50 well-adjusted workers, a second group of 25 hospitalized patients with a history of poor work adjustment, and to a group of mental hospital patients making a good work adjustment away from the hospital.

This administration of the scale showed that the WFTS differentiated between this second group of workers and patients at a level of significance equal to a "t" value of 9.35 which meets the .001 level of significance. It also differentiated between the hospitalized patients and the patients making a good work adjustment away from the hospital at a level of significance equal to a "t" value of 6.66 which meets the .001 level of significance. It did not differentiate between well-adjusted workers and the mental hospital patients making a good work adjustment away from the hospital. The "t" ratio of the difference between these two groups was 1.33 which does not meet the .05 level

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of significance.

The second hypothesis formulated for this study stated that a projective technique, the Tomkins-Horn Picture Arrangement Test (PAT), would differentiate more sharply than the WFTS among the three groups. The PAT was administered to the first group of well-adjusted workers and to the first group of hospitalized patients. The results do not indicate significant differences between these two groups. The "t" ratios of the differences between the groups range from .60 to 1.47, none of which meet the .05 level of significance.

In summary, this study has resulted in a Work Frustration Tolerance Scale with an empirically determined cut-off score of 74 which differentiates between a well-adjusted worker and a hospitalized paranoid patient with a poor work adjustment. Although the Tomkins-Horn Picture Arrangement Test did not show significant differences between these groups, it did show possibilities as a qualitative tool, especially when used in conjunction with the WFTS, to refine the WFTS analysis of a person's work frustration tolerance.

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CHAPTER VIII

IMPLICATIONS FOR FURTHER RESEARCH

The present study has produced a Work Frustration Tolerance Scale validated for a specific group of subjects: hospitalized paranoid psychotics with a history of poor work adjustment. Further work with the WFTS will be carried on to refine the scale, develop norms for various psychotic test entities, work areas, ages and other variables, and to test the suitability of the cut-off score of 74 when applied to larger samples.

The cooperation afforded the writer by industry is indicative of the need in industrial evaluation for the type of technique which was the subject of this study. The majority of personnel men contacted expressed an interest in the final results of the study and indicated their willingness to have their organization participate in the long range study to follow the present project. One industrial organization is presently using the WFTS on an experimental basis, gathering data for future use.

The writer is continuing to work with Tomkins on analysis of combinations of PAT "elements." The PAT will continue to be used with hospitalized patients and workers in industry to determine whether specific sequences and responses rather than areas (as used in the present study) will differentiate hospitalized patients from well adjusted workers.

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Further research with the WFTS is indicated in the following specific areas:

1. The WFTS will be administered to male patients, with a history of poor work adjustment, when they are admitted or returned to hospitals, and when they leave. This testing will provide a comparison between morbid and post-morbid functioning, in respect to work attitudes and work frustration tolerance. Such testing is now in progress.
2. At present, the WFTS will be given to every male patient who is leaving the hospital and who will be entering the job field. Follow-up evaluations of his work adjustment will be made at 3 month intervals to determine whether his WFTS score could have predicted his eventual level of work adjustment.
3. Patients now on convalescent status, or discharged, are frequently referred for vocational rehabilitation, because of their poor work adjustment. The WFTS will be administered to these patients to determine their work frustration tolerance. It may also be possible to elicit specific areas of work maladjustment through analysis of specific items or trends projected in their responses.

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APPENDIX

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TABLE 9

PERCENTAGE OF EACH PRELIMINARY GROUP SELECTING EACH OF THE CHOICES ON 115 ITEMS OF THE PRELIMINARY WFTS, TOGETHER WITH CORRESPONDING "t" VALUES

Item no.	Well-Adjusted Workers			Patients with Poor Work Adjustment			"t" Value		
	Choice			Choice			Choice		
	1	2	3	1	2	3	1	2	3
								sample	
* 1	100	0	0	96	4	0			
2	30	64	6	32	48	20	.00	1.26	1.89
3	26	14	60	28	20	52	.00	.63	.63
* 4	2	9	89	16	20	64	2.52	1.26	2.52
5	41	41	18	36	40	24	.63	.00	.63
* 6	4	6	90	28	12	60	3.15	.63	3.15
7	21	0	79	16	8	76	.63	2.52	.00
8	8	7	85	16	16	68	.63	1.26	1.26
* 9	2	0	98	8	20	72	1.26	4.41	3.15
10	56	7	37	40	8	52	1.26	.00	1.26
11	10	21	69	8	40	52	.00	1.89	1.26
* 12	7	82	11	16	48	36	1.26	3.15	2.52
13	3	82	15	8	72	20	1.26	.63	.63
14	38	22	40	36	40	24	.00	1.89	1.26
15	86	3	11	68	20	12	1.26	2.52	.00
* 16	10	8	82	12	48	40	.00	4.41	3.78
17	59	41	0	60	32	8	.00	.63	2.52
18	40	41	19	60	24	16	1.89	1.89	.00
* 19	3	17	80	12	40	48	1.89	2.52	3.15
* 20	72	3	25	44	0	56	2.52	1.89	2.52
21	62	5	33	48	20	32	1.26	1.89	.00
* 22	21	3	76	44	8	48	1.89	1.26	2.52
* 23	2	87	11	24	56	20	3.15	3.15	1.26
* 24	1	1	98	16	4	80	2.52	.63	2.52
* 25	5	6	89	28	12	60	3.15	1.26	3.15
26	3	48	49	20	40	40	2.52	.00	.63
27	4	20	76	8	28	64	.63	.63	1.26
* 28	19	4	77	28	24	48	.63	2.52	2.52
* 29	6	4	90	36	16	48	3.15	1.89	4.41
30	7	59	34	12	52	36	.63	.00	.00

* starred items indicate the ones chosen for the final form of the WFTS

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TABLE 9 (Cont.)

PERCENTAGE OF EACH PRELIMINARY GROUP SELECTING EACH OF THE CHOICES ON 115 ITEMS OF THE PRELIMINARY WFTS, TOGETHER WITH CORRESPONDING "t" VALUES

Item no.	Well-Adjusted Workers			Patients with Poor Work Adjustment			"t" Value		
	Choice			Choice			Choice		
	1	2	3	1	2	3	1	2	3
* 31	0	2	98	24	8	68	4.41	1.26	3.78
* 32	19	0	81	72	16	12	5.04	3.78	6.93
* 33	0	93	7	16	56	28	3.78	3.78	2.52
* 34	15	85	0	24	68	8	.63	1.89	2.52
* 35	16	80	4	28	44	28	1.26	3.15	3.15
* 36	25	8	67	12	48	40	1.26	4.41	2.52
* 37	5	7	88	20	24	56	1.89	1.89	3.15
* 38	0	94	6	8	72	20	2.52	2.52	1.89
* 39	86	3	11	44	16	40	3.78	1.89	3.15
* 40	96	2	2	72	20	8	3.15	2.52	1.26
* 41	0	46	54	36	36	28	5.67	.63	2.52
42	23	77	0	32	64	4	.63	1.26	1.89
43	30	63	7	44	48	8	1.26	1.26	.00
44	85	8	7	64	24	12	1.89	1.89	.63
* 45	2	96	2	4	80	16	.00	1.89	2.52
46	23	53	24	40	40	20	1.26	1.26	.00
47	89	3	8	72	8	20	1.89	.63	1.26
48	12	76	12	12	64	24	.00	1.26	1.26
49	88	11	1	76	8	16	1.26	.63	2.52
* 50	13	87	0	36	60	4	2.52	3.15	1.89
51	55	31	14	44	20	36	.63	1.26	1.89
* 52	22	2	76	24	20	56	.00	2.52	1.89
* 53	43	55	2	56	28	16	1.26	2.52	2.52
54	49	22	29	36	24	40	1.26	.00	.63
* 55	2	3	95	16	24	60	2.52	3.15	3.78
56	37	11	52	36	24	40	.00	1.26	1.26
* 57	6	94	0	20	68	12	1.89	3.15	3.15
58	18	70	12	28	56	16	1.26	1.26	.63
* 59	14	74	12	32	40	28	1.89	3.15	1.89
* 60	25	73	2	28	40	32	.00	3.15	3.78

* starred items indicate the ones chosen for the final form of the WFTS

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TABLE 9 (Cont.)

PERCENTAGE OF EACH PRELIMINARY GROUP SELECTING EACH OF THE CHOICES ON 115 ITEMS OF THE PRELIMINARY WFTS, TOGETHER WITH CORRESPONDING "t" VALUES

Item no.	Well-Adjusted Workers			Patients with Poor Work Adjustment			"t" Value		
	Choice			Choice			Choice		
	1	2	3	1	2	3	1	2	3
* 61	22	77	1	28	64	8	.00	1.26	1.26
62	22	26	52	44	24	32	1.89	.00	1.89
* 63	32	60	8	24	40	36	.63	1.89	3.15
* 64	35	2	63	40	20	40	.00	3.15	1.89
* 65	0	100	0	16	72	12	3.78	5.04	3.15
66	4	85	11	16	64	20	1.89	1.89	1.26
67	4	34	62	8	48	44	.63	1.26	1.26
* 68	0	90	10	12	60	28	3.15	3.15	1.89
69	75	21	4	80	20	0	.00	.00	1.89
70	2	33	65	0	28	72	1.26	.63	.63
71	14	32	54	36	16	48	2.52	1.26	.63
* 72	66	23	11	32	40	28	3.15	1.26	1.89
73	56	44	0	44	40	16	1.26	.00	3.78
74	23	29	48	24	28	48	.00	.00	.00
* 75	9	18	73	32	32	36	2.52	1.26	3.15
76	49	40	11	52	28	20	.00	1.26	1.26
* 77	6	94	0	28	64	8	2.52	3.15	2.52
78	24	22	54	44	24	32	1.89	.00	1.89
* 79	100	0	0	68	32	0	5.04	5.04	.00
* 80	88	0	12	48	12	40	3.78	3.15	2.52
81	61	39	0	44	52	4	1.26	1.26	1.89
82	16	39	45	16	48	36	.00	.63	.63
83	11	36	53	16	36	48	.63	.00	.00
* 84	0	2	98	16	20	64	3.78	3.15	4.41
85	37	61	2	40	52	8	.63	.00	1.26
86	22	76	2	24	68	8	.00	.63	1.26
* 87	2	7	91	4	44	52	.63	3.78	3.78
88	19	56	25	16	60	24	.00	.00	.00
* 89	11	0	89	32	8	60	2.52	2.52	3.15
90	1	70	29	4	52	44	.63	1.26	1.26

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TABLE 9 (Cont.)

PERCENTAGE OF EACH PRELIMINARY GROUP SELECTING EACH OF THE CHOICES ON 115 ITEMS OF THE PRELIMINARY WFTS, TOGETHER WITH CORRESPONDING "t" VALUES

Item no.	Well-Adjusted Workers			Patients with Poor Work Adjustment			"t" Value		
	Choice			Choice			Choice		
	1	2	3	1	2	3	1	2	3
* 91	63	19	18	28	32	40	3.15	1.26	1.89
92	45	54	1	36	60	4	.63	.63	.63
* 93	89	0	11	44	8	48	4.41	2.52	3.78
* 94	59	39	2	24	68	8	3.15	2.52	1.26
* 95	88	11	1	60	28	12	2.52	1.89	2.52
96	18	10	72	36	12	52	1.89	.00	1.89
* 97	5	84	11	12	60	28	1.26	2.52	1.89
* 98	29	49	22	32	20	48	.00	2.52	2.52
* 99	98	0	2	64	20	16	4.41	3.15	2.52
*100	86	2	12	60	12	28	2.52	1.89	1.89
101	11	83	6	24	64	12	1.26	1.89	.63
*102	87	11	2	64	32	4	2.52	2.52	.63
103	6	90	4	16	72	12	1.26	1.89	1.26
104	56	40	4	40	48	12	1.26	.63	1.26
*105	77	16	7	28	48	24	4.41	3.15	2.52
*106	17	71	12	36	32	32	1.89	3.78	2.52
107	50	6	44	52	20	28	.00	1.89	1.26
*108	94	2	4	60	16	24	3.78	2.52	2.52
*109	20	1	79	44	4	52	1.89	.63	2.52
110	18	56	26	24	48	28	.63	.00	.00
*111	12	73	15	24	44	32	1.26	2.52	1.89
*112	90	5	5	60	20	20	3.15	1.89	1.89
113	8	62	30	8	72	20	.00	1.26	.63
114	11	64	25	16	44	40	.63	1.89	1.26
115	24	72	4	28	64	8	.00	.63	.63

* starred items indicate the ones chosen for the final form of the WFTS

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TABLE 10

SCORING KEY FOR THE FINAL FORM OF THE WFTS SHOWING WEIGHT ASSIGNED TO EACH CHOICE OF EACH ITEM

Item no.	WEIGHT		
	CHOICE 1	CHOICE 2	CHOICE 3
1	(Sample)		
2	-4	-2	4
3	-5	-1	5
4	-2	-7	5
5	-2	5	-4
6	0	-7	6
7	-3	-4	5
8	4	3	-4
9	-3	-2	4
10	-5	5	-2
11	-4	-1	4
12	-5	-2	5
13	-1	-4	4
14	-5	-3	7
15	-7	-2	6
16	-8	-6	11
17	-6	6	-4
18	-1	3	-4
19	-2	5	-5
20	2	-7	4
21	-3	-3	5
22	-4	4	-3
23	6	-2	-5
24	5	-4	-2
25	-9	1	4
26	0	3	-4
27	-4	5	-3
28	0	-4	3
29	-2	4	-4
30	-4	-5	6
31	-3	5	-5
32	-3	5	-3
33	0	5	-6
34	0	2	-2
35	1	3	-5

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TABLE 10 (Cont.)

SCORING KEY FOR THE FINAL FORM OF THE WFTS SHOWING WEIGHT ASSIGNED TO EACH CHOICE OF EACH ITEM

Item no.	WEIGHT CHOICE 1	CHOICE 2	CHOICE 3
36	0	-5	3
37	-6	8	-5
38	-5	5	-3
39	5	-2	-3
40	-4	-2	5
41	-4	5	-4
42	8	-8	0
43	6	-5	-4
44	-6	-5	7
45	-1	-6	6
46	-4	-4	5
47	5	-2	-3
48	7	-4	-6
49	5	-4	-2
50	4	-3	-4
51	-2	4	-3
52	0	4	-5
53	7	-5	-4
54	4	-3	-3
55	4	-4	-1
56	7	-5	-4
57	-3	6	-4
58	6	-4	-4
59	-3	-1	4
60	-2	4	-3
61	5	-3	-3

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TABLE 11

AGES, I.Q.'S, WORK AREAS, OF HOSPITALIZED PATIENTS WITH A POOR WORK ADJUSTMENT, WHO WERE USED IN DEVELOPING THE WFTS SCORING KEY

SUBJECT	AGE	I.Q.*	WORK AREA
1	40	89	Automobile Mechanic
2	26	91	Repairman
3	22	86	Carpenter
4	29	90	Painter
5	42	96	Electrician
6	31	93	Machinist
7	22	84	Lathe Operator
8	34	102	Machinist
9	26	84	Punch Press Operator
10	28	112	Lathe Operator
11	43	88	Boring-Machine Operator
12	37	101	Shoe Repairman
13	35	114	Machinist
14	36	104	Punch Press Operator
15	20	93	Sheet Metal Worker
16	34	86	Painter
17	43	106	Electrician
18	45	92	Painter
19	26	102	Electrician
20	41	109	Automobile Body Repairman
21	30	89	Boring-Machine Operator
22	45	103	Sheet Metal Worker
23	45	103	Carpenter (Construction)
24	38	111	Carpenter
25	27	105	Punch Press Operator

Mean = 97.3

*Wechsler-Bellevue Form I

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TABLE 12

AGES, I.Q.'S, WORK AREAS, OF HOSPITALIZED PATIENTS WITH A POOR WORK ADJUSTMENT WHO WERE USED IN VALIDATING THE WFTS

SUBJECT	AGE	I.Q.*	WORK AREA
1	28	105	Radio Repairman
2	44	99	Office Machine Repairman
3	29	115	Electrician
4	37	101	Stationary Engineer
5	39	116	Machinist
6	22	84	Punch Press Operator
7	28	93	Automobile Assembler
8	28	90	Stencil Cutter
9	32	102	Carpenter (Maintenance)
10	19	94	Lathe Operator
11	34	98	Carpenter
12	39	103	Painter
13	39	98	Machinist
14	23	96	Milling Machine Operator
15	28	87	Carpenter (Construction)
16	39	92	Inspector
17	44	112	Lathe Operator
18	28	96	Furniture Finisher
19	42	102	Drill Press Operator
20	41	94	Bench Grinder
21	31	102	Punch Press Operator
22	24	88	Polisher
23	40	91	Painter
24	42	89	Lathe Operator
25	27	93	Automobile Mechanic

Mean = 97.6

*Wechsler-Bellevue Form I

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TABLE 13

AGES, I.Q.'S, AND WORK AREAS OF MENTAL HOSPITAL PATIENTS CURRENTLY MAKING A GOOD WORK ADJUSTMENT AWAY FROM THE HOSPITAL, WHO WERE USED IN TESTING THE HYPOTHESIS

SUBJECT	AGE	I.Q.*	WORK AREA
1	45	98	Painter
2	22	96	Plumber
3	32	116	Boring Machine Operator
4	22	110	Carpenter
5	45	102	Electrician
6	27	88	Lathe Operator
7	44	89	Sheet Metal Worker
8	24	101	Lathe Operator
9	30	105	Painter
10	44	97	Radio Repairman
11	45	90	Laundry-Machine Mechanic
12	30	92	Automobile Assembler
13	39	91	Automobile Mechanic
14	23	84	Furniture Repairman
15	29	112	Cutter
16	44	93	Carpenter (Construction)
17	28	90	Printer
18	35	111	Carpenter
19	41	99	Cabinet Maker
20	24	99	Automobile Mechanic
21	32	92	Machinist
22	34	118	Watchmaker
23	28	93	Machinist
24	39	124	Machinist
25	28	97	Machinist

Mean = 99.4

*Wechsler-Bellevue Form I

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TABLE 14

WORK FRUSTRATION TOLERANCE SCALE SCORES OF THE WELL ADJUSTED WORKERS USED IN DEVELOPING THE WFTS SCORING KEY

	SCORES		
Subject	CONFORMITY	DIVERGENCE	C/D
1	257	26	231
2	220	64	156
3	241	33	208
4	271	16	255
5	253	34	219
6	242	18	224
7	238	33	205
8	268	15	253
9	273	15	258
10	237	42	195
11	241	36	205
12	227	55	172
13	251	26	225
14	248	31	217
15	219	48	171
16	248	32	216
17	272	14	258
18	264	19	245
19	282	7	275
20	254	30	224
21	229	44	185
22	271	12	259
23	239	31	208
24	272	10	262
25	216	63	153
26	270	18	252
27	259	22	237
28	264	23	241
29	262	21	241
30	259	25	234
31	282	7	275
32	251	26	225
33	258	25	233
34	235	44	191
35	263	25	238

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TABLE 14 (Cont.)

WORK FRUSTRATION TOLERANCE SCALE SCORES OF THE WELL ADJUSTED WORKERS USED IN DEVELOPING THE WFTS SCORING KEY

	SCORES		
Subject	CONFORMITY	DIVERGENCE	C/D
36	225	47	178
37	229	57	172
38	267	15	252
39	254	28	226
40	239	40	199
41	235	33	202
42	209	58	151
43	262	21	241
44	224	47	177
45	227	53	174
46	249	38	211
47	257	31	226
48	237	50	187
49	271	14	257
50	278	21	257
51	251	29	222
52	255	28	227
53	234	26	208
54	231	42	189
55	230	52	178
56	182	74	108
57	247	40	207
58	223	49	174
59	268	19	249
60	277	11	266
61	251	26	225
62	269	19	250
63	240	48	192
64	250	24	226
65	259	27	232
66	254	31	223
67	243	37	206
68	262	12	250
69	267	14	253
70	233	46	187

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TABLE 14 (Cont.)

WORK FRUSTRATION TOLERANCE SCALE SCORES OF THE WELL ADJUSTED WORKERS USED IN DEVELOPING THE WFTS SCORING KEY

	SCORES		
Subject	CONFORMITY	DIVERGENCE	C/D
71	256	31	225
72	247	38	209
73	268	15	253
74	274	11	263
75	268	21	247
76	252	29	223
77	281	13	268
78	274	12	262
79	263	13	250
80	254	29	225
81	265	19	246
82	260	23	237
83	245	45	200
84	281	12	269
85	265	24	241
86	244	28	216
87	206	59	147
88	242	41	201
89	247	28	219
90	255	18	237
91	252	39	213
92	273	12	261
93	246	40	206
94	252	26	226
95	280	8	272
96	244	29	215
97	241	37	204
98	258	16	242
99	257	27	230
100	260	27	233

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TABLE 15

WORK FRUSTRATION TOLERANCE SCALE SCORES OF HOSPITALIZED PATIENTS WITH A POOR WORK ADJUSTMENT, WHO WERE USED IN DEVELOPING THE WFTS SCORING KEY

	SCORES		
Subject	CONFORMITY	DIVERGENCE	C/D
1	150	106	44
2	234	53	181
3	29	224	-195
4	224	47	177
5	82	187	-105
6	117	144	- 27
7	199	67	132
8	200	70	130
9	212	53	159
10	28	204	-176
11	75	171	- 96
12	207	61	146
13	187	61	126
14	18	234	-216
15	165	99	66
16	208	88	120
17	40	212	-172
18	235	44	191
19	66	185	-119
20	154	106	48
21	137	122	15
22	221	60	161
23	80	178	- 98
24	197	72	125
25	91	177	- 86

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TABLE 16

WORK FRUSTRATION TOLERANCE SCALE SCORES OF THE WELL-ADJUSTED WORKERS USED IN VALIDATING THE WFTS

	SCORES		
Subject	CONFORMITY	DIVERGENCE	C/D
1	258	28	230
2	242	38	204
3	282	10	272
4	274	12	262
5	260	30	230
6	265	25	240
7	286	14	272
8	246	30	216
9	240	33	207
10	257	37	220
11	254	41	213
12	248	40	208
13	281	13	268
14	286	31	255
15	268	18	250
16	256	30	226
17	230	47	183
18	233	49	184
19	254	31	223
20	251	25	226
21	260	20	240
22	277	11	266
23	230	45	185
24	182	60	122
25	230	41	189
26	259	24	235
27	270	20	250
28	262	21	241
29	182	72	110
30	258	28	230
31	264	25	239
32	267	15	252
33	241	40	201
34	210	55	155
35	261	47	214

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TABLE 16 (Cont.)

WORK FRUSTRATION TOLERANCE SCALE SCORES OF THE WELL-ADJUSTED WORKERS USED IN VALIDATING THE WFTS

	SCORES		
Subject	CONFORMITY	DIVERGENCE	C/D
36	227	53	174
37	256	35	221
38	237	50	187
39	254	28	226
40	251	29	222
41	257	26	231
42	271	16	255
43	240	16	224
44	268	17	251
45	233	49	184
46	227	60	167
47	240	33	207
48	257	26	231
49	282	17	265
50	230	45	185

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TABLE 17

WORK FRUSTRATION TOLERANCE SCALE SCORES OF HOSPITALIZED PATIENTS WITH A POOR WORK ADJUSTMENT, WHO WERE USED IN VALIDATING THE WFTS

	SCORES		
Subject	CONFORMITY	DIVERGENCE	C/D
1	97	185	- 88
2	197	72	125
3	90	178	- 88
4	60	186	-126
5	93	153	- 60
6	43	208	-165
7	88	165	- 77
8	115	130	- 15
9	219	57	162
10	154	104	50
11	127	122	5
12	231	45	186
13	40	212	-172
14	208	80	128
15	148	106	42
16	24	204	-180
17	66	185	-119
18	187	67	120
19	217	77	140
20	113	121	- 8
21	167	99	68
22	154	106	48
23	147	127	20
24	147	129	18
25	207	81	126

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TABLE 18

WORK FRUSTRATION TOLERANCE SCALE SCORES OF MENTAL HOSPITAL PATIENTS CURRENTLY MAKING A GOOD WORK ADJUSTMENT AWAY FROM THE HOSPITAL, WHO WERE USED IN TESTING THE HYPOTHESIS

	SCORES		
Subject	CONFORMITY	DIVERGENCE	C/D
1	221	44	177
2	254	33	221
3	264	22	242
4	251	30	221
5	233	33	200
6	232	49	183
7	243	35	208
8	247	27	220
9	278	11	267
10	231	39	192
11	261	19	242
12	252	32	220
13	248	24	224
14	238	52	186
15	240	42	198
16	256	31	225
17	221	44	177
18	256	33	223
19	257	28	229
20	241	37	204
21	242	41	201
22	265	24	241
23	260	23	237
24	231	42	189
25	225	47	178

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WORK FRUSTRATION TOLERANCE SCALE

_____ AGE_____ OCCUPATION_____ _____

A SURVEY OF WORK ATTITUDES

This survey is part of a study to find out what people think about the many things that make up their work. Every person has different reasons for liking a job. Some things that annoy one person will please another person. We want to know what YOU find interesting or annoying about work in general.

This survey is CONFIDENTIAL. Do not sign your name. No one in your company will see your answers.

THERE ARE NO RIGHT OR WRONG ANSWERS. This is not a test. We want your opinion about matters like pay, supervisors, working conditions, and other factors related to work in general.

DIRECTIONS

Read each question or statement carefully. Then, put an "X" in the parentheses opposite the answer closest to your own thinking about the item. One item might read:

Which job would you like best if you worked in a machine shop?

( ) A machine operator.
( ) An inspector.
( ) A tool maker.

A person who would like to be a MACHINE OPERATOR would answer like this:

(x) A machine operator.
( ) An inspector.
( ) A tool maker.

A person who would like to be AN INSPECTOR would answer like this:

( ) A machine operator.
(x) An inspector.
( ) A tool maker.

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A person who would like to be a TOOL MAKER would answer like this:

( ) A machine operator
( ) An inspector
(x) A tool maker

Some of the items may not apply to any work you have done. If you find this to be the case, you should imagine that you were in such a situation and then mark and "X" next to the answer you choose.

Please answer each question in turn. Do not skip around.

If you do not understand any question, its meaning will be explained to you.

There is no time limit but do not spend too much time on any one question. We would like your answer without too much thinking on your part. If you want to change your answer, erase the "X" and then put an "X" next to the answer you want to give.

Answer the following questions:

Item No.		
Prelim.	Final.	
1	1	What do you think is most often the reason for promotions? ( ) Ability. ( ) Luck. ( ) Being the foreman's favorite.
2		How would you feel if your supervisor stopped at your bench very often? ( ) I would begin to imagine he doesn't think I'm doing a good job. ( ) I would feel he is showing the right kind of interest on his part. ( ) I would be flattered at his attention.
3		Which one of the following three items would influence you most in taking a job? ( ) The working hours. ( ) Work that would be hard or easy. ( ) The kind of persons you would be working with.

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Item No. Prelim.	Final.	
4	2	What would you do if you were asked to fill out a report on how you felt about conditions in your company and couldn't say something nice? ( ) I would refuse to answer if I had to sign my name. ( ) I would be honest if I didn't have to sign my name. ( ) I would give an honest answer always because it might help other workers.
5		If you had to rate foremen, which one of these three would you rate the highest? ( ) The foreman who can pick out the men who need a lot of help and give it to them. ( ) The foreman who knows that praise for good work makes a man work harder. ( ) The foreman who doesn't try to feed company propaganda to the men.
6	3	What would you do if you began to get the feeling that your boss didn't like you? ( ) I would begin to worry because he might get me fired. ( ) I would worry because I can't stand people not liking me. ( ) I would just forget about it if I knew I was doing my job.
7		What would you do if you had a problem on your job? ( ) I would talk it over with my fellow workers. ( ) I would keep it to myself. ( ) I would talk it over with my boss rather than the men I work with.
8		What would you do if you thought you should have been promoted and were not? ( ) I would think there was something wrong with me. ( ) I would probably blame it on bad breaks. ( ) I would discuss it with my boss.

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Item No. Prelim.	Item No. Final.	
9	4	Whom would you blame, if a machine you were working on broke down? ( ) The company for not giving you proper working equipment. ( ) Yourself. ( ) Nobody; accidents can happen.
10		What would you do if a foreman seemed to watch you more closely than he did the other workers? ( ) I would pay no attention to him. ( ) I would think he had it in for me. ( ) I would begin to worry about my work.
11		What would your first thought be if two other workers and yourself have finished three assemblies which you think are all equally good, and the foreman praises the other two workers but not you? ( ) He's not fair, he should have praised me too. ( ) It doesn't matter, there will be other chances for priase. ( ) Maybe my work wasn't as good as theirs was.
12	5	The team you are working with doesn't pull together. What would you do? ( ) I wouldn't mind because you have to learn that most people don't get along. ( ) I would try to get the workers on the team together and try to straighten things out. ( ) I would call in the supervisor to try to fix the matter.
13		What would you do if the company you worked for gave its workers employee benefits at the company's expense? ( ) I would be pretty suspicious because the company would probably take something else away from us ( ) I would accept these benefits as proving the good intentions of the company. ( ) I would probably give credit to the union.

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Item No. Prelim.	Final.	
14		Some jobs keep a man inside all the time; some jobs let him work outside all the time. Which would you like if you had your choice? ( ) I would like to do inside work. ( ) I would like to work outside. ( ) It wouldn't matter to me whether I worked inside or outside.
15		What would you do if you had an idea that you thought could help your company? ( ) I would feel free to take it to my boss. ( ) I would keep it to myself because most bosses don't think too much of their workers' ideas. ( ) I would ask other workers if I should take it to the boss.
16	6	Which of the three jobs listed would you prefer? ( ) A job that offers a chance for growth and advancement even if the pay would never be too high. ( ) A job that offers good pay even without a chance to advance. ( ) A job that offers a small beginning pay with a chance to grow on the job.
17		What would you do if something went wrong with the machine you were working on? ( ) I would ask my foreman to fix it at once. ( ) I would try to fix it myself before asking for help. ( ) I would be afraid to ask for help because I'm usually blamed if things go wrong.

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Item No. Prelim.	Final.	
18		How would you feel if you made a fair complaint to your boss and he ignored it? ( ) I wouldn't like it but after all he's the boss and doesn't have to listen to me. ( ) Something like that would probably keep me from sending in any future suggestions. ( ) I'm the kind of person who would probably think I was wrong.
19	7	What would you do if this happened to you? Sometimes a foreman tries to make you do things that you know are wrong. ( ) I wouldn't obey him. ( ) I would do as he asked because he is the boss. ( ) I would try to show him where he is wrong.
20	8	Which one of the following three statements would describe most of your bosses? ( ) They have been fair to all workers. ( ) They have discriminated against me for no good reason. ( ) They had their favorites among the workers.
21		Of the following three job conditions which would be most important to you? ( ) Being treated like a person, not just a hand. ( ) Good pay. ( ) Good working conditions.
22	9	What would you do if you worked for a company that didn't let the workers know what was going on? ( ) I'd be satisfied if that's the way they wanted it. ( ) I'd have to quit soon because I don't like to be left in the dark about things. ( ) I'd try to show the top management that an interested worker is a better worker.

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Item No. Prelim.	Final.	
23	10	In the matter of taking criticism from a boss, how would you compare yourself to other workers? ( ) I take criticism better than the next person. ( ) I take criticism about as good as anyone. ( ) I take criticism much harder than the next person.
24	11	What would you do if there was something about your job you didn't understand? ( ) I would probably blame my supervisor; he should know how to teach his workers. ( ) I would probably blame myself for being ignorant. ( ) I would probably ask my supervisor for more explanations.
25	12	What would you do if another worker got a promotion you thought you should have gotten? ( ) I would blame myself as a failure. ( ) I would make sure I got the next promotion that came along. ( ) I would find out why he got it and try for the next chance.
26		What do you think you would do if you got into trouble on your job and you could get out of it by lying? ( ) I would tell a lie to save my job. ( ) I would never lie even if it cost me my job. ( ) I would have to consider how important the job was to me and then decide what to do.
27		How would you feel about a fellow worker who made a fuss about every little thing on the job. ( ) I would be sorry for him because I'm like that too. ( ) I couldn't get along with him because on every job you have to take the good with the bad. ( ) I would try to help him with his troubles if I could.

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Item No. Prelim.	Final.	
28	13	What would you do if you felt you were turning out all the work you could and your foreman put pressure on you to produce more work? ( ) I would try to do even more because he might need that extra effort on my part. ( ) I couldn't do what he asked me to because I can't stand pressure like that. ( ) I would try to cooperate if it didn't happen too often.
29	14	How would you feel if other workers were advanced and you weren't? ( ) I would get sore at myself for not being as good as they were. ( ) I would feel satisfied to remain where I was and not have to begin learning a new job routine. ( ) I would be encouraged to plan ahead to be ready for the next chance.
30		Which one of the following three items would bother you most as far as job instructions are concerned? ( ) The fact that you can't seem to understand job instructions as well as the next person. ( ) The kind of job instruction that doesn't cover all the details. ( ) Too much instruction with too little chance to use your own ideas.
31	15	What attitude would you take if you were a foreman who has to train new workers? ( ) Most workers aren't too bright and would need a lot of instructions before they understood their jobs. ( ) The men I was training were as smart as I was and wouldn't need much instruction. ( ) Men differ in their understanding of directions and I would expect some men to ask more questions than others.

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32	16	Which of the following would be your feeling if you saw some of your fellow workers talking among themselves at lunch time? ( ) It wouldn't bother me at all. ( ) I would think they were talking me. ( ) I would probably join them.
33	17	What would you do if your supervisor would criticize you too much? ( ) I think I would quit because I can't stand criticism. ( ) I would try to talk to him to find out what was wrong. ( ) I guess I would just grin and bear it.
34	18	What would you do if you had a job complaint and wanted to correct it? ( ) I would probably work it out with my fellow employees. ( ) I would take it in person to my supervisor. ( ) I would probably do nothing about it except hope that someone else had the same complaint and would do more about it.
35	19	Compared with other people, how much do you worry about your work? ( ) More than the average person. ( ) As much as the average person. ( ) Less than the average person.
36	20	How would you feel about your company if it didn't have a good reputation in town? ( ) I wouldn't want to work for it. ( ) It wouldn't bother me at all. ( ) I'd do what I could to change that condition.

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Item No. Prelim.	Final.	
37	21	What kind of company would you like to work for? ( ) A company where you can express your gripes through a suggestion box. ( ) A company where you aren't given a chance to air your gripes but you are given a square deal. ( ) A company where you know you can always talk to your boss about your problems.
38	22	Why do you think a foreman puts pressure on his men? ( ) He's the boss and can treat the men as he likes. ( ) The management is putting pressure on him and he has to get the work out. ( ) He's afraid if he doesn't, the men might think he's a soft touch and take advantage of him.
39	23	Which kind of job would you like to have? ( ) A job where I could use my intelligence and get raises or promotion based on my superior work. ( ) A job where I wouldn't have to learn anything new to advance myself. ( ) A job where my lack of schooling and poor work wouldn't stand in my way.
40	24	What do you think about accidents at work? ( ) They can usually be avoided if I'm careful. ( ) They are bound to happen the way most companies treat their help. ( ) They would probably happen more often to me than to other workers.

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41	25	How would you act if you were a foreman? ( ) I would treat my men just as strict as I've been treated. ( ) I would try to remember that I was once just a hand. ( ) I would try to steer a middle course between the company's demands and what I think the men can produce.
42		Company A gives raises to all its employees. Company B gives raises to the men who deserve them. Company C is known to have foremen who pick favorites for raises. Which company would you like to work for? ( ) Company A. ( ) Company B. ( ) Company C.
43		What do you think is the main reason when fellow employees don't get along? ( ) They are jealous if someone else gets the breaks. ( ) They don't respect each other's feelings. ( ) The boss plays one worker against the other.
44		On most of your jobs, which of the following describes the way you usually felt at the end of the day? ( ) Happy to be working for that company. ( ) Wishing that you didn't have to come back to that company the next morning. ( ) Satisfied with the company but hoping you could be transferred to another department.

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Item No. Prelim.	Item No. Final.	
45	26	Under which foreman would you like to work? ( ) One who would be like a father to me. ( ) One who would respect me as an individual with some good ideas. ( ) One who wouldn't bother with me at all.
46		What would you do if you worked for a company where you have to take a lot from your foreman before he recommends you for a raise or promotion? ( ) I wouldn't like that but after all most foremen are like that and you have to go along with them. ( ) I'd go over his head, if I thought he wasn't being fair to me, and complain to his boss. ( ) I'd just stick it out till he left or I was assigned to another section.
47		On most of your jobs, with whom have you been most friendly? ( ) Your fellow workers. ( ) Your supervisors. ( ) Neither of them; I get along best if I keep to myself.
48		What do you think of a person who turns down a job because it has nothing to offer but good pay? ( ) He is reaching for the moon; he'll never find what he's looking for. ( ) He is absolutely right; money isn't everything. ( ) He is using this excuse just because he doesn't want to work.
49		What do promotions depend on? ( ) What you know. ( ) Who you know in the company. ( ) Just blind luck.

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50	27	How strongly do you feel about a chance to advance yourself on your job? Is it: ( ) More important than anything else. ( ) Important but there are other considerations too, like pay, working conditions and others. ( ) Unimportant.
51		Which of the following would bother you most on your job? ( ) Work that is boring and monotonous. ( ) Work that makes you so tired you can't enjoy yourself after you leave for the day. ( ) Work where you have to learn many different job routines.
52	28	How have you felt about most of your jobs? ( ) They have given me a lot of satisfaction. ( ) They have been pretty disappointing. ( ) They have had their share of good and bad features.
53	29	How much interest would you say the companies you've worked for, have taken in you? ( ) A lot of interest. ( ) Some interest. ( ) Little interest.
54		Which do you think is the most important reason when foremen don't get along with the men who work under them? ( ) They don't know how to handle people who aren't on their job level. ( ) They don't know how to give job instructions. ( ) The workers won't cooperate; it isn't the fault of the foremen.

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Item No. Prelim.	Final.	
55	30	What would you do if your supervisor promised something and then went back on his word? ( ) I wouldn't say anything to him because I might stir up his anger. ( ) I would stand for it once but not too often. ( ) I would talk to him about it, because he may have forgotten.
56		What would a promotion on your job mean to you? ( ) Recognition for your good work. ( ) A feeling that you're a better worker than you thought. ( ) A chance to advance even further in time.
57	31	How do you think you compare with other workers? ( ) Better than the next person. ( ) About as good as the next person. ( ) Not as good as the next person.
58		How much interest do you think most workers have in their company? ( ) A lot of interest. ( ) A fair amount of interest. ( ) Little or no interest.
59	32	In most of the companies you've worked for, which of the following was usually the rule? ( ) The only way you could get your ideas across to top management was through a suggestion box. ( ) The bosses or supervisors were willing to listen to men's ideas or suggestions. ( ) There just wasn't any way to present your ideas.

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Item No. Prelim.	Final.	
60	33	Which do you think is the most important duty of a supervisor? ( ) Keeping the men under him happy. ( ) Recognizing when a man is troubled and try to help him. ( ) Getting the most work he can out of his men.
61	34	Which do you think counts most when promotions are made? ( ) How a man stands with his foreman. ( ) How much work a man turns out. ( ) Pressure put on the company by a union.
62		If another worker leaves a tool around and someone steals it, on whom should most of the blame be put? ( ) The man who steals it. ( ) The man who left the tool around. ( ) Both of the workers.
63	35	Which type of boss would you like to work for? ( ) One who would treat you like a person, not just a machine tender. ( ) One who would leave you alone most of the time but be ready to help you if you called on him. ( ) One who would remember that you don't know too much about your job and would give you a lot of help even if you didn't ask for it.
64	36	What would you do if working conditions in your company were bad and the management did nothing to correct them? ( ) I'd still try to do my best because I get satisfaction from my own work. ( ) I'd feel that the company should get just what they deserve and I would show that feeling in the kind of work I'd turn out. ( ) I'd try to correct the conditions by going through proper channels.

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Item No. Prelim.	Final.	
65	37	What would you do if your supervisor asked you to instruct a new worker? ( ) I would probably refuse because I know that I'm not a good teacher. ( ) I would be happy to have my work recognized as superior, and I would do as the supervisor asked. ( ) I would refuse because the boss might be doing this to check on how much I know about my own job.
66		What would you do if another worker came to you feeling pretty blue because he was just a hand, not a supervisor? ( ) I would probably sympathize and agree with him because workers usually feel inferior to their bosses. ( ) I would try to show him that everyone, workers and bosses alike, have important places in the firm. ( ) I would begin to think of him as a person who would feel small in any situation, not just his job.
67		What would you do if changes were made in the work of your section and the workers weren't told about it? ( ) I would resent it as a reflection on our intelligence. ( ) I would accept the change without questioning why it was done. ( ) I would make it my business to find out why the change was made.
68	38	What would you expect your foreman to do if you made a mistake on your job? ( ) Bawl me out. ( ) Show me what I did wrong. ( ) Tell me I made a mistake and let me work it out for myself.

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Item No. Prelim.	Final.	
69		How do you feel your pay usually compares with the kind of work you turn out? ( ) I am paid what I am worth. ( ) I am paid less than what I should get. ( ) I am overpaid.
70		What kind of bosses have you usually had? ( ) I've had one or more who usually wished me harm. ( ) I've never had a boss who wasn't kind and considerate. ( ) I've had my share of good and bad bosses.
71		Which of the following would apply to you if you had a foreman who didn't know his stuff? ( ) I would feel insecure because I usually need a lot of help on my job. ( ) I would like that because then I could use my own ideas. ( ) I would probably quit or asked to be transferred because you couldn't depend on a person like that.
72	39	How important to you are friendly fellow employees in making your job satisfying to you? ( ) They are more important to me than anything else on my job. ( ) They are not too necessary, I can get satisfaction from other things on my job. ( ) They are important and I would like to work with fellow employees like that, but I can't seem to find them.
73		What is your feeling about job surveys or time studies? ( ) They are useful because they benefit the worker. ( ) They are helpful to the company but they don't do too much for the worker. ( ) They are used by the company to spy on the workers.

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Item No. Prelim.	Item No. Final.	
74		Why do you think more suggestions don't come from the workers? ( ) The men feel they wouldn't get credit if the suggestions were used. ( ) The men feel the suggestions would just be ignored and not used. ( ) The men feel they don't know how to present the suggestions in a good form.
75	40	What is your feeling about the pay a man gets on his job? ( ) It is more important than anything else on his job. ( ) It is important but can't make up for a company's lack of interest in its help. ( ) It is not as important as good working conditions, like safety regulations, proper tools, employee benefits and the like.
76		How would you like your foreman to act toward you? ( ) Give me very exact job instructions covering every detail. ( ) Just assign the job and let me work it out for myself. ( ) Actually do the work for me until I understood how to do it.
77	41	What would you do if you had a gripe about your job? ( ) Keep it to myself. ( ) Take it to my foreman. ( ) Try to get some other worker to do something about it.
78		Why would working under a supervisor who wasn't qualified bother you? ( ) Because I usually feel insecure on a job and like to have somebody above me whom I can turn to for help. ( ) Because top management might regard you in the same way they think of him. ( ) Because I couldn't work for a man I couldn't respect.

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Item No. Prelim.	Final.	
79	42	If you come up against a problem on your job that you couldn't handle at once, how would such a situation affect you? ( ) I would try all the harder to work it out myself. ( ) I would give up and wait for help. ( ) I would get so angry at myself that I couldn't continue working.
80	43	How do you usually feel when you make a mistake on your job? ( ) I usually blame my own ignorance. ( ) I usually blame the poor job instruction. ( ) I usually ignore my mistakes as long as they don't interfere with my holding on to my job.
81		How well do you think most of the foremen you've had knew their job? ( ) They knew their job very well. ( ) They knew their job fairly well. ( ) They knew very little about their job.
82		What would you do if your supervisor showed favoritism toward some other worker? ( ) I would take it up with the people over him. ( ) I wouldn't say anything but it would gripe me. ( ) I wouldn't say anything because he might change sometime and show the same attitude toward me.
83		Under what conditions do you do your best work? ( ) When I know I'll get praised for a good job. ( ) If the job I'm doing makes me think about what I'm supposed to. ( ) When everything else is running smoothly.

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Item No. Prelim.	Item No. Final.	
84	44	What would you do if you couldn't get along with your fellow workers? ( ) I would probably blame them. ( ) I would probably blame myself. ( ) I would probably try to find the reason and correct it.
85		What would you do if another worker and yourself were given equal assignments and he knew his job but you had some questions about your job assignment? ( ) I would probably ask him for help. ( ) I would ask my supervisor for help. ( ) I wouldn't ask either of them because they might think I couldn't handle the work.
86		How would you compare yourself to other workers? ( ) I try to work harder than they do. ( ) I try to work about as hard as they do. ( ) I try not to work as hard as they do.
87	45	In general, how have you felt about most of your work? ( ) It has made me feel jumpy and nervous. ( ) It has meant just a pay envelope to me. ( ) It has given me a lot of self-satisfaction.
88		How would you compare the average worker to his supervisor? ( ) He is just as intelligent as his supervisor. ( ) He is less intelligent than his supervisor. ( ) He is just as intelligent but hasn't gotten the same breaks.

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Item No. Prelim.	Item No. Final.	
89	46	What would you do if you were a foreman and something happened on the job to put you on the spot? ( ) I would take the responsibility myself. ( ) I would shift the responsibility to my men. ( ) I would take it in my stride and try to keep it from happening again.
90		What would you think was the main reason if you failed on a job assignment? ( ) My fellow workers had it in for me and caused me to fail. ( ) I didn't have the necessary training. ( ) A person can't be a success in everything.
91	47	In which class would you put most of the companies you have worked for? ( ) The kind of company where a man could get ahead if he worked hard. ( ) The kind of company where top management really tried to help their workers get ahead. ( ) The kind of company where the workers were usually stuck for good in their beginning level.
92		On most of your jobs, who took the most interest in you? ( ) My fellow workers. ( ) My foreman. ( ) None of the people working with me ever took a real interest in me.
93	48	How do you usually feel when you work in a group with a lot of other men? ( ) I am friendly with most of them. ( ) I usually feel lonely even in a group. ( ) I usually have just one or two close friends.

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Item No.		
Prelim.	Final.	
94	49	What do you think the other members of a work team should do if one of them falls behind in his work? ( ) They should help him out all the time. ( ) They should help him out if his poor work would affect their rate of pay. ( ) They should ignore his poor work. Every man for himself.
95	50	What would you do if you suffered a minor accident at work, like cutting your finger? ( ) I would get it bandaged and go back on my job. ( ) I would ask the company doctor or nurse if I should take the day off. ( ) I would become so angry at myself that I couldn't continue to work.
96		Under which of the following job conditions would you like to work? ( ) Where the limits of the job are very carefully fixed with no chance of going outside these limits. ( ) Where you get just a general outline of the job without too many details. ( ) Where the job routine changes pretty often.
97	51	Which one of the following three do you think most men would do to get ahead on their job? ( ) They would lie if necessary. ( ) They would try to get ahead on their own merits but not at the expense of other workers. ( ) They would not consider other people at all.

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Item No. Prelim.	Item No. Final.	
98	52	How do you think most workers feel toward their bosses? ( ) Most workers respect their bosses. ( ) Most workers both respect and like their bosses. ( ) Most workers listen to their bosses because they have to, not because they respect or like them.
		Read each statement and then mark an "X" in the parentheses opposite the answer which best describes how you feel about the statement.
99	53	Some men like to work for a company where they have a chance for promotion to a higher level job. ( ) I would like to work for a company like that. ( ) I wouldn't like that because I don't think I'd stand a chance of being promoted. ( ) To me, any job is O.K. as long as I get my regular pay envelope.
100	54	Some workers like to feel an interest in the success of the company they are working for. ( ) I have felt that way about most of the companies I have worked for. ( ) I have never felt that way about any company I worked for. ( ) I don't think most companies care one way or another how their workers feel about the company.
101		Some older workers say that relations between the workers and bosses aren't as close as they used to be. ( ) I don't think bosses ever felt too close to their workers. ( ) I think they are wrong. I've always had the feeling my boss knew what I was doing and respected my work. ( ) I don't think there should be close relations because workers are in a lower class than bosses.

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102	55	Workers sometimes feel sore if another worker gets a raise and they don't. ( ) I don't feel that way. I think raises are usually given to the worker who is better or faster than the others. ( ) I would feel that way, even if I didn't deserve a raise, because all workers should be treated alike. ( ) If that happened to me, I would quit that company.
103		In some companies top management tries to instill a "company spirit" among its workers. ( ) I wouldn't fall for such propoganda. Companies are only interested in how much they can get out of their workers. ( ) I like that idea because I could do better work if I felt the company and I had the same interest. ( ) I would like to have that spirit but I can't seem to become part of any group I work with.
104		Sometimes I'm bothered about things not connected with my job but which do trouble me and I would like to talk to a supervisor about these problems. ( ) I would like to work for a company where you could talk to a supervisor about such problems. ( ) I don't think you should bother your supervisor with matters not connected with your job. ( ) I would be afraid to mention such things to my supervisor because he might think I was a chronic complainer.

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Item No. Prelim.	Final.	
105	56	To some workers the value their job has for the company is more important than other job considerations. ( ) I agree with them. I couldn't work at a job if I felt it didn't have an important place in the company's program. ( ) I don't think the importance of the job would make much difference to me. ( ) I would like to feel my work is valuable to the company, but so far I've had pretty low level and unimportant jobs.
106	57	Some workers worry a lot about their jobs when they get home. ( ) I'm like that. ( ) I do all my thinking about my job when I'm on it. ( ) I just do my job and don't worry about it at all.
107		Workers who favor unions say they do so because unions help workers get the recognition and status they should have. ( ) I'm in favor of any group that will get us the recognition and status we deserve. ( ) I don't see why status and recognition are so important; if the job pays well, that's all I want. ( ) I think a man's work should give him status in a company without outside help.
108	58	Work can sometimes be made easier if people help each other out, even if they have to go to some trouble to do so. ( ) Fellow workers usually like to help each other. ( ) Fellow workers don't like to put themselves out for each other. ( ) Fellow workers will help each other if there is something in it for themselves.

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Item No. Prelim.	Final.	
109	59	A job sometimes calls for you to work with both men and women. ( ) I would probably get along best if I worked only with men. ( ) I think I would like to work mostly with women. ( ) I think I could get along either way.
110		Friends sometimes tell me they mind not knowing what goes on in their company. ( ) I feel they should quit that company because it shows a lack of interest on the part of the company if they don't keep the men informed. ( ) I think they should just forget it. Workers don't have to share in the company's plans. ( ) I can sympathize with them because I feel insecure if I don't know what is going on.
111	60	Some workers get a lot of satisfaction from their job because they feel the work they are doing is important to their company. ( ) To me, that's not important. Just do your work, keep out of trouble and get your pay. ( ) I agree with them. I couldn't work for a company if I felt the work I was doing meant nothing to the firm. ( ) I'd like to feel my work is important to the company, but most companies don't care enough to give their workers that feeling.
112	61	Older workers sometimes won't help newer workers with their job problems. ( ) I think they are wrong because you should try to be helpful when you can. ( ) I think they are right because they had to learn what they know, the hard way. ( ) I think this is just another example of every man for himself.

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Item No. Prelim.	Final.	
113		There are some workers who try to cheat or trick others for their own benefit. ( ) On most of my jobs I have worked with someone like that, who plotted against me. ( ) I have sometimes worked with a person like that. ( ) I have never met anyone like that in my work.
114		Some companies are run like the Army; all workers have to act alike. ( ) I would like to work in such a company; you don't have to try to be different. ( ) I don't think I could stand that. I would like to be able to express my own ideas. ( ) As long as everyone was treated fairly, I don't think it matters whether you can express your own ideas.
115		Some companies give their workers bonuses, raises and other benefits as though they were handing out gifts. ( ) I would resent that because workers deserve these benefits for the work they do. ( ) I would accept them in the spirit offered because top management doesn't have to be generous to their workers. ( ) I would refuse to take charity from my company.

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TOMKINS-HORN PICTURE ARRANGEMENT TEST

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