To the Graduate Council:

I am presenting herewith a dissertation written by Douglas P. Massengill entitled "An Investigation of the Relationship between Extrinsic and Intrinsic Outcomes and Anticipated Job Satisfaction, Attitudes toward Management, and Attitudes toward Unions." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Organizational Psychology.

Michael E. Gordon, Major Professor

We have read this dissertation
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AN INVESTIGATION OF THE RELATIONSHIP BETWEEN EXTRINSIC AND INTRINSIC OUTCOMES AND ANTICIPATED JOB SATISFACTION, ATTITUDES TOWARD MANAGEMENT, AND ATTITUDES TOWARD UNIONS

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ABSTRACT

One hundred sixty-seven trainees at a vocational training school were provided with job descriptions in which the levels of intrinsic and extrinsic outcomes along with whether or not the jobs were unionized were varied. Ss then completed questionnaires to assess anticipated reactions to the jobs.

It was predicted that both intrinsic and extrinsic outcomes would be related to anticipated job satisfaction, that whether or not a job was unionized would moderate the relationship between extrinsic outcomes and anticipated attitudes toward management, that only extrinsic outcomes would be related to anticipated attitudes toward a union, and that only extrinsic outcomes would be related to anticipated desire for union representation.

The results of a series of 2x2x2 and 2x2 ANOVA's supported all but the prediction that whether or not the job was unionized would moderate the relationship between extrinsic outcomes and anticipated attitudes toward management. The relationship between extrinsic outcomes and desire for union representation was somewhat complex, in that when the job was already unionized, it was positive in direction, but when the job was not unionized, it was negative.

Results were interpreted to provide evidence that both intrinsic and extrinsic outcomes are important determinants of satisfaction with the job and positive attitudes toward management, but only extrinsic outcomes are important in determining positive attitudes toward a union

and desire for union representation. Relationships between the dependent variables provided evidence for the concept of dual allegiance to management and union.

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CHAPTER I

INTRODUCTION

Since the founding of the American Federation of Labor in 1886 (Peterson, 1963) the purpose of trade unions has been to defend the rights of the working person and secure for him/her as large a portion of the "fruits of his/her labor," i.e., financial benefits, as possible. These responsibilities have held organized labor in good stead through the last 90 years and have provided ample "raison d'etre" for the unions.

Questions are now being asked, however, as to whether pay and other financial rewards are enough to fully compensate a person for spending one third of his/her day in the workplace. Are high wages, fringe benefits, and job security enough to compensate for a repetitive, monotonous job which provides little sense of achievement? Do workers see their unions instrumental in providing interesting jobs that challenge their full abilities? If not, do workers expect and desire their unions to take an active part in providing for improved job content?

Worker Attitudes

Much controversy exists as to whether a large segment of the nonprofessional-nonmanagerial work force are dissatisfied with their work in general. The existence of widespread dissatisfaction is proclaimed by two recent major publications: Work In America (Special Task Force to the Secretary of Health, Education, and Welfare, 1973) and

Where Have All the Robots Gone (Sheppard and Herrick, 1972). Evidence is presented in both which substantiates the claims of their authors.

Work In America (Special Task Force to the Secretary of Health, Education, and Welfare, 1973, pp. 3-6) reports that if given a choice only 43% of white collar workers and 24% of blue collar workers would remain in their present jobs. When asked what they would do with the extra two hours if there were 26 hours in a day, one in twenty nonprofessional workers reported that they would spend it in work related activities as opposed to one out of four lawyers and two out of three college professors.

Work In America also reported other evidence. White collar turnover rates were as high as 30%; white collar unionization had increased 46% between 1958 and 1968; and in a survey of office workers, respondents reported that they were producing at only 55% of their potential. Interviews with workers in heavy industry found large numbers of workers who reported that they had to consume great quantities of alcohol in order to withstand the boredom of their jobs, and 15% of a United Auto Workers local of 3,400 people were found to be addicted to heroin.

Sheppard and Herrick (1972) reported that out of a national sample of 709 blue collar workers and 753 white collar workers the percentages expressing negative attitudes about their work were 17% and 13% respectively. This classification was based on the responses to two sets of questions. The first set was composed of questions to ascertain the following:

1. How the job measured up to what the worker wanted when he first took it.

2. How much the worker had achieved since leaving high school.
3. How far ahead was the worker in achieving the things he wanted out of life as compared to 10 years ago.

The second set consisted solely of a question as to the worker's perceived probability of promotion to a better job.

Work In America (Special Task Force to the Secretary of Health, Education, and Welfare, 1973, p. 13) characterized the "blue collar blues" as general apathy towards life itself. This is evidenced by several characteristics. Either nonparticipation in elections or by voting for protest candidates is one manifestation. A belief among workers that the condition of the average person has been getting worse over the years is yet another. Workers also seem to be becoming more authoritarian. The dissatisfaction of the worker manifests itself in feelings of inferiority so that he/she is unable to talk proudly to his/her children about work. Apparently many feel that they must apologize for their status.

The conclusions of Work In America have been challenged by several writers. Chapman (1974) reported the results of a review done by Robert Kahn of the University of Michigan. After analyzing nearly 2,000 surveys, he found that most people were neither very satisfied nor very dissatisfied with work, but were on the positive side of neutral. From the most reliable of the surveys (including only working males over 21 years old), it was found that the percentage reporting satisfaction had increased from 81% in 1958 to 91% in 1973. The results of a 1973 Gallup Poll suggested a slight decline in satisfaction, but it included housewives, students, and part-time employees.

Kristol (1973) took issue with the methodology used by Work In America in inferring widespread dissatisfaction. He pointed out that if an employee says that he/she is satisfied with his/her job but would change for something better, he/she is considered alienated. If a factory or office worker says that he/she is not as fascinated by his/her tasks as a doctor or lawyer is, they are considered alienated. If a worker says that he/she would choose a different line of work if he/she could start over again, he/she is considered alienated.

Kristol went on to say that unfulfilled aspirations and inclinations to daydream, to engage in wishful thinking, or express regret for lost opportunities are characteristics quite common for most persons. He maintains that it is ridiculous to expect ordinary working people to be as content with their jobs as are professionals.

A different approach has been to look at statistical indicators of worker satisfaction (Henle, 1974; Wool, 1973; Kaplan, 1975). Trends in turnover, absenteeism, strikes, productivity, and labor force participation have failed to support the contention of decreasing satisfaction. Any variation in these indices can be accounted for by factors such as economic conditions. Only in the automobile industry does there seem to be a relationship between absenteeism and satisfaction.

If worker dissatisfaction is a widespread phenomenon, then social scientists ought to turn their attention to the root causes of this dissatisfaction. Work In America (Special Task Force to the Secretary of Health, Education, and Welfare, 1973, pp. 13-16, 36-39) attempted to supply one such explanation. It began by defining work as engaging in

activities that produce something valued by other people. The workplace then becomes the major source for personal evaluation. A person draws heavily upon the work experience in his/her development of self esteem because through the use of his/her abilities a worker can acquire mastery over himself/herself and his/her environment. Working tells a person that he/she has something of value to offer others.

Work In America (pp. 17-23) then contended that it is the nature of the work itself that is causing dissatisfaction. Jobs in many cases have become so specialized and routinized that they rob the worker of any use of his/her abilities or skills. There is also less autonomy today since more people are working for others instead of for themselves.

Evidence of the importance of actual work factors compared with the economic factors of a job was presented from the results of the Michigan Survey Research Center (MSRC) study on work satisfaction (Special Task Force to the Secretary of Health, Education, and Welfare, 1973). Interesting work was found to have the highest mean importance rating. In fact six of the first eight factors were related to work content. In order of importance the eight factors were:

1. Interesting work.
2. Enough help and equipment to get the job done.
3. Enough information to get the job done.
4. Enough authority to get the job done.
5. Good pay.
6. Opportunity to develop special abilities.
7. Job security.
8. Seeing the resultsof ones work. (p. 13)

Other observers have speculated about the basis for dissatisfaction. Myers (1970, pp. 55-95) traced the development of work from prehistoric man, to whom working was synonomous with living, through the industrial

revolution, to the present time. He contended that from the time one man sold his labor to another for a salary there has been a steady decay of the meaningfulness of work. With the advent of scientific management, time and motion studies, and specialization, many workers have been reduced to "automatons" at the service of an unrelenting master—the assembly line.

Another person who has spoken out on the issue of worker dissatisfaction is Fein (1973). He pointed out that in determining the importance of work factors, data was averaged across different types of jobs—from managerial to blue collar. He reanalyzed the data from the MSRC study by type of job held by respondents and compared those results to that of the overall sample. He distinguished three types of blue collar jobs: (1) factory, (2) structural, and (3) miscellaneous and trucking. Where interesting work was ranked first in importance by the overall group, it ranked seventh, fifth, and third respectively for the blue collar groups. Pay was fourth in importance for the overall sample but increased to first and a tie for first for the last two blue collar groups. For factory workers it remained fourth.

Fein also pointed out the difficulty in trying to distinguish the relative importance of pay and interesting work in determining job satisfaction. The most interesting, socially desirable jobs are usually the ones with the highest salaries. The occupants of these jobs on the average show higher satisfaction. This satisfaction may result from either the pay or from the interesting work. Construction workers are the highest paid blue collar workers and only one in twenty are

dissatisfied. On the other hand, they are also one of the last groups that work with their hands and own their tools.

Increasing availability of interesting work will not compensate for a desire for increased pay according to Fein. He contended that pay can go far in making up for poor working conditions. As an example, he cites the case of the New York garbage collectors. These jobs required heavy labor, many times under adverse weather conditions, and status was considered low. It was a difficult problem finding people to work at the jobs until the salary was raised to $10,500 per year. Now there are waiting lists for the jobs.

While the above example would leave much to be desired as far as experimental design is concerned, in that it was a "before and after" type of approach with no control group, it presents as valid a case as some of the alternative solutions to job dissatisfaction to be discussed later. The important result to be remembered is that an undesirable job became desirable not through changing the content of the job itself, but by increasing the financial rewards associated with it.

Others have questioned the basic premise of Work In America—that job content is the most important aspect of work. Kaplan (1973) stated that the belief that man wants to self actualize in his job is based on ethico-religious beliefs and philosophical suppositions about the nature of man. He cited studies that show many people do not seek more interesting, responsible jobs; work may not be a central life interest for all workers; and that some workers can be satisfied with routine or repetitive jobs. The contention was made that economic advancement is

the primary concern of many workers. This point of view is held also by Strauss (1974). He contended that lack of challenge is less oppressive than lack of income, and that if paid enough people can tolerate much boredom. Simpson (1975) agreed when he stated that the primary reason for working is to make a living.

A more rigorous research approach has been taken by some investigators in attempting to determine the importance of intrinsic aspects of the job. Studies which have been designed to test the two factor theory of job satisfaction (Herzberg, Mausner, and Snyderman, 1959) have usually found that intrinsic factors contribute more to overall job satisfaction than do extrinsic factors. For example, Graen (1968) found that intrinsic factors were associated with from 10 to 27% of the variance of total satisfaction while extrinsic factors were associated with 3 to 8%. However, he used pay as the only extrinsic factor and promotion and work itself as the intrinsic factors.

A more complete study was done by Weissenberg and Gruenfeld (1968). They used recognition, achievement, work itself, advancement, and responsibility as intrinsic factors and department policy, technical competence of supervisor, working conditions, interpersonal relations with peers, and pay as extrinsic factors. The results were that intrinsic factors accounted for 49% of the variance on an overall satisfaction scale and extrinsic factors accounted for 36%.

Halpern (1966) found no difference in the mean amount of intrinsic or extrinsic satisfaction in a group of workers. He did find, though, that the mean correlation of the intrinsic factors with an overall

measure of job satisfaction was 0.66 while the mean correlation of extrinsic factors with overall satisfaction was 0.40.

Ewen, Smith, Hulin, and Locke (1966) took a different approach in assessing the contributions of intrinsic and extrinsic satisfaction to overall satisfaction. They distinguished one group which was neutral on extrinsic satisfaction and high on intrinsic satisfaction and another group which was high on extrinsic satisfaction and neutral on intrinsic satisfaction. They found that the group high on intrinsic satisfaction indicated a significantly greater amount of overall satisfaction than did the group high on extrinsic satisfaction. From these results they concluded that intrinsic satisfaction contributed more to overall satisfaction than did extrinsic satisfaction. Graen (1966) reanalyzed the same data using a two-way analysis of variance. He found intrinsic satisfaction to account for 18% of the total satisfaction variance and extrinsic satisfaction to account for 2%.

The primary problem with the preceding five studies is that for the most part, measures of satisfaction with the various aspects of the jobs were correlated with measures of overall job satisfaction. The worker's reaction to the intrinsic aspects of his/her job, rather than the degree to which intrinsic outcomes were present, was related to overall satisfaction. It is possible that a job may have been low on intrinsic outcomes and yet the worker was satisfied with this situation. This being the case, a job low on intrinsic outcomes may have led to high overall job satisfaction.

Other studies have taken a more direct approach. Hackman and Lawler (1971) obtained responses from workers in 13 different jobs within a

telephone company. Jobs ranged from directory assistance operators to installer-repairers. Jobs were scaled on amount of autonomy, variety, task identity, and feedback, which the authors contended are the four core job factors needed to affect intrinsic motivation and satisfaction. All four of the job characteristics were positively related to job satisfaction and motivation. Brief and Aldag (1975) replicated the above results.

Lawler, Hackman, and Kaufman (1973) evaluated a program designed to increase autonomy, variety, task identity, and feedback in the jobs of directory assistance operators. Measures of the four variables, however, showed that only variety and autonomy had been significantly changed. No significant increases in satisfaction or motivation were detected. The authors attributed the negative attitudinal results to the fact that only two of the four core characteristics had changed.

Job Enrichment as a Solution to Worker Dissatisfaction

Regardless of the actual attitudinal and behavioral consequences, it is a fact that many jobs today can be characterized as specialized, routine, and repetitious. At least as recent as the mid-1950's this trend seems to have been the explicit goal in the design of the jobs (Davis, Canter, and Hoffman, 1955). To alleviate these conditions many people have championed a program called job enrichment (e.g., Herzberg, 1968; Ford, 1969; Myers, 1970). Job enrichment is intended to put back into work those things which make it meaningful and a source of satisfaction. Not only is worker satisfaction increased, but also

productivity should increase because enriched jobs tap the full potential of the worker.

Essentially, job enrichment is a vertical restructuring of the job so that it includes such things as planning, inspection of the product, and upkeep of any machinery. These activities would be in addition to expanding the variety of things done in performing the actual job (Myers, 1970). In general, this is what social scientists mean when they refer to "improving" job content. Job enrichment is thus to be distinguished from job enlargement. Job enlargement consists of incorporating more tasks at the same level into a job.

Job enrichment projects have been instituted with considerable success in several organizations (Arthur, 1973; Beer, 1973; Ford, 1973; Vough, 1973; Walton, 1972). That they have been successful does not necessarily mean that their effectiveness has been proven. In the first place, evaluation is often made on a before and after basis in much the same way that was mentioned in the New York garbage collectors case. Secondly, the organizations which have shown the greatest increases in productivity have instituted incentive plans along with job enrichment, whereby any improvements made in the work process leads to increased financial rewards for the worker. A good example of this is Donnelly Mirrors (Arthur, 1973). In order to institute increases in salary or other financial rewards, the employees have to "pay" for them with increased productivity.

Organized Labor's Response to Job Enrichment

The traditional bargaining role of unions has been in the area of job security and wages. These are the so-called "bread and butter" issues. It remains to be determined what part, if any, unions should play in the development of increased satisfaction with work itself.

There is evidence that organized labor has always been an influence, albeit an indirect one, in determining the content of jobs (Levitan & Johnston, 1974). This has been accomplished through such things as limiting production rates, protection of jobs, and concern for health and safety standards. Because of unions, employers no longer can demand maximum productivity for minimum rates. Pay rates are used to determine how much work must be done and how fast. Bargaining over number of workers on a job may influence the number of breaks a worker gets from the assembly line, intervals of repetition, and speed of operation. The enactment of health and safety standards have placed limits on the types of operations a worker may be called upon to do. Many times this is what labor leaders mean when they refer to "improving jobs."

Involvement of a more direct nature was documented by Gomberg (1973). He pointed out that the machinist unions led the fight against scientific management in order to maintain a more satisfying quality of working life. The arguments were that scientific management:

1. Tends to deprive worker of thought, initiative, achievement, and joy in work.
2. Tends to eliminate skilled crafts.
3. Is destructive of mechanical education and skill.

4. Tends to deprive worker of possibility of learning a trade.
5. Condemns worker to a monotonous routine.
6. Dwarfs and represses worker intellectually.
7. Tends to destroy the individuality and inventive genius of the worker.
8. Stimulates and drives the workers up to the limits of nervous and physical exhaustion and over fatigues and over strains them.
9. Tends to reduce workers to complete dependency on employer.

Organized labor's view of job enrichment today may be different. One of the leading critics of job enrichment is W. W. Winpisinger, Vice President of the International Association of Machinists (Winpisinger, 1973a). He argued that the major source of satisfaction in a job is a wage that is commensurate with the worker's skill. A major source of dissatisfaction is a lack of control over working conditions. Workers become alienated by rearrangement of job assignments or changes in existing work schedules without consulting the workers.

Some writers have interpreted the fact that younger workers appear to be less satisfied than older workers as an indication of rising expectations and increased educational opportunities (Guiles, 1972; Sheppard & Herrick, 1972, pp. 5-6; Walton, 1972). Winpisinger (1973a) took an opposing view and contended that older workers are more satisfied because they have accrued more of the advantages for which unions have fought. Such things as better wages, shorter hours, vested pensions, a right to have a say in working conditions, and promotion based on seniority are ". . . the kind of job enrichment that unions believe in" (p. 56).

A different unionist view about the importance of job enrichment comes from Dalena (1974), a steelworker who is editor of the Fairless Union News. He stated that workers are not bored but frustrated. Instead of job enrichment to increase motivation, they need the feeling that someone cares about them, feedback, and the feeling that the company needs them as much as they need the company. They need their "worklives" enriched, not their jobs.

On the other side of the coin are those union leaders who feel that job enrichment is an important issue. Fraser, Vice President of UAW, Chrysler, warned management that if they did not join the unions in discussions about improving the quality of jobs, it would become an issue for the bargaining table in 1973 (Automotive Industries, October 15, 1972). He said that mass production techniques have turned workers into "industrial automatons." Jennings, President of the International Union of Electrical Workers, suggested that there should be more emphasis on the worker's using his potential and imagination. He suggested that unions should take a more active part in promoting job enrichment because it is more their problem than management's problem (Guiles, 1972). Bluestone, Vice President of UAW, General Motors, stated that ". . . even a good paying job can be a boring, deadly, routine drag" (Iron Age, January 4, 1973, p. 23).

However, much of the preceding appears to have been "lip-service" to the issue of need for work improvement. Mushrock (1972) concluded that job satisfaction is an issue that labor unions would rather not talk about. He reported that Bluestone thinks there is need for "very deep

discussion and talk over a long period of time" (p. 28). Another contradiction is the statement of Jennings (Iron Works, April 26, 1973) that economic issues were of the main importance in talks with General Electric and Westinghouse. No mention was made of job enrichment issues. The United Auto Workers and the International Association of Machinists in stating their legislative goals for 1974 ignored such things as The Worker Alienation Research and Technical Assistance Act of 1973 (Industry Week, April 1, 1974). In their platform statement to the 1972 Democratic National Convention, the American Federation of Labor and Congress of Industrial Organizations (1972) covered issues ranging from national economy and jobs to foreign policy and defense. Conspicuously missing were issues involving the quality of work. In reviews of bargaining gains organized labor had made the previous years, no mention was made of job content areas (Galleher & Roth, 1974; Galleher & Mason, 1975; Hershfield, 1975).

Blum, Moore, and Fairey (1973) analyzed current contracts of 110 unions for the years 1970-71. These contracts included 12,100 clauses, of which only 11 indicated any formal attempts to influence worker motivation. These 11 clauses represented only 0.09% of the total clauses. Even these clauses addressed themselves more to such things as discretion in work schedules and individual incentive plans than to real enrichment issues.

These results are dated by four years, but even at that time job enrichment and employee satisfaction were issues that were being given considerable attention. A more contemporary example can be seen in the

contract talks between the United Auto Workers and Chrysler Corporation. The main areas of disagreement were wage increases, pension increases, and voluntary overtime (Iron Age, September 20, 1973). Voluntary overtime is the only one of the three that could remotely be considered related to a job enrichment point of view. Yet when agreements were finally made, considerable compromises were made in this area (Iron Age, October 11, 1973). Overtime was made voluntary after nine hours each day and on Sundays. This outcome developed in spite of the fact that there had been a precedent for voluntary overtime set in two plants of American Motors since 1969 (Iron Age, August 9, 1973).

Also important are the opinions of outside observers on the role unions have played in improving the content of jobs. Tchobanian (1975) stated that trade unions in the United States show the most resistance to job enrichment compared to unions in other countries. This, he felt, was due principally to a feeling on the union's part that job enrichment undermines seniority rules.

> For the AFL-CIO, criticism of job enrichment appears to be related to the need to defend a system in which seniority rules enable the union to exercise effective control over work organizations. (p. 213)

Levitan and Johnston (1974) also saw little involvement by American trade unions. They stated that "the motivational force behind virtually every experiment has been management. . . . Numerous efforts have been made to 'enlist union support' or to 'stimulate union initiative,' but so far the ball has been carried by those outside labor" (p. 21). Kassem (1970) implied a "hands off" attitude to job enrichment when he wrote:

> Organized labor has left to management the problem of increasing satisfaction on the job. It has left to society the problem of increasing satisfaction off the job. (p. 35)

There appear to be reasons why unions have taken what seems to be an ambivalent attitude towards job enrichment—an attitude which runs from active opposition to passive acceptance. Generally the negative responses can be categorized into questions about "management purposes" and "worker support."

Myers (1971) maintained that unionism can be considered a response to ineffective management. In this context, Bourn (1972) felt that the lack of intrinsic rewards cause undue emphasis to be placed on economic rewards, with workers channeling their dissatisfactions into grievances. The role of unions is then to handle these grievances.

Myers (1971) felt that job enrichment is the only realistic strategy to prevent unionization. According to him, "job enrichment has enabled managers to transform potentially hostile creativity into constructive outlets before it was able to crystallize into concerted antimanagement efforts," i.e., unionization. "Synergistic satisfaction of individual and organizational goals eliminate the alienation from which unions prosper" (p. 38).

Another view is that held by Sherman (1969). He contended that it is feelings of powerlessness and meaninglessness rather than economic reasons that cause workers to unionize. Unions, he said, promise to overcome these conditions. He proposed job enrichment as one means to prevent unionization.

Blum et al. (1973) stated that some people feel that motivation is an individual process and that, therefore, unions should not become

concerned since they deal only with group programs. Unions have always stressed solidarity and the group rather than the individual worker. Job enrichment programs are frequently viewed as devices which link management and the worker in a symbiotic relationship and reduces worker identification with solidarity and the concept of "group before the individual."

In some cases it is felt that the purpose of management is to increase productivity and profits rather than something as altruistic as job satisfaction (Winpisinger & Herrick, 1973). Uniosn feel that managers are taught to do only one thing—make profits. They feel that satisfaction with the job is no substitute for satisfaction with the pay check. According to Winpisinger (1973b), "If you want to enrich the job, enrich the pay check" (p. 9).

The second major issue at hand with regard to positive union action on job enrichment is the degree to which the unions feel that workers would support such action. No union leaders want to put themselves "out on a limb" unless they are sure that the rank and file are there to hold it up. Woodcock, President of the UAW, denied that worker alientation is a strike issue.

> Those who contend that boredom and monotony are the big problems among assembly workers are writing a lot of nonsense. (Iron Age, January 25, 1973, p. 19)

Winpisinger stated that "in my years as a union representative . . . never once have I carried into negotiations a membership mandate to seek job enrichment" (Baxter, 1973, p. 36). Levitan and Johnston (1974) also felt that the unions will not take a direct role in job enrichment until

the rank and file workers are concerned enough, which at present they are not. It was their opinion that "neither the unions nor their members feel the issue is currently important" (p. 21).

Statement of the Problem

It appears that by and large organized labor (for whatever its reasons) has divorced itself from attempting to provide intrinsic job rewards for its members. This leaves several questions to be answered, with some important and sometimes subtle implications for the labor unions.

As discussed above, unions do not generally feel that job enrichment is a matter of importance to most workers. However, there is some evidence that union leaders may not be as much "in touch" with the rank and file member as they would like to be. Lawler and Levin (1968) found that union officers at two companies significantly overestimated member preference for salary increases when the members were asked to indicate how they would allocate a possible $200 increase over ten alternatives (e.g., salary increase, more paid holidays, increased insurance benefits, etc.), which were all of a financial nature. On the other hand, Gluskinos and Kestleman (1970) found that union officers underestimated the ranked importance of interesting work, for both white collar and factory workers. In a cross cultural study of New Zealand workers (Howells & Brosnan, 1972) union leaders underpredicted worker preference for improved working conditions and training for advancement.

While in the above studies there were fairly high overall agreements between officer predictions and worker preferences (other

than the specific instances mentioned), it should be noted that the union leaders consisted of officers and stewards at the local level who were both very similar to the rank and file demographically and in everyday contact with them. Sheppard and Herrick (1972) conducted a survey which included 49 presidents of international unions. Union officials ranked the importance of improvement in the areas of interesting and satisfying work lower than did both white and blue collar workers.

Therefore, the first hypotheses to be tested by the present research are that anticipated overall job satisfaction will be affected by both intrinsic and extrinsic outcomes of the job. Stated formally:

Hypothesis Ia. There will be a positive relationship between the level of extrinsic outcomes provided by a job and anticipated overall job satisfaction.

Hypothesis Ib. There will be a positive relationship between the level of intrinsic outcomes provided by a job and anticipated overall job satisfaction.

Due to its history of improvement in the financial conditions and security of the American worker (Rubin, 1974) and the usual issues which unions base their organizational efforts, it is predicted that workers will see the union as an external force which at least partially influences management to provide those high levels of economic benefits which they receive from the job. On the other hand, due to organized labor's reluctance to become involved in job content areas, it is questionable as to whether the worker will see any relationship between

the effort of his union and any intrinsic outcomes he derives from the job. If a job is high in intrinsic outcomes, the worker may attribute them solely to management, or at least not consider the union as instrumental in their attainment.

The role of the union as an external pressure agent should have a moderating effect upon a worker's anticipated attitudes toward management due to what Kelley (1972) describes as the discounting principle. This principle states that if there are two or more possible causes for any given effect, a person will perceive less of a relationship between a given cause and the given effect than he would if the given cause were the only one possible. In this case, if a union is seen as an outside pressure, rewards from the job will be seen less as coming from some internal (possibly altruistic concern for the worker) motive on the part of management.

Considerable evidence (Thibaut & Riecken, 1955; Ring, 1964; Goranson & Berkowitz, 1966; Thompson, Stroebe, & Schopler, 1971; Greenberg & Frisch, 1972) has shown that a person will tend to exhibit more positive affect towards someone they perceive to be giving rewards for internal motives (e.g., genuine liking of the person) than to someone perceived to be giving rewards for some external reason (e.g., influence from an outside agent). Therefore, it is predicted that anticipated positive attitudes toward management under conditions of high extrinsic outcomes will be less if a union is present than if a union is not present. On the other hand, the presence of a union should have no effect upon the relationship between intrinsic outcomes and anticipated attitude towards

management since the union will not be seen as an external influence on management pressuring them to provide those rewards. The first hypothesis is:

Hypothesis IIa. Presence or absence of a union will moderate the relationship between degree of extrinsic outcomes and anticipated attitude towards management such that high extrinsic outcomes will result in less positive attitude towards management when there is union representation than when there is no union.

The second prediction will be stated as the null hypothesis:

Hypothesis IIb. Presence or absence of a union will have no effect on the relationship between degree of intrinsic outcomes and anticipated attitude towards management.

It should be noted at the outset that support for Hypothesis IIb will be evidence of workers' viewing unions as noninstrumental in providing intrinsic rewards only if Hypothesis IIa is supported.

A third matter of importance concerns the extent to which workers feel that their unions should become involved in exerting an influence to improve the content of their jobs. If the workers do not give credit to the unions if intrinsic rewards are high, this may not necessarily mean that the union is absolved of all blame if the intrinsic rewards are low. On the other hand, there should be a clear relationship between extrinsic outcomes and attitude towards the union. Due to past history and current practices, it is predicted that workers will express a less positive attitude towards their union if extrinsic outcomes are low than if extrinsic outcomes are high. This hypothesis is stated as:

Hypothesis IIIa. There will be a positive relationship between extrinsic outcomes and anticipated attitudes towards the union. Regarding intrinsic outcomes, there is no concrete basis for prediction, but in order to be nominally consistent with Hypothesis IIb (though the second does not necessarily follow from the first) the null hypothesis will be stated:

Hypothesis IIIb. There will be no relationship between intrinsic outcomes and anticipated attitudes towards the union.

Finally, there is the issue that might be of greatest concern to organized labor (as well as to management)—whether or not improvement in job content precludes the need for a union. As discussed earlier, Myers (1972) felt that "enriched jobs" will produce such a harmony between management and the worker that formal organization is unnecessary. He even cited the occasion in which workers voted against their former union after moving to restructured jobs. Labor, while they might see job enrichment as an anti-union effort on the part of management (Mills, 1973; Schappe, 1974), would argue that improved job content would not negate the need for a union.

Therefore the present study will investigate desire for union representation as a function of both intrinsic and extrinsic outcomes. This will be determined in both the cases of the workforce being currently unionized and nonunionized. In the former case respondents will be asked to indicate how likely it would be for them to vote to decertify the union. In the latter case respondents will be asked to indicate the likehood of their voting for unionization. Due to the

past history of labor unions in improving the financial aspects of jobs, it is predicted that the lower the extrinsic outcomes provided by a job the more the worker will desire a union.

Hypothesis IVa. There will be a negative relationship between extrinsic outcomes and anticipated desire for a union.

On the other hand, level of intrinsic outcomes should have no effect on desire for a union.

Hypothesis IVb. There will be no relationship between intrinsic outcomes and anticipated desire for a union.

CHAPTER II

METHODOLOGY

Subjects

Ss were 167 male trainees in five vocational areas at the Knoxville State Area Vocational Technical School. The five areas were automotive mechanics, industrial electricity, machining, refrigeration mechanics, and welding. This group of Ss was chosen for the following reasoning. In order to make the treatment condition of "unionized" vs. "nonunionized" realistic it was necessary to pick subjects who might reasonably be expected to enter unionized jobs. Persons enrolled in vocational trade training fulfill this requirement.

Experimental Treatments

Eight job descriptions were formulated for each vocational area. These job descriptions were written such that each corresponded to a separate cell in a 2x2x2 classification matrix. Two job descriptions presented high intrinsic outcomes and high extrinsic outcomes; two, high intrinsic and low extrinsic; two, low intrinsic and high extrinsic; and two, low intrinsic and low extrinsic. In each pair described above one of the jobs was presented as having union representation by an appropriate national labor organization and one was presented as being nonunionized.

For the extrinsic outcome factor, levels of salary, vacation, holidays, medical protection, and retirement benefits were varied. Job security was presented as being high in all conditions. The theoretical

model developed by Hackman and Oldham (1975) was used as the basis for manipulating intrinsic outcomes. Their model states that in order for a job to be intrinsically rewarding it must be high in the following areas:

1. Skill Variety—the extent the job requires the worker to do many different things using a number of different skills and talents.
2. Task Identity—the extent the job involves doing a complete piece of work.
3. Task Significance—the extent that the results of the work is likely to affect the lives or work of other people.
4. Autonomy—the extent the job permits the worker to decide on his/her own how to go about doing the work.
5. Feedback—the extent that the job itself provides the worker with information about his/her work performance.

Since Ss were to be utilized from five areas of vocational training it was necessary to formulate ten different descriptions of job duties—one "high intrinsic" and one "low intrinsic" for each vocational area. The Dictionary of Occupational Titles, Part I (United States Training and Employment Service, 1965) was used to provide the basis for all of these descriptions except "low intrinsic-automotive mechanic." Job descriptions were chosen according to their ratings on two of the three classification factors in the Dictionary of Occupational Titles—relationship to Things and Data. The job descriptions used are presented in Appendix A.

To summarize, the treatment conditions comprise a 2x2x2 factorial design with the factors being intrinsic outcomes (IO), extrinsic outcomes (EO), and presence of union (PU). A diagram of this classification matrix is presented in Figure 1.

Instrumentation

There were four dependent variables of interest in the present research. They were (1) anticipated overall satisfaction with the job, (2) anticipated attitude towards management, (3) anticipated attitude towards the union (only in the jobs with union representation), and (4) desire to have union representation.

Anticipated overall satisfaction with the job (JOBSAT) was assessed by asking Ss to indicate on a 5-point scale how satisfied they felt they would be if they were working at the described job.

To assess anticipated attitudes toward management and the union, Ss were asked to rate each of the groups with a semantic differential scale (Osgood, Suci, & Tannenbaum, 1957). This type of scale consists of a set of pairs of bipolar adjectives which a respondent uses to describe some concept of interest.

The semantic differential has proven to be a valuable tool in the measurement of attitudes in and about the workplace. For example, it has been used successfully to differentiate between members of management and union officers in their attitudes toward certain industrial relations terms (Schwartz, Stark, & Schiffman, 1970; Schwartz, Schiffman, & Stark, 1972). More directly applicable to the present research was the use of

	High Extrinsic		Low Extrinsic	
	High Intrinsic	Low Intrinsic	High Intrinsic	Low Intrinsic
Union Representation				
No Union				

Figure 1. Diagram of Treatment Conditions.

the semantic differential to measure attitudes toward "Top Management" (Scott, 1967; Swasey, 1970; Scott & Rowland, 1970).

Scott (1967) used 31 adjective pairs to assess "morale" as it applied to attitudes toward "Top Management." After performing a factor analysis, he found that the factor accounting for the most variance was one that he considered evaluative in nature. Of the 31 adjective pairs, 11 had a factor loading of 0.40 or higher. These 11 pairs were used as the major portion of the semantic differential to assess anticipated attitudes toward management and toward the union:

Flexible—Inflexible	Obstructive—Helpful
True—False	Insensitive—Sensitive
Permissive—Restrictive	Regressive—Progressive
Reasonable—Unreasonable	Impractical—Practical
Ungrateful—Grateful	Unsociable—Sociable
Disliked—Liked	

In addition to the above pairs, two other pairs were also included in the scale. These were Good—Bad and Weak—Strong. Ratings on all the adjective pairs except Weak—Strong were combined into overall scales of anticipated attitude towards management (SUMMAN) and anticipated attitude towards the union (SUMUN).

The Weak—Strong item was not included in the SUMMAN and SUMUN scales because it was felt that this perception was not evaluative in nature but rather might affect or be affected by the evaluative attitudes. For this reason it was included in the study to investigate its relationship with the other dependent variables.

In addition to the semantic differential, direct measures of anticipated attitude towards management and towards the union were obtained. Ss were asked to respond to a question about how well they felt they would like management (ATTMAN) and how well they felt they would like the union (ATTUN).

To assess the Ss anticipated desire for union representation (DESUN) one of two questions was asked. In the "Union Representation" condition the Ss were asked to indicate the probability of their voting to get rid of the union should an election be held to decertify the union. In the "No Union" condition the Ss were asked to indicate the probability of their voting for union representation.

Since it is possible that a Ss generalized opinion about organized labor will affect his specific ATTUN, SUMUN, and DESUN in the hypothetical job situation, Newcomb's (1939) Attitude Towards Labor Scale (ATTLABOR) was administered. Scores on this scale were used as a covariate to adjust for any between cell differences in ATTLABOR in the analyses using ATTUN, SUMUN, or DESUN as the dependent variable.

Finally, two sets of items were used to check the treatment effects of the job descriptions on perceived intrinsic outcomes and perceived extrinsic outcomes. This was necessary to determine if Ss were reacting to the job descriptions in the manner intended; e.g., whether a high IO—low EO description was actually perceived as being high in intrinsic outcomes and low in extrinsic outcomes. Each of the extrinsic outcomes was rated on a 5 point scale from very good to very poor. A portion of Hackman and Oldhams (1974) Job Diagnostic Survey was used for rating the jobs on the intrinsic outcomes.

In addition to the above scales biographical information was obtained for each subject. All scales are shown in Appendix B.

Procedure

Questionnaires were administered to the Ss during class time at the school. Ss were assembled in groups ranging from approximately 15 to 30 persons and asked to participate in the study. Each group consisted exclusively of trainees in one training area. All trainees present at the time of administration were encouraged to participate. One hundred-seventy out of 187 trainees present (91%) agreed to participate. Of the 170 questionnaires completed, three were discarded after it became readily apparent that the Ss had not answered seriously the questionnaire items.

Within each group, questionnaires were systematically varied according to the eight different job descriptions in order to obtain as closely as possible an equal number of Ss for each cell within each vocational area. The questionnaires were given one at a time to the subjects in the order they were seated or, in two of the groups, as they came to the E to receive one. It was felt that this procedure was the best means by which to randomly assign Ss to treatment conditions while maintaining the ideal of equal cell sizes per vocational area. Table 1 shows the distribution of Ss from each vocational area in the treatment conditions.

The Ss were told that the purpose of the study was to investigate people's reactions to different types of jobs. They were asked to read

Table 1

Distribution of Subjects from Each Vocational Area across Treatment Groups

	High EO Union High IO	High EO Union Low IO	High EO No Union High IO	High EO No Union Low IO	Low EO Union High IO	Low EO Union Low IO	Low EO No Union High IO	Low EO No Union Low IO
Automobile Mechanics	2	2	2	3	3	3	2	3
Industrial Electricity	4	4	4	4	4	3	5	3
Machining	3	3	4	3	4	4	4	4
Refrigeration Mechanics	4	4	4	4	4	5	4	5
Welding	7	7	7	6	8	6	6	6

the Job Description and then answer the questionnaire according to the way they saw the job and the way they thought they would feel if they were actually working in the job. The Ss were not informed that there were different Job Descriptions within the questionnaires and were asked not to discuss their answers with each other.

CHAPTER III

RESULTS

Characteristics of Subjects

Several items of biographical information were obtained from the Ss. These items related to age, sex, marital status, level of education, area lived in up to eighteen years of age, area living in currently, whether or not currently working, and whether or not having ever belonged to a union. Table 2 shows the distribution of these characteristics for the total sample.

In order to check for possible disproportionate representation of the biographical characteristics within some of the treatment groups, a tabulation was made for each characteristic across treatment groups. No tabulation was made for sex since all Ss were male. Table 3 shows the results of these tabulations. Chi-square analyses were performed to test for any association between treatment groups and each of the biographical characteristics. The results of these analyses are reported in Table 3.

The only characteristic to show significant disproportionate representation in the treatment groups was marital status. Point biserial correlation coefficients were computed between MARSTAT and each of the dependent variables. The only significant correlation was with MSTRONG ($r = .196$). Therefore MARSTAT was not considered in any tests of the hypotheses.

Table 2

Distribution of Biographical Characteristics for Total Sample[a]

	Number of Ss
Marital Status	
Single	73
Married	94
Sex	
Male	167
Female	0
Education	
Some Elementary School	3
Completed Elementary School	6
Some High School	23
Completed High School	134
Presently Working	
Yes	59
No	110
Previous Association with Union	
Yes	57
No	110
Size Community Lived in to Age 18	
Rural Area	50
Town Less Than 10,000 People	16
Town of 10,000 - 20,000 People	16
City of 20,000 - 100,000 People	33
City Larger Than 100,000 People	51
Size Community Presently Live In	
Rural Area	54
Town Less Than 10,000 People	18
Town of 10,000 - 20,000 People	16
City of 20,000 - 100,000 People	27
City Larger Than 100,000 People	52
Age	
Under 20 Years	49
21 - 30 Years	74
31 - 45 Years	40
46 - 60 Years	3

[a]Some totals do not equal 167 due to missing responses on some variables.

Table 3

Distribution of Biographical Characteristics across Treatment Groups[a]

	High EO Union High IO	High EO Union Low IO	High EO No Union High IO	High EO No Union Low IO	Low EO Union High IO	Low EO Union Low IO	Low EO No Union High IO	Low EO No Union Low IO
Marital Status[b]								
Single	7	13	15	6	8	8	6	10
Married	14	8	6	17	12	13	14	10
Education[c]								
Some Elementary School	1	0	0	0	1	1	0	0
Completed Elementary School	1	2	1	0	0	0	0	2
Some High School	1	0	2	6	5	3	3	3
Completed High School	18	18	18	17	14	17	17	15
Presently Working[d]								
Yes	7	4	5	11	7	10	6	9
No	14	17	16	12	13	11	13	10
Previous Association with Union[e]								
Yes	7	5	5	8	8	9	7	8
No	14	16	16	15	12	12	13	12
Size Community Lived in to Age 18[f]								
Rural Area	9	9	8	4	4	8	4	4
Town Less Than 10,000 People	0	1	2	1	3	2	3	4
Town of 10,000 - 20,000 People	5	3	1	0	3	2	0	2
City of 20,000 - 100,000 People	4	1	3	9	6	3	4	3
City Larger Than 100,000 People	3	6	7	9	4	6	9	7

Table 3 (Continued)

	High EO Union High IO	High EO Union Low IO	High EO No Union High IO	High EO No Union Low IO	Low EO Union High IO	Low EO Union Low IO	Low EO No Union High IO	Low EO No Union Low IO
Size Community Presently Live In[g]								
Rural Area	10	6	6	9	6	5	5	7
Town Less Than 10,000 People	1	3	1	1	2	3	4	3
Town of 10,000 - 20,000 People	3	4	0	1	3	2	1	2
City of 20,000 - 100,000 People	2	1	4	6	4	6	2	2
City Larger Than 100,000 People	5	7	10	6	5	5	8	6
Age[h]								
Under 20 years	5	11	10	5	3	5	4	6
21 - 30 years	8	5	7	10	13	13	9	9
31 - 45 years	8	3	4	7	4	3	6	5
46 - 60 years	0	2	0	0	0	0	0	1

[a]Some totals do not equal 167 due to missing responses on some variables.

[b]Chi-square = 15.44 with 7 df's; $p < .05$.

[c]Chi-square = 22.22 with 21 df's; $p > .05$.

[d]Chi-square = 7.80 with 7 df's; $p > .05$.

[e]Chi-square = 3.33 with 7 df's; $p > .05$.

[f]Chi-square = 36.73 with 28 df's; $p > .05$.

[g]Chi-square = 24.20 with 28 df's; $p > .05$.

[h]Chi-square = 30.33 with 21 df's; $p > .05$.

Strength of Treatment Effect

A major assumption of this study was that the Job Descriptions presented to the Ss would affect the Ss' perception of the job in the intended direction—that is, if a Job Description was intended to be high intrinsic—low extrinsic, the Ss actually would perceive the job as high on intrinsic outcomes and low on extrinsic outcomes. Table 4 shows the mean levels of each outcome corresponding to the levels of the appropriate factor. In addition to individual outcomes, all intrinsic and all extrinsic outcomes were summed in order to obtain an overall scale for total perceived intrinsic outcomes (TOTINT) and total perceived extrinsic outcomes (TOTEXT). These two composite scales are also shown in Table 4.

While the ideal situation would have been for all Ss within a specific treatment group to perceive the job identically on each intrinsic and each extrinsic outcome, it was recognized that this ideal would probably not be realized. Therefore, a more realistic expectation was that the main effects for the IO and EO conditions would account for a significant amount of variation in each specific intrinsic and each specific extrinsic outcome respectively. A 2x2x2 analysis of variance (ANOVA) with EO, PU, and IO as factors was performed for each intrinsic and extrinsic outcome and the two composite variables.

Since the number of observations varied between cells in the analyses, it was necessary to perform a least squares regression analysis to calculate the sums of squares needed to compute the F-values for the various effects (Winer, 1971). In this type of analysis the

Table 4

Mean Values of Perceived Job Characteristics Associated with Levels of Extrinsic or Intrinsic Factors

Characteristic	Factor	Low Mean	High Mean	F-value	Partial R^2
Salary	EO	2.60	3.58	56.741*	.256
Vacation	EO	3.41	4.11	40.473*	.197
Holidays	EO	2.74	3.84	75.729*	.314
Medical	EO	2.01	3.92	136.637*	.439
Retirement	EO	1.25	3.56	402.810*	.709
Job Security	EO	3.31	3.85	12.438*	.071
TOTEXT	EO	15.32	22.85	232.370*	.581
Feedback	IO	3.55	5.23	43.778*	.214
Autonomy	IO	2.92	4.88	48.395*	.227
Variety	IO	2.32	5.72	158.603*	.489
Task Significance	IO	4.00	5.35	20.256*	.111
Task Identity	IO	3.40	5.28	28.062*	.149
TOTINT	IO	16.14	26.51	114.159*	.417

*$p < .001$

effects are nonorthoginal and, therefore, any evaluation for a specific effect must be made after partialing out the influence of the other effects.

Table 4 also shows the F-values for the main effect of the appropriate factor for each job characteristic and the two overall scales. A partial R^2 (Draper & Smith, 1966) was computed for each effect in order to assess the proportion of variance independently accounted for in the dependent variables.

As can be seen from Table 4 each extrinsic and each intrinsic outcome shows a significant main effect for the appropriate factor. In only four instances were there any other significant effects within any one ANOVA. Of these only the PU main effect for the outcome Medical Benefits accounted for more than 2% of the variance (R^2 = .029). One point of interest is that there was a main effect for EO on Job Security even though this outcome was held constant in the Job Descriptions.

Even though there were significant main effects for the appropriate factor for all outcomes, there was considerable variation in the amount of variance independently accounted for by the effects. In general there was more variance accounted for in the extrinsic outcomes by the EO factor (excluding Job Security, 19.7—70.9%) than there was accounted for in the intrinsic outcomes by the IO factor (11.1—22.7%).

A 2x2 ANOVA (least squares solution) with Occupational Group (OCC) and IO as factors and TOTINT as the dependent variable was performed to check for any differences in perceptions between the occupations due to different descriptions of Job Duties. Only the main effect for IO was

significant. The OCC main effect and the IOxOCC interaction were nonsignificant.

Characteristics of Dependent and Concomitant Variables

Descriptive Statistics

Table 5 shows the means, standard deviations, and possible ranges for the variables. JOBSAT, ATTMAN, SUMMAN, MSTRONG, and ATTLABOR are based on the entire sample. Since items relating to ATTUN, USTRONG, and SUMUN were included only in the Union Representation condition, these results are based on that portion of the sample. DESUN was analyzed separately for the two levels of PU because it was felt that desire to keep an already established union was not the same as desire for establishment of a union where there currently was not one.

For JOBSAT, ATTMAN, ATTUN, and DESUN a value greater than 3.0 represents a positive attitude and a value less than 3.0 represents a negative attitude. For MSTRONG and USTRONG a score greater than 4.0 represents a perception of strength while a score less than 4.0 represents a perception of weakness. For ATTLABOR positive attitudes are represented by values greater than 0.0 (i.e., positive numbers) and negative attitudes are represented by values less than 0.0 (i.e., negative numbers). The cutting point for positive and negative attitudes on SUMMAN and SUMUN is somewhat less clear. However, in order to provide some basis for interpretation of the scale scores, it was decided to use the total score that would result if the average value for each of the 12 items in each

Table 5

Number of Cases, Means, Standard Deviations, and Possible Ranges for Dependent and Concomitant Variables

	Number of Cases	Mean	Standard Deviation	Possible Range
JOBSAT	166	3.14	1.03	1-5
ATTMAN	163	3.29	.68	1-5
SUMMAN	146	52.97	11.49	12-84
MSTRONG	154	4.79	1.47	1-7
ATTLABOR	167	.28	4.13	-12-12
ATTUN	80	3.46	.94	1-5
SUMUN	75	57.97	12.55	12-84
USTRONG	77	5.01	1.84	1-7
DESUN (No Union)	80	3.74	1.38	1-5
DESUN (Union Representation)	80	3.53	1.22	1-5

scale was equal to the neutral point of 4.0. Using this criterion a score greater than 48.0 will represent a positive attitude on SUMMAN and SUMUN and a score less than 48.0 will represent a negative attitude.

Since a few questionnaires contained some omitted items, the N for the variables vary and, therefore, sample size is reported in Table 5 also. The smaller N's for SUMMAN and SUMUN are due to omitting the score for these scales from analysis if any one of the 12 items was missing for that S.

Reliability

Reliability coefficients were computed for SUMMAN, SUMUN, and ATTLABOR by the method of Cronbach's alpha (Guilford, 1954). This method, which provides an estimate of internal consistency, is based on the average interitem correlation adjusted for total scale length. These coefficients, along with the number of Ss upon which they were based, are reported in Table 6.

Table 6

Reliability Coefficients for Overall Anticipated Attitude towards Management, Overall Anticipated Attitude towards the Union, and Generalized Attitude towards Labor

	Scale		
	SUMMAN	SUMUN	ATTLABOR
Alpha	.876 (156)	.906 (74)	.400 (167)

It can be seen that the reliability estimates for SUMMAN and SUMUN are relatively high. There was no way to compute reliability coefficients for ATTMAN and ATTUN, since each was based on only one item. Therefore, results based upon the composite scales may be a more accurate reflection of true attitudes than those based on the single item scales.

Intercorrelations between Dependent and Concomitant Variables

Table 7 shows the intercorrelations between the dependent and concomitant variables. The correlations are presented for the total sample and separately for each of the PU conditions. The correlations involving ATTUN, USTRONG, and SUMUN appear only in the Union Representation condition of PU, and the correlations involving DESUN appear only in the two separate conditions of PU.

From Table 7 it can be seen that while JOBSAT correlates relatively highly with ATTMAN and SUMMAN, the correlations with ATTUN and SUMUN are considerably lower and in the case of ATTUN the correlation is nonsignificant. The correlations between JOBSAT and ATTLABOR are negative and relatively low. The correlation between JOBSAT and DESUN is positive but nonsignificant for the Union Representation condition. For the No Union condition the JOBSAT—DESUN correlation is negative. The difference between the correlations for the two conditions is significant ($t = 2.83$, $p < .01$).

The correlations of ATTMAN with SUMMAN and ATTUN with SUMUN were positive and relatively high. The correlations of ATTMAN and SUMMAN with ATTUN and SUMUN were positive but relatively low.

Table 7

Intercorrelations of Dependent and Concomitant Variables for Entire Sample and Each Condition of Presence of Union[a]

		JOBSAT	ATTMAN	SUMMAN	MSTRONG	ATTLABOR	DESUN	ATTUN	SUMUN	USTRONG
TOTAL SAMPLE	JOBSAT		.467** (163)	.493** (145)	.168* (153)	-.168* (166)				
	ATTMAN			.459** (144)	.341** (152)	-.075 (163)				
	SUMMAN				.380** (146)	-.197** (146)				
	MSTRONG					-.133* (154)				
UNION REPRESENTATION	JOBSAT		.477** (80)	.503** (75)	.246* (78)	-.099 (82)	.182 (79)	.126 (80)	.263* (74)	.287** (77)
	ATTMAN			.442** (74)	.204* (77)	-.175 (80)	.319** (77)	.302** (80)	.364** (73)	.344** (76)
	SUMMAN				.563** (76)	.097 (76)	.249* (74)	.032 (74)	.267** (72)	.314** (74)
	MSTRONG					-.154 (79)	.071 (77)	-.129 (77)	.149 (75)	.135 (77)
	ATTLABOR						-.006 (79)	.011 (80)	.002 (75)	-.040 (77)

Table 7 (continued)

		JOBSAT	ATTMAN	SUMMAN	MSTRONG	ATTLABOR	DESUN	ATTUN	SUMUN	USTRONG
	DESUN							.645** (77)	.483** (76)	.458** (76)
	ATTUN								.580** (73)	.483** (76)
	SUMUN									.717** (74)
NO UNION	JOBSAT		.458** (83)	.485** (70)	.099 (75)	-.260** (84)	-.292** (80)			
	ATTMAN			.481** (70)	.098 (75)	-.001 (83)	-.263** (79)			
	SUMMAN				.180 (70)	-.363** (70)	-.185 (68)			
	MSTRONG					-.181 (75)	.122 (73)			
	ATTLABOR						.217* (80)			

[a]The number inclosed in parentheses indicates the number of cases upon which the correlation is based.

*p < .05 **p < .01

The correlation of MSTRONG with JOBSAT, ATTMAN, and SUMMAN were positive but nonsignificant for the No Union condition. For the Union Representation condition the above correlations were positive and significant. The difference between the MSTRONG—SUMMAN correlations was statistically significant ($t = 2.67$, $p < .01$). MSTRONG showed no statistically significant correlations with ATTUN, SUMUN or USTRONG.

USTRONG was positively and significantly correlated with JOBSAT, ATTMAN, SUMMAN, ATTUN, DESUN, and SUMUN. The correlation with SUMUN was particularly large, while the remainder of the above correlations were relatively low to moderate.

Test of Hypotheses Under Original Treatment Conditions

Hypotheses Ia and Ib

To test the hypotheses that IO and EO both would be positively related to JOBSAT, a 2x2x2 ANOVA with EO, PU, and IO as factors was performed. Again unequal cell sizes necessitated a least squares solution to computing sums of squares for the various effects.

The summary for this ANOVA is presented in Table 8. Both the main effects for EO and IO were significant. The mean JOBSAT for high EO was 3.56 and the mean JOBSAT for low EO was 2.70. The high IO mean JOBSAT was 3.40 and the low IO mean JOBSAT was 2.89. The amount of variance independently accounted for by the EO main effect (17.6%) was almost three times as great as the amount independently accounted for by the IO main effect (6.2%).

Table 8

Analysis of Variance for the Effects of Extrinsic Outcomes, Presence of Union, and Intrinsic Outcomes on Anticipated Job Satisfaction (JOBSAT)

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	31.077	1	31.077	37.328	.0001	.176
PU	.967	1	.967	1.161	.2828	
IO	10.870	1	10.870	13.057	.0004	.062
EO x PU	.092	1	.092	.111	.7396	
EO x IO	1.867	1	1.867	2.242	.1363	
PU x IO	.182	1	.182	.218	.6409	
EO x PU x IO	.182	1	.182	.218	.6409	
Error	131.542	158	.883			
Total	176.530	165				

Hypotheses IIa and IIb

A 2x2x2 ANOVA (least squares solution) with EO, PU, and IO as factors was performed for both ATTMAN and SUMMAN. Hypothesis IIa predicts that whether or not a union is present will moderate the effect of EO on ATTMAN and SUMMAN. When a job was classified as having union representation it was predicted that a high EO condition would have less positive effect on ATTMAN and SUMMAN than it would when there was no union. Support for this hypothesis would be shown by a significant interaction between EO and PU for either or both of ATTMAN and SUMMAN.

Tables 9 and 10 show the ANOVA (least squares solution) summaries for ATTMAN and SUMMAN. For neither variable was there a significant interaction effect between EO and PU. For ATTMAN there was a significant main effect for EO ($\overline{X}_H$ = 3.55; $\overline{X}_L$ = 3.00) and a significant main effect for IO ($\overline{X}_H$ = 3.41; $\overline{X}_L$ + 3.17). The amount of variance independently accounted for by the EO main effect was approximately four times that independently accounted for by the IO main effect (17.1% vs. 3.7%). For SUMMAN only the main effect for EO was significant ($\overline{X}_H$ = 58.26; $\overline{X}_L$ = 52.83). The amount of variance independently accounted for in SUMMAN by the EO main effect was 8.4%.

Hypothesis IIb stated that union representation would have no effect upon the relationship between levels of IO and ATTMAN and SUMMAN. While there was no interaction between IO and PU, interpretation of this result is ambigious since Hypothesis IIa was not supported.

Table 9

Analysis of Variance for the Effects of Extrinsic Outcomes, Presence of Union, and Intrinsic Outcomes on Anticipated Attitude towards Management (ATTMAN)

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	12.896	1	12.896	35.010	.0001	.171
PU	.436	1	.436	1.184	.2781	
IO	2.798	1	2.798	7.596	.0066	.037
EO x PU	.959	1	.959	2.603	.1087	
EO x IO	.890	1	.890	2.416	.1221	
PU x IO	.266	1	.266	.721	.3971	
EO x PU x IO	.696	1	.696	1.888	.1714	
Error	57.095	155	.368			
Total	75.448	162				

Table 10

Analysis of Variance for the Effects of Extrinsic Outcomes, Presence of Union, and Intrinsic Outcomes on Overall Anticipated Attitude towards Management (SUMMAN)

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	1125.962	1	1125.962	13.061	.0004	.084
PU	211.282	1	211.282	2.451	.1197	
IO	224.627	1	224.627	2.606	.1088	
EO x PU	.001	1	.001	.000	.9975	
EO x IO	2.078	1	2.078	.024	.8768	
PU x IO	55.949	1	55.949	.649	.4218	
EO x PU x IO	23.359	1	23.359	.271	.6035	
Error	11896.416	138	86.206			
Total	13479.514	145				

Hypotheses IIIa and IIIb

Hypotheses IIIa and IIIb pertain to the effect that EO and IO will have on ATTUN and SUMUN. Hypothesis IIIa predicted that a positive relationship exists between EO and anticipated attitudes toward the union (i.e., low EO would result in lower ATTUN and SUMUN than high EO). Hypothesis IIIb predicted that IO would be unrelated to the two variables. To test these hypotheses a 2x2 ANOVA (least squares solution) with EO and IO as factors was performed for ATTUN and SUMUN. Tables 11 and 12 show the ANOVA summaries for these analyses.

The results of these analyses show that only for ATTUN was there a significant main effect for EO ($\overline{X}_H = 3.71$; $\overline{X}_L = 3.21$). The amount of variance independently accounted for by EO was 7.3%. There were no main effects for IO on either ATTUN or SUMUN.

It was suggested earlier that a S's generalized attitude towards labor unions might influence his specific responses to the items pertaining to the unions regardless of treatment condition. Therefore, 2x2 analyses of covariance (ANOCOVA), using a least squares solution, with EO and IO as factors were performed on ATTUN and SUMUN. Tables 13 and 14 show the summaries for these analyses. A comparison of Tables 13 and 14 with Tables 11 and 12 reveals that negligible changes were produced in the sums of squares and F-values for the effects.

Hypotheses IVa and IVb

Hypothesis IVa predicts that there will be a negative relationship between EO and DESUN. The lower a job is on extrinsic outcomes, the more a worker will anticipate a desire for a union. On the other hand,

Table 11

Analysis of Variance for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Anticipated Attitude towards Union (ATTUN)

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	5.087	1	5.087	6.054	.0161	.073
IO	.172	1	.172	.204	.6525	
EO x IO	.836	1	.836	.996	.3216	
Error	63.857	76	.840			
Total	69.888	79				

Table 12

Analysis of Variance for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Overall Anticipated Attitude towards Union (SUMUN)

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	222.521	1	222.521	1.738	.1917	
IO	4.712	1	4.712	.037	.8484	
EO x IO	93.641	1	93.641	.731	.3953	
Error	9091.787	71	128.053			
Total	9410.320	74				

Table 13

Analysis of Covariance Using Generalized Attitude towards Labor as a Covariate for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Anticipated Attitude towards Union (ATTUN)

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	.301	1	.301	6.253	.0146	.075
IO	.232	1	.232	.274	.6024	
EO x IO	.958	1	.958	1.130	.2913	
Error	63.575	75	.848			
Total	69.888	79				

Table 14

Analysis of Covariance Using Generalized Attitude towards Labor as a Covariate for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Overall Anticipated Attitude towards Union (SUMUN)

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	227.941	1	227.941	1.757	.1893	
IO	6.105	1	6.105	.047	.8289	
EO x IO	87.225	1	87.225	.672	.4151	
Error	9082.662	70	129.752			
Total	9410.320	74				

Hypothesis IVb states that there should be no relationship between IO and DESUN. A job being low or high on intrinsic outcomes should have no effect on anticipated desire for a union.

The above hypotheses were tested under two conditions—the job having Union Representation or the job having No Union. A separate 2x2 ANOVA (least squares solution) with EO and IO as factors was performed on DESUN for the two levels of PU. Separate analyses were performed because it was felt that responding affirmatively to the proposition of getting rid of an existing union was not equivalent to responding negatively to the proposition of acquiring union representation if there were no union at the present time. It would have been necessary to equate these two types of responses in order to perform a simultaneous analysis on the complete sample.

Table 15 shows the summary for the ANOVA under the Union Representation condition. Only the main effect for EO was significant, with the amount of variance independently accounted for being 12.2%. However, the difference between the mean scores for DESUN was in a direction opposite that predicted in Hypothesis IVa. The mean DESUN for low EO was 3.29 while the mean DESUN for high EO was 4.32. As predicted by Hypothesis IVb there was no relationship between IO and DESUN. Table 16 shows the summary for the ANOVA under the No Union condition. Under this condition there were no significant effects for either EO or IO on DESUN.

As in the analyses with ATTUN and SUMUN, it was felt that ATTLABOR might have an effect on DESUN. Therefore ANOCOVA's (least squares

Table 15

Analysis of Variance for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Desire for Union (DESUN) under the Union Representation Condition

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	21.127	1	21.127	11.529	.0011	.122
IO	2.737	1	2.737	1.493	.2254	
EO x IO	5.698	1	5.698	3.110	.0817	
Error	142.931	78	1.832			
Total	172.878	81				

Table 16

Analysis of Variance for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Desire for Union (DESUN) under the No Union Condition

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	4.995	1	4.995	2.612	.1102	
IO	1.333	1	1.333	.697	.4063	
EO x IO	.037	1	.037	.019	.8905	
Error	145.335	76	1.912			
Total	151.488	79				

solutions) with EO and IO as factors and ATTLABOR as a covariate were performed on DESUN under the same two conditions as above. Tables 17 and 18 contain the ANOCOVA summaries for these analyses. Comparisons of Tables 17 and 18 with Tables 15 and 16 show that under the Union Representation condition controlling for the covariance of ATTLABOR had a negligible effect on the sums of squares and F-values. Although there was a relatively more pronounced effect under the No Union condition, the result was to decrease the sum of squares and F-value for EO.

Test of Hypotheses after Reclassification According to Perceptions of Intrinsic and Extrinsic Outcomes

Rationale

As discussed previously in this chapter, even though significant main effects were found for EO and IO on the individual outcomes associated with each factor, there was considerable variance in the outcomes within the levels of each of the factors. This was especially true for the intrinsic outcomes. (See the partial R^2 columns in Table 4, p. 39.)

For this reason it was decided to reclassify Ss into the levels of EO and IO factors according to their scores on TOTEXT and TOTINT respectively. To do this Ss whose scores on the two variables were above the respective medians (med TOTEXT = 19.93; med TOTINT = 22.25) were assigned to the high level of the factor, and Ss whose scores were below the medians were assigned to the low levels. There were five Ss for whom a TOTINT score and one S for whom a TOTEXT score could not be calculated due to a missing response on one or more of the items which

Table 17

Analysis of Covariance Using Generalized Attitude towards Labor as a Covariate for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Desire for Union (DESUN) under the Union Representation Condition

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	20.793	1	20.793	11.205	.0013	.120
IO	2.617	1	2.617	1.410	.2387	
EO x IO	5.495	1	5.495	2.960	.0893	
Error	142.889	77	1.856			
Total	172.878	81				

Table 18

Analysis of Covariance Using Generalized Attitude towards Labor as a Covariate for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Desire for Union (DESUN) under the No Union Condition

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	4.224	1	4.224	2.269	.1362	
IO	.663	1	.663	.356	.5526	
EO x IO	.006	1	.006	.003	.9537	
Error	139.655	75	1.862			
Total	151.488	79				

comprised the scale. These Ss remained classified according to the original treatment condition on the factor for which there was no composite score available. In all, 12.6% of the Ss were reclassified into the EO conditions (6.6% from low to high; 6.0% from high to low) and 19.8% were reclassified into the IO conditions (10.2% from low to high; 9.6% from high to low). Table 19 shows the cell size resulting from this new 2x2x2 classification.

Table 19

Cell Size for Treatment Conditions after Reclassification of Subjects

	High EO		Low EO	
	High IO	Low IO	High IO	Low IO
Union Representation	24	21	14	24
No Union	21	21	24	18

Hypotheses Ia and Ib

Again these hypotheses were tested by a 2x2x2 ANOVA (least squares solution) with EO, PU, and IO as factors and JOBSAT as the dependent variable. As can be seen from Table 20, there were main effects for both EO ($\overline{X}_H$ = 3.54; $\overline{X}_L$ = 2.71) and IO ($\overline{X}_H$ = 3.54; $\overline{X}_L$ = 2.75). The amount of variance independently accounted for in JOBSAT by EO was 14.9% and by IO was 14.0%. This is a marked change from the previous analysis when EO accounted for approximately three times as much of the JOBSAT variance as did IO.

Table 20

Analysis of Variance for the Effects of Extrinsic Outcomes, Presence of Union, and Intrinsic Outcomes on Anticipated Job Satisfaction (JOBSAT) after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	26.245	1	26.245	34.185	.0001	.149
PU	1.041	1	1.041	1.356	.2460	
IO	24.718	1	24.718	32.196	.0001	.140
EO x PU	.489	1	.489	.636	.4262	
EO x IO	.241	1	.241	.314	.5760	
PU x IO	.300	1	.300	.391	.5328	
EO x PU x IO	.070	1	.070	.091	.7634	
Error	121.301	158	.768			
Total	176.530	165				

Hypotheses IIa and IIb

Two separate 2x2x2 ANOVA's (least squares solution) with EO, PU, and IO as factors were performed—one each for ATTMAN and SUMMAN. As discussed previously in this chapter, support for the two hypotheses would be shown by the combination of a significant EO x PU interaction and a nonsignificant IO x PU interaction. Tables 21 and 22 show the summaries for the two ANOVA's.

Neither analysis resulted in the combination of interactions predicted by the two hypotheses. As in the corresponding analyses presented earlier in this chapter, there was neither a EO x PU nor a IO x PU interaction.

There were significant main effects for EO and IO on both ATTMAN and SUMMAN. For ATTMAN the EO main effect ($\overline{X}_H$ = 3.53; $\overline{X}_L$ = 3.01) independently accounted for 13.6% of the variance while the IO main effect ($\overline{X}_H$ = 3.49; $\overline{X}_L$ = 3.09) independently accounted for 9.2% of the variance. The EO main effect on SUMMAN ($\overline{X}_H$ = 58.82; $\overline{X}_L$ = 52.25) independently accounted for 9.6% of the variance and the IO main effect ($\overline{X}_H$ = 58.38; $\overline{X}_L$ = 52.78) independently accounted for 8.5% of the variance.

In addition to the two main effects pointed out above, there was a significant EO x IO interaction for ATTMAN which accounted for 2.0% of the variance and a significant PU main effect for SUMMAN which accounted for 2.4% of the variance. The ATTMAN means for the combinations of EO and IO were high EO, high IO, $\overline{X}$ = 3.64; high EO, low IO, $\overline{X}$ = 3.41; low EO, high IO, $\overline{X}$ = 3.32; low EO, low IO, $\overline{X}$ = 2.72. The main effect for PU

Table 21

Analysis of Variance for the Effects of Extrinsic Outcomes, Presence of Union, and Intrinsic Outcomes on Anticipated Attitude towards Management (ATTMAN) after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	10.255	1	10.255	28.610	.0001	.136
PU	.585	1	.585	1.633	.2033	
IO	6.914	1	6.914	19.289	.0001	.092
EO x PU	.027	1	.027	.075	.7849	
EO x IO	1.529	1	1.529	4.265	.0406	.020
PU x IO	.023	1	.023	.065	.7993	
EO x PU x IO	.117	1	.117	.326	.5689	
Error	55.559	155	.358			
Total	75.448	162				

Table 22

Analysis of Variance for the Effects of Extrinsic Outcomes, Presence of Union, and Intrinsic Outcomes on Overall Anticipated Attitude towards Management (SUMMAN) after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	1297.083	1	1297.083	17.600	.0001	.096
PU	322.897	1	322.897	4.381	.0382	.024
IO	1146.428	1	1146.428	15.556	.0001	.085
EO x PU	50.925	1	50.925	.691	.4073	
EO x IO	66.077	1	66.077	.897	.9763	
PU x IO	.066	1	.066	.001	.9763	
EO x PU x IO	220.674	1	220.674	2.994	.0860	
Error	10170.094	138	73.696			
Total	13479.514	145				

on SUMMAN resulted in a $\overline{X}$ = 56.53 for Union Representation and a $\overline{X}$ = 54.56 for No Union.

Hypotheses IIIa and IIIb

Again the hypotheses were tested by performing 2x2 ANOVA's (least squares solution) with EO and IO as factors and ATTUN and SUMUN as dependent variables for the condition of Union Representation only. Tables 23 and 24 show the summaries for these analyses.

For each variables only the EO main effect was significant. For ATTUN the EO main effect ($\overline{X}_H$ = 3.73; $\overline{X}_L$ = 3.14) independently accounted for 10.2% of the variance. For SUMUN for EO main effect ($\overline{X}_H$ = 63.05; $\overline{X}_L$ = 55.83) independently accounted for 10.8% of the variance.

ANOCOVA's (least squares solution) were then performed with ATTLABOR as the covariate. The summaries for these analyses are found in Tables 25 and 26. Comparisons of these tables with Tables 23 and 24 show that negligible differences were obtained in the values for the sums of squares and F-values for the various effects by using ATTLABOR as a covariate.

Hypotheses IVa and IVb

Separate ANOVA's (least squares solution) with EO and IO as factors and DESUN as the dependent variable were performed for each level of PU. The summaries for these analyses are shown in Tables 27 and 28.

For the Union Representation condition the EO main effect was significant. This main effect ($\overline{X}_H$ = 4.16; $\overline{X}_L$ = 3.39) accounted for 6.0% of the variance. It should be noted that, as in the corresponding

Table 23

Analysis of Variance for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Anticipated Attitude towards Union (ATTUN) after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	6.963	1	6.963	8.412	.0049	.100
IO	.111	1	.111	.134	.7154	
EO x IO	.023	1	.023	.027	.8691	
Error	62.910	76	.828			
Total	69.888	76				

Table 24

Analysis of Variance for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Overall Anticipated Attitude towards Union (SUMUN) after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	1014.206	1	1014.206	8.588	.0045	.108
IO	19.283	1	19.283	.163	.6874	
EO x IO	36.996	1	36.996	.313	.5774	
Error	8384.788	71	118.096			
Total	9410.320	74				

Table 25

Analysis of Covariance Using Generalized Attitude towards Labor as a Covariate for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Anticipated Attitude towards Union (ATTUN) after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	7.132	1	7.132	8.528	.0046	.102
IO	.039	1	.039	.046	.8306	
EO x IO	.005	1	.005	.005	.9411	
Error	62.722	75	.836			
Total	69.888	79				

Table 26

Analysis of Covariance Using Generalized Attitude towards Labor as a Covariate for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Overall Anticipated Attitude towards Union (SUMUN) after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	1024.445	1	1024.445	8.568	.0046	.109
IO	10.902	1	10.902	.091	.7636	
EO x IO	29.782	1	29.782	.249	.6193	
Error	8369.799	70	119.569			
Total	9410.320	74				

Table 27

Analysis of Variance for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Desire for Union (DESUN) under the Union Representation Condition after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	10.302	1	10.302	5.203	.0253	.060
IO	.069	1	.069	.035	.8522	
EO x IO	6.247	1	6.247	3.155	.0796	
Error	154.440	78	1.980			
Total	172.878	81				

Table 28

Analysis of Variance for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Desire for Union (DESUN) under the No Union Condition after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	14.406	1	14.406	8.085	.0057	.095
IO	.004	1	.004	.002	.9610	
EO x IO	1.194	1	1.194	.670	.4155	
Error	135.418	76	1.782			
Total	151.488	79				

analysis presented earlier in this chapter, the direction of the effect was opposite that predicted by Hypothesis IVa. There was also a main effect for EO ($\bar{X}_H$ = 3.32; $\bar{X}_L$ = 4.18) in the No Union Condition, which independently accounted for 9.5% of the DESUN variance. Under this condition the direction of the results was that predicted by Hypothesis IVa.

In neither condition did IO have a significant effect on DESUN. These results are consistent with Hypothesis IVb.

To check the effects of ATTLABOR, 2x2 ANOCOVA's (least squares solution) with EO and IO as factors and ATTLABOR as a covariate were performed. Tables 29 and 30 show the results of these analyses. Comparison of these tables with Tables 27 and 28 show that the addition of ATTLABOR as a covariate had negligible effect on the sums of squares and F-values for the Union Representation condition. The effect on the analysis for the No Union condition was to reduce slightly the amount of variance independently accounted for by the EO main effect (8.3% vs. 9.5%).

Table 29

Analysis of Covariance Using Generalized Attitude towards Labor as a Covariate for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Desire for Union (DESUN) under the Union Representation Condition after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	10.027	1	10.027	5.005	.0282	.059
IO	.139	1	.139	.069	.7930	
EO x IO	5.780	1	5.780	2.885	.0934	
Error	154.261	77	2.003			
Total	172.878	81				

Table 30

Analysis of Covariance Using Generalized Attitude towards Labor as a Covariate for the Effects of Extrinsic Outcomes and Intrinsic Outcomes on Desire for Union (DESUN) under the No Union Condition after Reclassification of Subjects

Source	SS	DF	MS	F	P Less Than	Partial R^2
EO	12.559	1	12.559	7.184	.0090	.083
IO	.021	1	.021	.012	.9133	
EO x IO	.479	1	.479	.274	.6021	
Error	131.105	75	1.748			
Total	151.488	79				

CHAPTER IV

DISCUSSION

The purpose of this study was to investigate the effects of intrinsic and extrinsic outcomes on attitudes about the job itself (job satisfaction) and attitudes toward the two major sources of authority and power that the worker may face at the job—the management of the company and his/her union, if one is present. Also of interest was the moderating effect that the presence of a union might have on the relationship between extrinsic and intrinsic outcomes and attitudes toward management.

The design for this study was a compromise between the need for realism, which could be derived from a field study and the need to have an adequate sample size for each of the eight cells in the 2x2x2 classification matrix. It was felt that the methodology employed in this study provided realism in the choice of subject (a person reasonably familiar with the functions of unions) and in presenting profiles of potential jobs as unionized (the jobs were typical industrial jobs). By reading job descriptions which were based upon the vocational areas for which the Ss were training, the Ss should be able to predict their attitudes toward the various aspects of the job.

At the outset it must be emphasized that the dependent variables investigated in this study were anticipated reactions to hypothetical jobs, and any conclusions drawn from the results should be considered tentative until they can be tested wholly or partially in a field setting. However, this type of study is not without precedent. The

validity of using projected feelings about future jobs has been shown. Giles (1974) found several individual difference variables to be related to workers' anticipated satisfaction with an enlarged job. Kerr, Harlan, and Stogdill (1974) proposed that using hypothetical situations will reduce the tendency to respond defensively or in a socially desirable manner when reacting to intrinsic and extrinsic job outcomes. They found that college students reacted to a hypothetical employment situation with the same pattern of responses as real managers.

The hypotheses that anticipated job satisfaction would be affected by both extrinsic outcomes and intrinsic outcomes was supported. Of considerable interest, though, was the result of extrinsic outcomes being more highly related to job satisfaction than intrinsic outcomes when the analysis was performed according to original treatment conditions. This result, however, may be partly explained by the fact that there was much greater variation in perceptions of intrinsic outcomes than there was in perceptions of extrinsic outcomes within each level of the two factors. After the reclassification of Ss into levels of EO and IO according to perceptions of the relevant outcomes, this difference disappeared. However, even after this reclassification extrinsic outcomes accounted for as much variance in job satisfaction as did intrinsic outcomes. This may be due to greater familiarity, at the present time (a period of training), with the rewards obtainable from high extrinsic outcomes (e.g., ability to purchase a new automobile and enough free time to enjoy it) than with the rewards associated with high intrinsic outcomes (e.g., a sense of accomplishment resulting from completing a challenging job).

Lack of an interaction between EO and IO on JOBSAT indicates that the effects for intrinsic and extrinsic outcomes were additive. This means that in order for the job to have been anticipated as maximally satisfying, both extrinsic and intrinsic outcomes had to be high. Also of importance is the comparison of the mean anticipated job satisfaction for the high and low levels of intrinsic and extrinsic outcomes, especially after the reclassification was performed. This comparison shows that the actual effects for the levels of intrinsic and extrinsic outcomes were almost identical. Not only were the effects for extrinsic and intrinsic outcomes independently important in contributing to anticipated job satisfaction, but also each contributed an essentially equal amount.

The importance of these results lies in the fact that anticipated job satisfaction was systematically related to perceptions of the amount of both intrinsic and extrinsic outcomes associated with the job when no other information was provided about the job (with the exception of whether or not the job was unionized, which had no effect on anticipated job satisfaction). Even though it could be expected that other factors at an actual job would influence job satisfaction, the results of this study do provide an indication of the relative importance of each compared to the other.

The hypothesis that a high level of extrinsic outcomes would lead to a less favorable anticipated attitude towards management when there was union representation was not supported. The assumption behind this hypothesis was that a union would be perceived as a force pressuring

management to provide this high level of extrinsic outcomes and therefore management would receive less credit for these outcomes than they would if there were no union.

Since the above hypothesis was not supported, there can be no interpretation placed on the results of no IO x PU interaction even though this result was predicted. There is no way to determine if this lack of interaction is due to the union being perceived as noninstrumental in attaining intrinsic outcomes (which was the basis for the hypothesis). To make that conclusion from these results would require that it also be concluded that the unions were perceived as being noninstrumental in attaining extrinsic outcomes. While the theoretical grounds upon which the combination of Hypothesis IIa and IIb were based provided a justification for the determination of union instrumentality for extrinsic and intrinsic outcomes based on indirect evidence, given that Hypothesis IIa was supported, no such basis is present when only Hypothesis IIb receives support.

Hypotheses IIIa and IIIb concerned the relationships between extrinsic and intrinsic outcomes on the job and anticipated attitudes toward the union representing the person in the job. It was predicted that extrinsic outcomes would be positively related to anticipated attitudes toward the union, but that there would be no relationship between intrinsic outcomes and attitudes toward the union. Both of these hypotheses were supported by the results of this study. From the results of the analyses, it appears that only levels of extrinsic outcomes are given consideration in anticipating differential attitudes towards the union.

The results of the ANOCOVA's using generalized attitude towards labor as a covariate gives indication that the Ss formed their anticipated attitudes towards the unions based upon the facts provided about the job rather than letting previous prejudices unduely affect their reactions.

The results of the final analyses are perhaps the most complex. These analyses showed that the relationship between anticipated desire for a union and level of extrinsic outcomes depended upon whether or not the job was described as already having union representation. When there was no union the results supported the proposed hypothesis. The lower the level of extrinsic outcomes, the greater was the anticipated desire for union representation. On the other hand, when the job was described as having union representation the relationship was reversed. The lower the level of extrinsic outcomes, the lower the anticipated desire for a union.

Actually this pattern of results is not surprising and probably should have been anticipated in advance. When the extrinsic outcomes of a job without a union are considered low, it is reasonable to assume that a union would be seen as one possible resource to improve these conditions. However, if the extrinsic outcomes are considered low and the job is already unionized, probably some degree of discontent will be felt toward the union. One way to manifest this discontent would be an anticipated desire to be rid of the union. It can be seen, however, from examining the mean values for DESUN that in both cases the lower value was on the positive side of the response levels. The average

anticipated desire for unions, even though significantly related to extrinsic outcomes never fell into the category of actually wanting to get rid of the union in the one case or not being inclined to vote for unionization in the other case.

This indicates that there was a favorable response (to the union's point of view) to anticipated desire to have union representation no matter whether the extrinsic outcomes were perceived as high or low. The relationship between anticipated desire for a union and extrinsic outcomes was one of degree, not kind. In other words, a union was anticipated as being desirable regardless of extrinsic outcomes, but more or less desirable under the conditions of extrinsic outcomes as discussed above.

As predicted, intrinsic outcomes had no effect on anticipated desire for a union under either condition of PU. Also using generalized attitude towards labor as a covariate in ANOVOCA analyses had little if any effect on the above relationships.

While the results obtained from the individual sets of hypotheses provide useful information when considered independently, a better picture of the implication of these results can be obtained by the integration of the information obtained from the complete study. An attempt will be made in this portion of the discussion to provide that integration.

It was found that for a group of students training for vocations in industrial jobs both intrinsic and extrinsic outcomes were associated with anticipated satisfaction with the job. These results are important

for two reasons. First it adds to the growing body of research literature showing that what the person actually does on the job contributes to his or her overall feelings about the job (i.e., job satisfaction). Second it shows that given only limited information about a job, a person can and will make an estimate about his future responses to the job. In many employment situations there is no more information available to the prospective employee than was provided by the job descriptions in this study. Therefore, it appears that if a person is in a position to make a choice between two jobs, and job satisfaction is important, extrinsic and intrinsic outcomes may share equally in influencing that decision.

From the results of the analysis involving anticipated attitudes toward management and anticipated attitudes toward the union, it can be seen that both intrinsic outcomes and extrinsic outcomes are related to attitudes toward management but only extrinsic outcomes are related to attitudes toward the union. This means that while management benefits from the positive effects of a job that is high on autonomy, variety, feedback, etc., attitude towards the union is not improved. On the other hand the union suffers none of the consequences that management does (decrease in positive attitude) when intrinsic outcomes are low.

While the results of the analyses testing Hypotheses IIa and IIb could not be interpreted as providing evidence that unions are perceived as noninstrumental in providing "improved" job content (i.e., intrinsic outcomes), the above results do provide some support for such a proposition. According to instrumentality theory (Vroom, 1964), an

object will acquire a positive valence when it is perceived as leading to outcomes which have a positive value. It has been shown that intrinsic outcomes can be considered to have a positive value due to their relationship with job satisfaction. This being the case, there must be some explanation as to why there is no relationship between attitudes toward the union (positive valence) and high level of intrinsic outcomes (positive value). The implication is that the union was not perceived as being instrumental in the attainment of the intrinsic outcomes. This makes sense in view of the close association between unions and "bread and butter" issues. While this line of reasoning is by no means intended to be proof of "perceived noninstrumentality" it is compatible with the results of this study.

The lack of an interaction of PU with either EO or IO lends support to the concept of dual allegiance (Stagner & Rosen, 1965). It appears that there need not be an inherent conflict between a worker belonging to a union and manifesting a positive attitude towards management when job conditions are favorable. In fact, ATTMAN and SUMMAN were higher in the Union Representation condition than in the No Union condition, although the differences were small and the only one that was statistically significant was for SUMMAN after reclassification.

Further evidence supporting the idea of dual allegiance comes from the correlational data presented in Table 20, p. 59. Attitudes toward the union were positively related to attitudes toward management. Perceptions of strong management were positively related to attitude towards management and to job satisfaction only when the job was presented

as being unionized. Also, perceptions of a strong union were positively related to attitudes toward management.

At this point two caveats seem to be in order. One pertains to the internal validity of the study and the other to the generalizations from the results. In the discussion so far it has been suggested (either implicitly or explicitly) that the intrinsic and extrinsic qualities of the job have been a cause of the variation in the dependent variables. While this was an appropriate assumption when the results were analyzed according to original treatment assignment, the validity of attributing causes may be questioned in the analyses where Ss were reassigned according to their perceptions of the job.

An argument could be made that it is possible that any or all of the "dependent" variables may have lead to the differential perceptions of the intrinsic and extrinsic outcomes. For this to be plausible, the source of the variance in these now "independent" variables remains to be shown. Certainly, if the Ss had actually been employed in the jobs in question, there might be various factors contributing to job satisfaction, attitude towards management, etc. However, in the present study, the only information available was that provided by the job descriptions.

The only reasonable explanation might be that the presence or absence of a union caused the variation in anticipated job satisfaction and/or anticipated attitude towards management, and this resulting variation caused the variation in perceptions of the intrinsic and extrinsic outcomes. The lack of any significant main effects for PU on JOBSAT, ATTUN, or SUMUN would seem to negate this explanation.

It should be noted also that the effect of the reclassification was mainly that of strengthening rather than changing associations and that the primary differences were for the IO main effects. This seems logical in light of Hackman and Lawler's (1973) contention that while objective characteristics of a job will be of considerable influence on subjective perceptions of the characteristics of the job, the subjective perceptions themselves will be the source of any attitudes about these characteristics.

With regard to internal validity, some attention should be addressed to the validity of the dependent variables employed in the study. In a study of this nature it is especially important to be sure that Ss are discriminating between the variables. Table 20, p. 59, presents evidence that Ss were able to differentiate between the dependent variables. For example, even though a semantic differential scale was used for both SUMMAN and SUMUN, the correlation between the two scales was relatively low and each was more highly correlated with the appropriate single item scale than with each other. Further evidence is provided by comparing the MSTRONG—SUMMAN correlation with the USTRONG—SUMUN correlation. If no discriminations were being made, it could be expected that the two correlations would be approximately equal. Finally, the moderating effect of PU on the MSTRONG—SUMMAN correlation can be considered. If the relationship between the two variables were due to method variance only, it should be the same regardless of conditions.

Regarding external validity, it was the intent of this study to add to the information available about the differential effects of intrinsic and extrinsic outcomes on several types of attitudes. While

anticipated attitudes are important in their own right (e.g., anticipated job satisfaction may affect the choice between two or more possible jobs), it has been argued that the situations presented to the Ss were realistic and personally applicable enough to the individuals involved in the study to give a reasonable approximation of the results that might be obtained had the Ss actually been working in the described jobs.

However, it must be pointed out the Ss in the study were a self selected group. These were people who cared enough about learning a skilled trade to devote at least 12 months of their time to this effort. Therefore, the results of this study are directly generalizable to those with craft skills or those who have a desire to acquire these skills. Given the increased availability of technical-vocational training and a large number of persons eligible for Veterans Educational Benefits, it would appear that the number of this type of persons may be increasing.

Given the above limitations, this final set of conclusions may be drawn:

1. Extrinsic outcomes and intrinsic outcomes appear to have a positive effect on job satisfaction.
2. While both intrinsic and extrinsic outcomes will influence attitudes toward management, only extrinsic outcomes influence attitudes toward the union.
3. The presence of a union does not inherently reduce positive attitudes toward management.
4. a. If a union is already in existence, low extrinsic outcomes will cause a slight though significant decrease in desire for the union.

b. If a job is not represented by a union, low extrinsic outcomes will cause an increase in desire for a union.

5. There appears to be no support for the contention that a job high on intrinsic and extrinsic outcomes will cause a worker to reject union representation.

CHAPTER V

SUMMARY

This study has provided information about the effects of intrinsic and extrinsic outcomes on anticipated attitudes toward the job, management, and unions. Ss were provided job descriptions in which intrinsic outcomes, extrinsic outcomes, and union representation were varied. Ss then indicated various anticipated reactions to the job through responses to questionnaire items.

Scales were employed to assess the effect of the intrinsic and extrinsic treatment conditions. While there were main effects for the appropriate factors on the scale items, there was considerable variance for some of the dimensions within the levels of the factors. Therefore analyses used to test hypotheses were performed using both the original treatment conditions and a reclassification based on Ss' perceptions of the job characteristics.

Relationships between the dependent variables were examined. The patterns of correlations indicated that Ss were able to discriminate between the attitudes measured by the various scales. The correlations also provided evidence for the concept of dual allegiance.

Hypotheses Ia and Ib predicted that both EO and IO would show a relationship with JOBSAT. Both of these hypotheses were supported. Before reclassification EO independently accounted for a much larger proportion of variance in JOBSAT, but after reclassification the proportions were approximately equal.

Hypotheses IIa and IIb predicted that PU would moderate the effect of EO on ATTMAN and SUMMAN, but that PU would have no effect on the relationship between IO and ATTMAN and SUMMAN. Support for Hypotheses IIa was not obtained. While there was no IO x PU interaction, it was felt that this result, in the absence of support for Hypothesis IIa, was not interpretable as support for Hypothesis IIb.

Hypotheses IIIa and IIIb predicted that EO would be positively related to ATTUN and SUMUN, but that IO would show no relationship with the two variables. Both of these hypotheses were supported. Using ATTLABOR as a covariate caused negligible changes in the results.

Hypotheses IVa and IVb predicted that EO would be negatively related to DESUN and that IO would show no relationship. While there were significant effects for EO under both conditions of PU, the direction of the results were opposite. Under the No Union condition the predicted negative relationship was obtained. However, under the Union Representation condition the relationship was positive—the higher the level of EO the greater was DESUN. There were no effects for IO on DESUN under either condition. Using ATTLABOR as a covariate caused negligible changes in the results.

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APPENDICES

APPENDIX A

CONDITIONS OF EMPLOYMENT, PRESENCE OF UNION, AND JOB DUTIES

Conditions of Employment

High Extrinsic

Salary: $800 per month

Paid Vacation: 3 weeks per year

Paid Holidays: 9 per year

Medical Protection: Group Plan—Employer pays all costs

Retirement Plan: Retire at age 60 or after 30 years employment at 50% base pay

Job Security: Layoffs and firings extremely rare

Low Extrinsic

Salary: $500 per month

Paid Vacation: 2 weeks per year

Paid Holidays: 5 per year

Medical Protection: Group Plan—Employee pays all costs

Retirement Plan: None

Job Security: Layoffs and firings extremely rare

Presence of Union

No Union

There is no formal employee union at the present time.

Union Representation

Employees are represented by the _____.

A collective bargaining agreement has been in force for five years.

All employee benefits are subject to union bargaining.

Blank space was filled by the name of a labor organization according to type of job described.

Automobile Mechanic: United Auto Workers

Industrial Electrician: International Brotherhood of Electrical Workers

Machinists: International Association of Machinists

Refrigeration Mechanic: International Brotherhood of Electrical Workers

Welder: International Union of United Welders

Job Duties: Automobile Mechanic

High Intrinsic

Inspects, repairs, and performs maintenance on functional parts of automotive equipment. Plans work procedure, using charts, technical manuals, and experience. Removes units, such as engine, transmission, or differential. Disassembles unit and inspects parts for wear. Repairs or replaces parts such as pistons, rods, gears, valves, and bearings. Overhauls parts such as carburetors, generators, distributors, starters and pumps. Rebuilds parts such as crankshafts and cylinder blocks. Rewires ignition and electrical system. Relines and adjusts brakes, aligns front end, repairs or replaces shock absorbers and solders leaks in radiators.

Low Intrinsic

Engages in partial assembly of automobile carburetor units. Takes main body of carburetor from conveyor belt. Places carburetor body in holder on work bench. Aligns holes in choke unit with holes in carburetor body, starts screws by hand, and tightens screws with power screwdriver. Removes carburetor body from holder and replaces on conveyor belt.

Job Duties: Industrial Electrician

High Intrinsic

Plans new or modified wiring installations to minimize waste of materials, provide access for future maintenance, and avoid unsightly, hazardous, and unreliable wiring. Prepares sketches showing location of all wiring or follows blue prints of others. Measures, cuts, bends, threads, assembles, and installs electrical conduits. Connects wiring to lighting fixtures and power units. Installs control and distribution apparatus such as switches, relays, and circuit breaking panels. Tests continuity of circuit to insure electrical compatibility and safety of all components, using standard instruments, such as ohmmeter, battery, and buzzer and oscilloscope. Observes functioning of installed equipment to detect hazards or need for adjustments.

Low Intrinsic

Installs electric meters in preinstalled meter connection boxes and closes switch to connect service. Fits meter onto prongs extending from top of box and turns set screws to secure prongs to meter. Fastens meter to wall with screws and seals with sealing device. Pushes slide of connection box into position to provide contact between box and meter. Closes and seals connection box. Disconnects service by pulling out connecting slide between meter and box and resealing connection box. Records meter reading before connecting or after disconnecting service.

Job Duties: Machinist

High Intrinsic

Set up and operate machines such as lathes, milling machines, boring machines, and grinders to machine metal workpieces according to specifications, tooling instructions, and standard charts by applying knowledge of machining methods. Reads blueprints or job order for product specifications, such as dimensions and tolerances and tooling instructions. Positions and secures workpiece to holding device, machine table, or fixture. Positions and secures tool in tool holder. Moves controls to position tool and workpiece in relation to each other and to set feeds, speeds, and depth of cut. Starts machine, turns handwheel to feed tool to workpiece or vice versa, and engages feed. Observes operation and verifies conformance of machined workpiece to specifications using measuring instruments.

Low Intrinsic

Tends fabricating machine to cut metal plates. Sets stops or guides to specified length as indicated by detailed instructions. Positions workpieces, manually or by using hoist, against stops. Pushes button or depresses treadle to activate machine. Removes burrs or sharp edges using file or hand grinder.

Job Duties: Refrigeration Mechanic

High Intrinsic

Replaces defective components and reassembles refrigeration units to work order and blue print specifications. Studies rejection slips from inspection department and observes functioning of components such as controls, fan, condenser, evaporator, or compressor to determine need for repair or replacement. Drains oil and pumps gas from unit. Removes and replaces defective components. Brazes or solders parts to repair defective joints and leaks. Reassembles unit and tests operation. Adjusts unit controls if needed. Records cause of malfunction, repairs, and replacements made.

Low Intrinsic

Assembles prepunched aluminum fin plates and copper tubing to form cooling coils for air conditioning units, using hand tools and other equipment according to detailed instructions. Places fin plates on work table and clamps into position. Inserts copper tubing through holes in fin plate. Depresses switch to activate hydrolic rams, forcing them through tubes, to expand tubes and lock fins in position. Joins assemblies, using end plates and pneumatic hammer to expand ends of tubes.

Job Duties: Welder

High Intrinsic

Positions, fits, and welds fabricated, cast, and forged components to assemble structural forms, such as machinery, frames, tanks, pressure vessels, furnace shells, and building and bridge parts, according to blueprint and knowledge of welding characteristics of metal. Selects equipment and plans layout, assembly, and welding, applying knowledge of geometry, physical properties of metal, effects of heat, allowances for thickness, and welding techniques. Lays out, positions, aligns, and fits components together. Bolts, clamps, and tack welds parts to secure them in position for welding. Sets up equipment and welds parts, using arc, gas shilded arc, submerged arc, or gas welding equipment. Assembles parts by bolting or riveting. Repairs products by dismantling, straightening, and reshaping parts and reassembling them.

Low Intrinsic

Operates spot welding machine to fuse metal components, such as brackets, panels, shells and housings, moldings, and wire products. Lifts and positions workpiece into holding clamps on machine. Moves controls to clamp workpieces in position. Pushes button which starts process to contact electrode with workpiece, start electric current, and join weld points of work piece. After automatic release of electrode, removes workpiece. Cleans electrode tip by using grinding wheel, emory cloth, or file.

APPENDIX B

COVER SHEET AND QUESTIONNAIRE ITEMS

Dear Trainee:

You are being asked to take part in a research project conducted by The University of Tennessee. This project has been approved by the Knoxville State Area Vocational School, but is not otherwise connected with it.

The purpose of this project is to determine how you might feel about working in certain types of jobs after you have finished your training. You will be asked to read a job description, and then to indicate what you think your reactions would be to various things about that job.

Other than a few personal questions about yourself (such as age or previous education) there are no right or wrong answers. The important thing is the way you actually think you might feel about working at the job which will be described.

Of course this questionnaire is completely anonymous. No one will know who answered the individual questionnaires. No one at the Vocational School will see the completed questionnaires.

It is important that complete information be received from each person, so please answer each item.

Thank you for your cooperation.

On the next page is a description of a job at which you might possibly work after you have finished your training. Please read the description carefully, and then answer the questions that will follow. Go back to the description anytime you feel you need to review the information in order to answer any question.

Part 1. Now that you have read the job description, please rate some of the characteristics of the job using the questions below. Please circle the number that corresponds to the word that best describes how you feel about that characteristic.

1.[a] How would you rate the salary for this job?

1	2	3	4	5
Very Good	Good	Average	Poor	Very Poor

2.[a] How would you rate vacation benefits for this job?

1	2	3	4	5
Very Good	Good	Average	Poor	Very Poor

3.[a] How would you rate holiday benefits for this job?

1	2	3	4	5
Very Good	Good	Average	Poor	Very Poor

4.[a] How would you rate medical benefits for this job?

1	2	3	4	5
Very Good	Good	Average	Poor	Very Poor

5.[a] How would you rate retirement benefits for this job?

1	2	2	4	5
Very Good	Good	Average	Poor	Very Poor

6.[a] How would you rate the job security for this job?

1	2	3	4	5
Very Good	Good	Average	Poor	Very Poor

[a]Reverse scoring

Part 2. This set of questions deals with the Job Duties section of the job description. Please read each question and the statements under "1," "4," and "7." If you feel that one of these statements is the best answer to the way you see the job, circle the number that corresponds to the statement. If the way you see the job is somewhere between two of the statements, circle one of the numbers between the two statements, depending upon which statement is closer to the way you see the job.

1. To what extent does this job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?

1--------2--------3--------4--------5--------6--------7

The job is only a tiny part of the overall piece of work; the results of the activities cannot be seen in the final product or service.	The job is a moderate-sized "chunk" of the overall piece of work; worker's contribution can be seen in final outcome.	The job involves doing the whole piece of work, from start to finish; the results of worker's activities are easily seen in the final product or service

2. How much autonomy is there in this job? That is, to what extent does the job permit the worker to decide on his/her own how to go about doing the work?

1--------2--------3--------4--------5--------6--------7

Very little; the job gives worker almost no personal "say" about how and when the work is done.	Moderate autonomy; many things are standardized and not under worker's control, but he/she can make some decisions about work.	Very much, the job gives worker almost complete responsibility for deciding how and when the work is done.

3. How much variety is there in this job? That is, to what extent does the job require the worker to do many different things at work, using a variety of his/her skills and talents?

1--------2--------3--------4--------5--------6--------7

Very little; the job requires worker to do the same routine things over and over again.	Moderate variety.	Very much; the job requires the worker to do many different things, using a number of different skills and talents.

4. In general, how significant or important is this job? That is, are the results of the work likely to significantly affect the lives or work of other people?

1--------2--------3--------4--------5--------6--------7

Not very significant; the outcomes of the work are not likely to have important effects on other people.	Moderately significant.	Highly significant; the outcomes of the work can affect other people in very important ways.

5. To what extent does doing the job itself provide the worker with information about his/her work performance? That is, does the actual work itself provide clues about how well the worker is doing?

1--------2--------3--------4--------5--------6--------7

Very little; the job itself is set up so worker could work forever without finding out how well he/she is doing.	Moderately; sometimes doing the job provides feedback to the worker; sometimes it does not.	Very much, the job is set up so that worker gets almost constant feedback during work about how well he/she is doing.

Part 3. This section is intended to determine some of the feelings you might have if you were working at the job. Please circle the number that best describes how you would feel about the job.

1. Taking all things into consideration, how satisfied do you think you would be working at this job?

1----------2----------3----------4----------5

Very Dissatisfied	Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied	Very Satisfied

2.[a] Taking all things into consideration, how do you think you would feel about the managers of the company?

1----------2----------3----------4----------5

Like Them Very Much	Like Them	Neither Like nor Dislike Them	Dislike Them	Dislike Them Very much

3.[a,b] Taking all things into consideration, how do you think you would feel about the union?

1----------2----------3----------4----------5

Like It Very Much	Like It	Neither Like nor Dislike It	Dislike It	Dislike It Very Much

[a] Reverse scoring [b] Item appeared only in the Union Representation condition

Part 4. In this section there are several pairs of adjectives which can be used to describe people or things. Based on the information contained in the job description, please use these adjective pairs to show what you think would be the best description of the MANAGERS of the company. You should put an X in one of the three blanks which are closer to the adjective that you feel best describes the way you see the MANAGERS of the company. The better the adjective describes the MANAGERS, the closer you should put your X to the adjective. For example, a person who felt that "Intelligent" was a fairly good description of the MANAGERS might place an X like this:

UNINTELLIGENT ____ ____ ____ ____ ____ X ____ INTELLIGENT

If you think that neither adjective in a pair describes the managers, put an X in the middle blank.

Please use these adjective pairs to describe the way you see the MANAGERS of the company.

				Neither			
FLEXIBLE[a]	____	____	____	____	____	____	____	INFLEXIBLE
TRUE[a]	____	____	____	____	____	____	____	FALSE
PERMISSIVE[a]	____	____	____	____	____	____	____	RESTRICTIVE
REASONABLE[a]	____	____	____	____	____	____	____	UNREASONABLE
UNGRATEFUL	____	____	____	____	____	____	____	GRATEFUL
DISLIKED	____	____	____	____	____	____	____	LIKED
UNHELPFUL	____	____	____	____	____	____	____	HELPFUL
INSENSITIVE	____	____	____	____	____	____	____	SENSITIVE
CONSERVATIVE	____	____	____	____	____	____	____	PROGRESSIVE
IMPRACTICAL	____	____	____	____	____	____	____	PRACTICAL
WEAK	____	____	____	____	____	____	____	STRONG
GOOD[a]	____	____	____	____	____	____	____	BAD
SOCIABLE[a]	____	____	____	____	____	____	____	UNSOCIABLE

[a]Reverse scoring

[b]Based upon the information contained in the job description, please use these same adjective pairs to show what you think would be the best description of the UNION which would be your representative.

Please use these adjective pairs to describe the way you see the UNION that would be your representative.

				Neither			
FLEXIBLE[a]	____	____	____	____	____	____	____	INFLEXIBLE
TRUE[a]	____	____	____	____	____	____	____	FALSE
PERMISSIVE[a]	____	____	____	____	____	____	____	RESTRICTIVE
REASONABLE[a]	____	____	____	____	____	____	____	UNREASONABLE
UNGRATEFUL	____	____	____	____	____	____	____	GRATEFUL
DISLIKED	____	____	____	____	____	____	____	LIKED
UNHELPFUL	____	____	____	____	____	____	____	HELPFUL
INSENSITIVE	____	____	____	____	____	____	____	SENSITIVE
CONSERVATIVE	____	____	____	____	____	____	____	PROGRESSIVE
IMPRACTICAL	____	____	____	____	____	____	____	PRACTICAL
WEAK	____	____	____	____	____	____	____	STRONG
GOOD[a]	____	____	____	____	____	____	____	BAD
SOCIABLE[a]	____	____	____	____	____	____	____	UNSOCIABLE

Part 5.[b] Please circle the number that corresponds to the answer that best describes how you feel about the following question.

1. Based on what you know about the job, how likely would you be to vote to get rid of the union if an election were held for that purpose?

1	2	3	4	5
Very Likely	Somewhat Likely	Don't Know	Somewhat Likely	Very Unlikely

[a]Reverse scoring

[b]This part appeared only in the Union Representation condition

Part 5.[b] Please circle the number that corresponds to the answer that best describes how you feel about the following question.

1.[a] Based on what you know about the job, how likely would you be to vote for union representation if an election were held for that purpose?

1	2	3	4	5
Very Likely	Somewhat Likely	Don't Know	Somewhat Likely	Very Unlikely

Part 6. Below are several sets of statements arranged in pairs. Please choose one of the statements in each pair that you most closely agree with and place an X in front of it. You may not entirely agree with either of them, but be sure to place an X in front of one statement out of each pair. Please do not omit any.

1. ____ Labor unions should be concerned only with such matters as wages, working conditions, hiring, and firing, etc.

   ____ Labor unions can't get and keep good wages and working conditions unless they help elect public officials who are sympathetic to them.

2. ____ Anyone who is smart enough to become wealthy should be allowed to enjoy his wealth himself.

   ____ People who are very wealthy are almost sure to use their power in ways which will keep working people down.

3. ____ The main reason why workers are not better off is that labor unions don't have as much influence in political circles as employers and businessmen do.

   ____ On the whole, national, state, and city governments are run for the best interests of every group of people represented.

4. ____ It is the workers' business to work in a plant, and the owners' business to manage it, and both sides should stick to their business.

   ____ Workers are affected more directly than owners are by what happens in a plant and so workers should try to become powerful enough to help decide how the plant should be managed.

5. ____ I believe in the idea of majority rule. Workers are a majority in this country, and so if they all would join unions they would have the right to have control of the government.

   ____ If workers are fair in their demands, their unions can get a fair deal for them without the trouble of trying to use their influence in government.

[a] Reversed scoring

[b] This part appeared only in the No Union condition.

6. ____ Talk about the working class as opposed to the owning class is foolish, because both classes suffer or prosper together.

____ People who talk about workers and owners really having the same interests are usually afraid that labor unions will become strong enough to cut down the owners' profit.

7. ____ The majority of people in this country would be better off if we had a strong Farmer-Labor party to compete with the other political parties.

____ Workers can get all the political representation they need by electing Republicans or Democrats who favor labor unions.

8. ____ Skilled workers can get along better by playing ball with employers than they can by tying themselves up with unions which include ignorant, unskilled workers.

____ The main reason why labor unions haven't gotten farther in this country is that skilled workers considered themselves above unskilled workers.

9. ____ A worker's right to his job should be considered more important than an investor's right to his profits, because a worker usually has nothing else but his job to fall back upon.

____ Labor unions might as well admit that an employer's first responsibility is to the owners, and do the best they can on that basis.

10. ____ Almost any one who has brains and is willing to work hard can expect to rise to a position of moderate wealth and influence.

____ Intelligence and hard work won't get you very far nowadays unless you have the backing of a powerful group.

11. ____ It's hard to see how organized labor can have much influence on government if it doesn't include the millions of unskilled workers.

____ Labor unions can put all the pressure on government that they need to by clever lobbying, and so they don't need to include millions of unskilled workers.

12. ____ Most people disapprove of sit-down strikes because no one ever has a right to take control of other people's property.

____ Most people who object to sit-down strikes don't like them just because they have been very useful in helping workers to win their rights.

Part 7. Please answer the following questions by circling the number that corresponds to the correct answer.

1. Are you

   1 Single
   2 Married

2. What is your educational level?

   1 Some elementary school (Grades 1-7)
   2 Completed elementary school (8th grade)
   3 Some high school (9-11 years)
   4 Graduated from high school

3. Are you presently working full time?

   1 Yes
   2 No

4. Do you now or have you ever belonged to a trade union?

   1 Yes
   2 No

5. What was the size of the community in which you spent the largest portion of your life up to the time you were 18 years old?

   1 A rural area
   2 A town of less than 10,000 people
   3 A town of 10,00-20,000 people
   4 A city more than 20,000 but less than 100,000 people
   5 A city larger than 100,000 people

6. What is the size of the community that best describes the location of your current home or residence?

   1 A rural area
   2 A town of less than 10,000 people
   3 A town of 10,000-20,000 people
   4 A city more than 20,000 but less than 100,000 people
   5 A city larger than 100,000 people

7. What was your age on your last birthday?

   1 Under 20
   2 21-30 years
   3 31-45 years
   4 46-60 years

8. Are you

   1 Male
   2 Female

PLEASE CHECK BACK THROUGH THE QUESTIONNAIRE AND MAKE SURE YOU HAVE COMPLETED EACH ITEM

VITA

Douglas P. Massengill was born in New Albany, Mississippi, on January 3, 1945. He attended elementary and secondary schools there and Northeast Mississippi Junior College in Booneville, Mississippi. After four years service in the United States Navy, he attended The University of California, Berkeley, California, where he received a Bachelor of Arts degree in Psychology in March 1972.

He entered Graduate School at The University of Tennessee in September 1972. In March 1976, he received the Doctor of Philosophy degree in Organizational Psychology. He has been a Staff Psychologist with Psychological Associates of St. Louis, Missouri, since January 1975.

He is married to the former Karen Diane Schultz of Milwaukee, Wisconsin.