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JOB CHARACTERISTICS AS RELATED TO JOB SATISFACTION OF UNIVERSITY FOODSERVICE EMPLOYEES

A Thesis

Presented for the

Master of Science

Degree

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Kelly M. Duke

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ABSTRACT

The purpose of this study was to determine the relationship between job characteristics and job satisfaction of university foodservice employees. The relationship of demographic variables to job satisfaction was also explored. A three-part survey was developed including the 30-item Job Characteristics Inventory, six items related to job satisfaction and seven demographic items. Separate written questionnaires were administered to 32 supervisory and 147 non-supervisory employees of a large state university foodservice department. The response rate was 98 percent (n=32 supervisory; n=142 non-supervisory).

The reliability for the instruments using Cronbach's alpha was .88 for employees and .91 for supervisors. Multiple regression analyses were used to test research hypotheses at a significance level of $p<.05$. There was a positive relationship between job characteristics (autonomy, task identity, feedback, variety, dealing with others, and friendship opportunities) and job satisfaction for both employees and supervisors. Only one job characteristic, dealing with others, was rated significantly higher by supervisors as compared to non-supervisory employees.

There was no difference in job satisfaction by role (supervisory vs. non-supervisory) or demographic variables, except age. Among the non-supervisory employees, older employees tended to be more satisfied with their jobs than did younger employees. As expected, job satisfaction appears to be more related to the job itself than to demographic variables.

This study provided information about employees' perception of job characteristics as they are related to job satisfaction. Dietitians and foodservice managers can use this information for implementing job design, job enrichment, or job rotation to influence employee satisfaction.

TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	Purpose of the Study	1
	Hypotheses	2
	Definition of Terms	2
II.	REVIEW OF LITERATURE	6
	Job Satisfaction	7
	Job Characteristics	11
	Summary	25
III.	METHODS	27
	Sample	27
	Instruments	27
	Data Collection	29
	Scoring	31
	Analysis	33
IV.	RESULTS	35
	Description of Sample	35
	Instrument Reliability and Validity	39
	Hypothesis 1	39
	Hypothesis 2	42
	Hypothesis 3	44

TABLE OF CONTENTS

(continued)

V. DISCUSSION 48

Limitations 52

Summary 53

Recommendations 53

REFERENCES 57

APPENDIXES 63

Appendix A. Certification of Exemption from Review for Research Involving Human Subjects 64

Appendix B. Letter Requesting Permission to Use the Job Characteristics Inventory 66

Appendix C. Survey Instrument for Non-Supervisory Employees 68

Appendix D. Survey Instrument for Supervisory Employees 73

Appendix E. Foodservices Newsletter Article 78

Appendix F. Cover Letter For Survey .....

VITA .....

LIST OF TABLES

TABLE		PAGE
1	Reliability of the Job Characteristics Inventory	22
2	Job Characteristics and Related Items in Survey Instrument	32
3	Characteristics of Samples	37
4	Intercorrelation of Job Characteristics and Job Satisfaction	40
5	Multiple Regression Analysis For Predicting Job Satisfaction From Job Characteristics	41
6	Mean Scores and Significance Levels of Job Characteristics By Role	43
7	Multiple Regression Analysis for Predicting Job Satisfaction From Demographic Variables for Supervisory Employees	45
8	Multiple Regression Analysis for Predicting Job Satisfaction From Demographic Variables for Non-Supervisory Employees	46
9	Comparison of Job Characteristics Mean Scores in Two Studies Using Foodservice Samples	51

CHAPTER I

INTRODUCTION

Quality of work life has become an increasingly important issue in the workplace. Both researchers and managers are realizing that the success of any organization is enhanced by meeting the individual needs of employees. Efforts to increase employee satisfaction are being made by organizations through addressing individual employee's needs. This study focused on exploring the relationship between job characteristics and job satisfaction of foodservice employees in a university setting.

Purpose of the Study

The purpose in this study was to determine foodservice employees' perceptions of job characteristics and their relationship to job satisfaction. Specifically, the objectives were to:

1) determine the relationship between perceived job characteristics and job satisfaction of foodservice employees;

2) determine differences in perceived job characteristics and job satisfaction between supervisory and non-supervisory employees;

3) determine if there was a relationship between job satisfaction and selected demographic variables.

Hypotheses

The following hypotheses were tested to determine foodservice employees' perceptions of job characteristics and the relationship of these characteristics to job satisfaction.

H1: Foodservice employees who rate their jobs higher in job characteristics will express higher job satisfaction.

H2: There is no significant difference in perceived job characteristics and job satisfaction between supervisory and non-supervisory employees.

H3: There is no relationship between job satisfaction and the demographic variables age, sex, job classification, education, hourly wage or annual salary, tenure, and full versus part-time employment.

Definition of Terms

The following definitions will help set parameters for the objectives of this research:

Supervisory employee--a foodservice employee who (1) has supervisory responsibility over one or more

employees; and/or (2) is a professional employee considered part of the management team, e.g. dietitian, food buyer, accountant, staff assistant.

Non-supervisory employee--a foodservice employee who does not have supervisory responsibility and who is not considered part of the management team.

Job characteristics--perceptions of a job in terms of the following dimensions (Hackman & Lawler, 1971):

> Variety--the degree to which a job requires employees to perform a wide range of operations in their work and/or the degree to which employees must use a variety of equipment and procedures in their work.
>
> Autonomy--the extent to which employees have a major say in scheduling their work, selecting the equipment they will use, and deciding on procedures to be followed.
>
> Task Identity--the extent to which employees do an entire or whole piece of work and can clearly identify the result of their efforts.

Feedback--the degree to which employees receive information as they are working which reveals how well they are performing on the job.

Dealing With Others--the degree to which a job requires employees to deal with other people (either customers, other company employees, or both).

Friendship Opportunities--the degree to which a job allows employees to talk with one another on the job and to establish informal relationships with other employees at work.

Job satisfaction--"the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values" (Locke, 1969, p.316).

Job characteristics model--a theoretical model proposed by Hackman & Oldham (1976) that relates core job dimensions, critical psychological states, and personal work outcomes as moderated by an individual's growth need strength.

Job Characteristics Inventory (JCI)--a written instrument developed by Sims et al. (1976) for measuring an individual's perceptions of variety, autonomy, task identity, feedback, dealing with others, and friendship opportunities provided in their work setting.

CHAPTER II

REVIEW OF LITERATURE

It is generally accepted by organizational theorists that the nature of job design strongly influences the attitudes of employees. Many modern employees would dislike the rigid, controlled approach to job design as developed by F.W. Taylor in the early 1900's (Nadler et al., 1979). Taylor's approach, known as scientific management, viewed workers somewhat like machines that could be carefully programmed to perform simple, routine tasks. According to scientific management, workers were most productive in jobs that were specialized and standardized.

Not surprisingly, Taylor's ideas were later rejected by most behavioral scientists and organizational psychologists. Scientific management may have economic advantages because jobs are simple, standardized, and routine, but few employees are satisfied in such an atmosphere (Nadler et al., 1979). The economic advantages may not be so great when job dissatisfaction leads to absenteeism, turnover, and the problem of supervising employees who feel that their jobs are monotonous (Brief & Aldag, 1975).

Although it is fairly easy to point out the humanistic flaws in Taylor's scientific management approach, it is more difficult to specify just what kind of changes in a work setting are needed to increase employee satisfaction. Job satisfaction may be inherent in the individual employee or may be a function of the job itself. The following sections will review organizational behavior research that examines job satisfaction in relation to both employee characteristics and job characteristics.

Job Satisfaction

Why study job satisfaction? Kalleberg (1977) listed three reasons why job satisfaction has been of interest to organizational behaviorists.

First, job satisfaction is linked to a personal value system in which satisfying work develops personal potential and furthers the employee's dignity as a human being. Second, job satisfaction has been linked with the quality of an employee's life outside the work role, thus impacting physical and mental health. Third, job satisfaction has been studied in an attempt to enhance employee productivity and organizational functioning.

Kalleburg also stated that there are several explanations as to why job satisfaction varies among workers. One explanation views job satisfaction solely as

a function of the different nature of jobs that people perform. Similarly, the job characteristics model is based on the viewpoint that satisfaction is tied to characteristics in the work setting, in addition to the individual growth need strength of the employee.

Demographic characteristics of employees and employment status factors have also been studied as determinants of job satisfaction. Numerous studies have examined job satisfaction in relation to the employee's age, sex, education, length of employment, salary, job title, and full-time versus part-time status, as well as other characteristics. Although the findings of these studies sometimes conflict, there are some general trends.

There is strong evidence that older employees tend to have higher levels of job satisfaction (Lee & Wilbur, 1985; Lowther et al., 1985; Lynch & Verdin, 1983; Rahim, 1982; Walsh, 1982; Weaver, 1980). There are several possible explanations for greater job satisfaction among older employees. Older employees are more likely to have been on the job longer and have adjusted their expectations about job rewards. Seniority itself may contribute to higher levels of job satisfaction. Also, older employees may place different emphasis on work values, being more concerned with the moral importance of work and less concerned with economic rewards (Lee & Wilbur, 1985).

Tenure, which may or may not be related to age, has also been found to be positively related to job satisfaction (Lynch & Verdin, 1983; Norris & Niebuhr, 1984). An employee who is dissatisfied with a job situation is likely to leave the organization; therefore the employees who have been there the longest are probably those who are most satisfied with the job. Job dissatisfaction expressed by new employees may be related to the greater likelihood that they are working in more routine, lower level jobs while adjusting to organizational expectations.

There appears to be little relationship between employee gender and job satisfaction (Lowther et al., 1985; Mottaz, 1986; Smith & Plant, 1982; Walsh, 1982; Weaver, 1980). Rahim (1982) found that females were more satisfied with their jobs when income, age, and education were controlled through covariance. Given the discrepancy in pay between males and females in many organizations, job satisfaction in relation to gender should take into account any pay differences. Yet, Varca et al. (1983) showed that lower level, lesser paid females expressed higher levels of job satisfaction than did other female employees.

The influence of educational level on job satisfaction is not clear. It would be expected that better educated employees would have a greater opportunity to choose work

situations which are more satisfying. Rahim (1982) and Weaver (1980) found a positive relationship between education and job satisfaction. However, Walsh (1982) found a negative effect of education on job satisfaction; i.e. the more highly educated employees tended to be the least satisfied.

Salary appears to be a fairly good indicator of job satisfaction. An employee's salary is a tangible, easily measured job reward. Job satisfaction is generally higher for higher paid, white-collar employees than for lower paid, blue-collar employees (Rahim, 1982; Weaver, 1980).

Differences in satisfaction may also be attributed to the type of job the employee performs. Job satisfaction varies among job function or job level (Adams et al., 1977; Glenn & Weaver, 1982; Lynch & Verdin, 1983; Walsh, 1982; Weaver, 1980). Walsh (1982) found significant differences in satisfaction among university foodservice personnel in four job functions. Employees in production and service expressed higher job satisfaction than employees in warewashing and storekeeping. Lynch & Verdin (1983) found higher job satisfaction among professional librarians as opposed to non-professional library employees. However, in any organization, job level or function is likely to be closely tied in with the employee's salary, educational level, and tenure, all of which influence satisfaction.

Employment status may also influence job satisfaction. In a sample of hospital employees, Eberhardt & Shani (1984) found that part-time employees were significantly more satisfied with their jobs than were full-time employees. The researchers explained the difference by suggesting that part-time employees may have lower job expectations and are thus more easily fulfilled. Or, due to lack of involvement in organizational functioning, the part-time employee possesses inadequate information regarding organizational problems and politics to express negative attitudes.

Job Characteristics

In the past 20 years, researchers have studied elements in the work setting which affect employee satisfaction. One area of research begun in the early 1970's focused on a specific set of job characteristics theorized to influence satisfaction. This research led to the development of the job characteristics model. Job characteristics focus on the relationship between work and the individual and deal with certain aspects of a job that can be altered to create higher job satisfaction (Miller, 1977).

Early Research

Lawler & Hall (1970) studied the relationship between satisfaction and job characteristics in a group of 291 scientists. They found that satisfaction was related to the amount of control perceived in the job as well as the degree to which the job was seen to be relevant to one's valued abilities.

Hackman & Lawler (1971) carried this further by suggesting that those individuals who have high levels of "growth need strength" are particularly affected by certain job characteristics. Growth need strength is defined as the need for personal growth, development, creativity, and challenge. Hackman & Lawler studied the impact of six job characteristics in a sample of 208 employees and 62 supervisors in a telephone company. The characteristics were autonomy, variety, task identity, feedback, dealing with others and friendship opportunities. Dealing with others and friendship opportunities did not substantially relate to satisfaction. The other four characteristics, variety, task identity, autonomy, and feedback, called "core dimensions," had a stronger impact on satisfaction. Importantly, employees with at least moderately high growth need strength tended to be more satisfied if they felt that their jobs were high on the four core dimensions.

In addition, Hackman & Lawler identified three other general job characteristics that are necessary to link individual need satisfaction with organizational goal achievement. These are: responsibility, meaningfulness, and knowledge of results. Specifically, a job must:

> (a) allow workers to feel personally responsible for an indentifiable and meaningful portion of the work; (b) provide work outcomes which are intrinsically meaningful or otherwise experienced as worthwhile; and (c) provide feedback about performance effectiveness (Hackman & Lawler, 1971, p. 263).

Hackman & Lawler's study was replicated by Brief & Aldag (1971). Their study showed strong support for the positive association between employee's perception of job characteristics based on four core dimensions and affective responses, including satisfaction. Employees with higher growth need strength exhibited stronger relationships between the core dimensions and affective responses intrinsically related to the work itself.

Wanous (1974) elaborated on individual differences in employees which affect employees' reactions to job characteristics. He studied the relationship between employees' perceptions of the four core dimensions (variety, autonomy, task identity, and feedback) and the following variables: urban versus rural background, strong versus weak belief in the Protestant work ethic, and high versus low strength for higher order needs. Growth need

strength was found to be the best moderator of the relationship between job characteristics and job satisfaction. Thus, even if a job is high on the four core dimensions, it may not be satisfying unless the employee possesses at least a moderate degree of growth need strength.

Stone & Porter (1975) studied the relationship between job title, job satisfaction and job characteristics in 605 telephone company employees categorized into 16 different job titles. Eight job characteristics were examined: autonomy, task identity, feedback, friendship opportunities, dealing with others, and two separate aspects of job prestige. Job title had a higher discriminatory power when individual attitudes were measured in relation to job title. Thus, differences in attitudes, including satisfaction, may be predicted by grouping individuals on the basis of the jobs they hold.

The Job Characteristics Model

In 1976, Hackman & Oldham proposed a model which tied together previous research on job characteristics. The job characteristics model (Figure 1) was based on the four core dimensions originally defined by Hackman & Lawler in 1971 with the addition of task significance, a fifth core dimension. Task significance was defined as

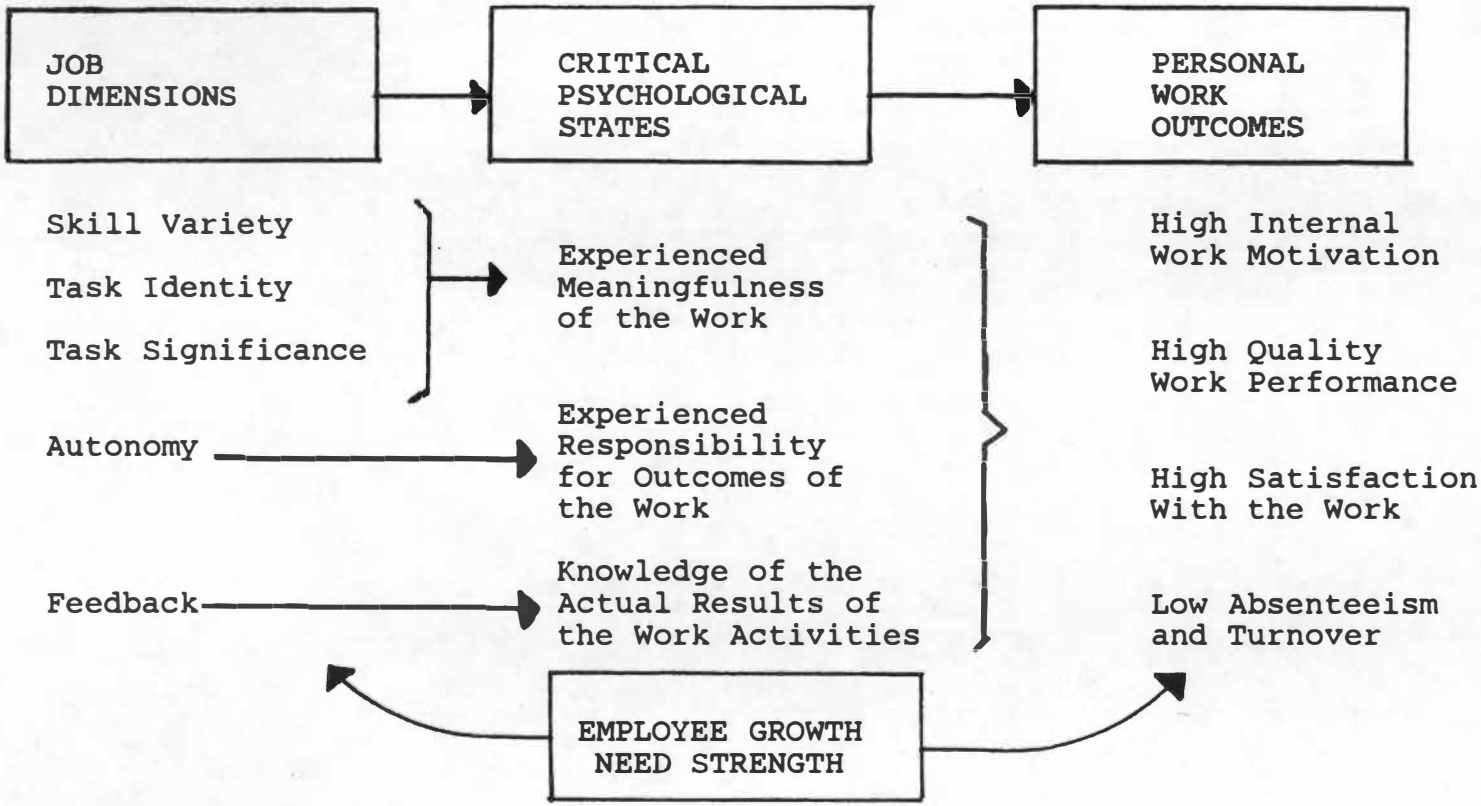


Figure 1. The job characteristics model.*

*Source: Hackman & Oldham, 1976.

"the degree to which the job has a substantial impact on the lives or work of other people, whether in the immediate organization or in the external environment" (Hackman and Oldham, 1976, p. 257).

The five core dimensions are seen as inducing three critical psychological states, which were also defined earlier by Hackman & Lawler (1971). The job dimensions, skill variety, task identity, and task significance contribute to experienced meaningfulness. Autonomy contributes to experienced responsibility and feedback contributes to knowledge of results. The psychological states in turn lead to four personal work outcomes: motivation, performance, satisfaction, low absenteeism, and low turnover. Individual growth need strength moderates the relationships between the core dimensions, psychological states, and work outcomes.

After the job characteristics model was proposed, researchers continued to question the link between job characteristics and satisfaction. Locke (1985) further studied the relationship between growth need strength and job characteristics on one outcome, job satisfaction. Job characteristics and job satisfaction were highly correlated for individuals with high growth need strength. For employees low in growth need strength, the researcher suggested emphasizing work group or management support.

Perceptions of job characteristics and job satisfaction may or may not be affected by changes in production methods or level of technology in a work setting. Billings et al. (1977) found that a change in batch to mass production in a hospital dietary department led to a decline in employee's perceived job importance (task significance) and task variety. However, the change in these two core dimensions did not affect satisfaction with the work itself. Three tentative explanations were offered for the lack of change in job satisfaction. First, the employees in the sample, which included foodservice employees, supervisors, clerks, and dietitians, may have been low in growth need strength and therefore did not regard their jobs as a source of satisfaction. Second, the change in production methods led to a decline in the required work effort, possibly offsetting the impact of task significance and task variety. Third, the change may have been so well managed that there was little significant effect on job satisfaction.

Rousseau (1977) found that characteristics of production jobs, as well as employee satisfaction, varied across technology. Her study further validated the relationship between job characteristics and job satisfaction. In contrast to Billings et al. (1977),

variety and task significance were found to be particularly important to employee satisfaction.

Researchers questioned the objectivity of job characteristics in relation to other factors in the employee's environment. O'Reilly & Caldwell (1979) found that perceptual measures of job dimensions were influenced by bias from informational cues. In an actual work setting, informational cues come in the form of roles, group norms, company or union messages, and perhaps family and community views. The same objective job dimension, such as task significance, may evoke biased perceptions and differing levels of satisfaction simply based on the subjective information to which the employee is exposed.

O'Reilly et al. (1980) proposed that the job characteristics model could actually be reversed, i.e., that an employee's affective response to the job results in different perceptions of job characteristics, rather than the opposite. Their study suggested that perceived job characteristics, even with employees holding the same jobs, vary according to an individual's frame of reference, such as (1) tenure, education, income, race, etc.; (2) definition of the job; and (3) general job satisfaction.

Limitations of the Job Characteristics Model

Hackman & Oldham (1976) identified three limitations of the job characteristics model that should be kept in mind:

First, the model deals only with aspects of the job that can be altered to create positive motivational incentives for the employee. It does not deal with the dysfunctional aspects of repetitive work.

Second, the model focuses on the relationship between an individual and his work and does not consider managerial, social, technical, or situational moderators of how people react to their work.

Third, the model applies only to jobs that are performed relatively independently by individuals and offers no guidelines for the effective design of work for interacting teams.

Given these limitations, the job characteristics model is useful nonetheless for providing a framework for research. The model attempts to explain how individuals in a work setting react to job characteristics. Measurement of the work outcomes (eg. satisfaction) in relation to job characteristics helps to validate the practical application of the model.

Measurement of Job Characteristics

The Job Diagnostic Survey

The Job Diagnostic Survey (JDS) was developed by Hackman & Oldham (1975) and has been widely used to study job characteristics. The JDS used a seven-point rating scale (1 = low, 7 = high) to measure five core dimensions: skill variety, task identity, task significance, autonomy, and feedback from the job itself. The JDS also measures two supplementary dimensions: feedback from supervisors and co-workers, and dealing with others.

Although the JDS has been very useful in job design research, its consistency and reliability have been questioned by several investigators. It has been suggested that the format of the JDS may be somewhat ineffective. In addition, the dimensionality of the JDS has been shown to vary across samples of employees (Dunham, 1976; Dunham et al., 1977).

The Job Characteristics Inventory

The Job Characteristics Inventory (JCI) was developed in 1976 by Sims et al. The 30-item JCI measures the four core dimensions (variety, autonomy, task identity, and feedback) and two interpersonal characteristics (dealing

with others and friendship opportunities) using a five-point rating scale. Pierce & Dunham (1978) found the JCI to be superior to the JDS in terms of internal consistency and dimensionality.

Sims et al. (1976) demonstrated acceptable validity and reliability of the JCI for use in research on the relationships between job characteristics and employee attitudes and behavior. They measured reliability and construct validity using two different employee groups. Group I consisted of employees of a medical center and included administrative, professional, technical, clerical and service personnel. Group II consisted of employees of a manufacturing firm and included managers, engineers, and foremen. Split-half reliability coefficients for Group I and Cronbach alpha reliability coefficients for Group II are shown in Table 1. Factor analysis was performed for both Groups I and II to assess construct validity of the JCI.

Sneed (1987) used the JCI in a study involving school foodservice employees. Cronbach alpha coefficients of .86 for non-supervisory employees and .90 for supervisory employees were found.

In contrast to the JDS, the JCI appears to be useful in a variety of settings. Griffin et al. (1980) assessed

Table 1

Reliability of the Job Characteristics Inventory

Job Characteristics	Reliability	
	Group I[a]	Group II[b]
Variety	.80	.78 (.82)[c]
Autonomy	.74	.84
Feedback	.80	.83 (.86)
Task Identity	.77	.75 (.83)
Dealing with Others	.75	.68 (.73)
Friendship Opportunities	.62	.84

Note. Source: Sims et al., 1978.

[a]Split-half reliability.

[b]Cronbach alpha reliability.

[c]Reliability subsequent to item analysis.

the cross-sample stability of the JCI. Four samples were studied: manufacturing employees from an industrial plant, sales associates from a retail store, resident physicians from a general hospital, and MBA students from a large university. The data indicated that task dimensionality as measured by the the JCI is consistent and reproducible across different settings.

Griffin (1981) evaluated the stability of individual perceptions of job characteristics over a short time interval. The JCI was administered to a group of manufacturing employees at one point in time, then administered again to the same group three months later. There was no significant change in perceptions of characteristics over the three-month time interval.

The JCI is not intended to be used as a comprehensive study of all aspects that are important to a task or job. Indeed, other characteristics such as task complexity, task responsibility, or task challenge may be important in particular organizations.

Application of the Job Characteristics Model In the Foodservice Setting

Foodservice is a highly labor-intensive service industry. Therefore, the success of any foodservice

operation is dependent on the successful management of employees. The job characteristics model appears to be very relevant to the design of jobs in a foodservice setting.

However, application of the job characteristics model to foodservice systems presents a particularly unique challenge for at least two reasons. First, there is a paucity of research in which the job characteristics model has been tested in a foodservice setting, thus making it difficult for a practitioner to feel confident in applying the model. There have been several recent studies in which the job satisfaction of foodservice employees was measured (Billings et al., 1977; Calbeck et al., 1979; Holt, 1984; Hopkins et al., 1980; Martin & Vaden, 1978; Notary, 1983; Pyles, 1983; Swartz & Vaden, 1978; Walsh, 1982). However, only the Billings study examined the relationship of job characteristics and job satisfaction.

Second, foodservice is characterized by a heterogenous employee profile. These employees generally do not share a unified professional identity and vary widely in skill and educational level, thus making it difficult to utilize a single approach in all settings. For example, if it were found that higher autonomy led to increased job satisfaction of university foodservice employees, it may not be valid to assume that this core dimension would

similarly affect job satisfaction of hospital, restaurant, or school foodservice employees. Employees in different settings may have differing levels of growth need strength which has a major influence on how the employee perceives job characteristics. Different contextual variables, such as informational cues from supervisors, may influence perceptions of job characteristics and job satisfaction. Varying levels of technology and production techniques exist in different foodservice settings, which have also been shown to affect job characterstics and job satisfaction.

Summary

The job characteristics model illustrates the relationship between job dimensions and individual reactions to a job. Job satisfaction, one of a set of reactions, is influenced by the employee's individual growth need strength. Satisfaction in relation to job characteristics is influenced by the employee's perception of job characteristics, rather than the actual presence of the job characteristics. Job satisfaction may also be influenced by employee demographic characteristics, job title, type of technology, informational cues, and individual frame of reference. Because it focuses exclusively on the individual, the job characteristics

model may be limited in that it provides little guidance for job design in an interacting system.

The job characteristics model has a great potential for influencing the satisfaction of foodservice employees through attention to individual job design. Application of the job characteristics model in foodservice systems could be enhanced if more appropriate research were available.

Although by no means exhaustive, the JCI appears to be the most useful tool to date for measuring individual perceptions of six specific job characteristics. In using the JCI, it is important to remember that the results reflect the individual's perception of his/her job, and two employees may perceive the same job quite differently.

CHAPTER III

METHODS

Sample

The sample consisted of 179 permanent supervisory (N=32) and non-supervisory (N=147) foodservice personnel at a large state university. Temporary and student employees were not included in the sample. The foodservice is wholly operated by the university, rather than by a contract foodservice firm, and all foodservice employees in this sample were state employees.

Because this research involved human subjects, review and approval by the Human Subjects Research Review Committee was obtained prior to collection of data (Appendix A). In addition, the researcher obtained permission to conduct the study from the Director and Associate Director of Foodservices.

Instruments

The survey instruments administered included all 30 items from the JCI developed by Sims et al. (1976). A letter was sent to Dr. Sims to request permission to use the JCI. (Appendix B), and permission was granted. The instruments also included six questions designed to

determine employees' perceptions of job satisfaction, as well as questions to obtain demographic information.

Two surveys were administered: one for non-supervisory employees (Appendix C), and one for supervisory employees (Appendix D). For questions related to job characteristics and job satisfaction, responses were made on a five-point rating scale. The scales "1 - Very little to 5 - Very much" and "1 - A minimum amount to 5 - A large amount" were used for the job characteristics questions. The scale "1 - Strongly agree to 5 - Strongly disagree" was used for the job satisfaction questions. Demographic questions were answered by choosing the correct descriptive statement. Ranges were provided for demographic questions including age, educational level, wage or salary, and years of employment.

It was known prior to administering the survey that all supervisory employees in the sample were employed full-time. Non-supervisory employees were asked to indicate whether they were employed full-time (40 or more hours per week) or part-time (less than 40 hours per week) and to select the job classification that most closely fit their present job. Because of the large size of the foodservice department and the variety of customer services offered, each non-supervisory job classification encompassed a multitude of tasks and specific job duties. For example,

food service workers, although grouped into one classification, might work in the dishroom, in retail or bakery sales, on the serving line, or in catering.

Pilottest

The survey was pilottested with a group of nine non-supervisory and one supervisory foodservice employees at a high school. Employees were assured that their individual written responses would remain confidential. The researcher read the survey aloud to the entire group. Employees completed the survey and gave the researcher verbal feedback on problems with wording of questions and the pace of reading aloud. Results of the pilottest were used to eliminate or re-write poorly worded questions and to assure the researcher that the level of difficulty of the survey was appropriate for most foodservice employees.

Data Collection

The researcher administered the survey during February 1987. About one month prior, employees were informed of the survey through an article in the monthly foodservices employee newsletter, which is distributed to all foodservices employees (Appendix E). The article explained the purpose of the survey, identified the researcher and graduate committee, and encouraged employees to participate

in the research. With the assistance of unit managers, employees were scheduled in groups at various times during normal working hours to complete the survey. Surveys were administered by the researcher at the unit in which the employee normally worked. Both supervisory and non-supervisory employees were scheduled together in mixed groups.

A cover letter was attached to the front of the instrument (Appendix F). Prior to taking the survey, employees were informed of the nature and purpose of the study and the researcher's background. Employees were assured that all responses would remain confidential and participation in the survey was voluntary. It was emphasized that group data, rather than individual data, would be reported in the results, and that no one in the foodservices department would have access to the completed surveys.

It was estimated that some of the non-supervisory foodservice employees were illiterate to varying degrees. No attempt was made to determine which employees were actually illiterate. To avoid bias and to give all employees the opportunity to complete the survey, the researcher read aloud the non-supervisory instrument. Employees then placed the completed responses in a box

placed at the rear of the room. There were no names nor any other type of identification placed on the responses.

Scoring

Employees responded by circling their answers on the survey. All responses were then coded by the researcher for use in statistical analyses.

The first 30 questions of both surveys related to employees' perceptions of the six job characteristics. Each question related to a specific characteristic. The characteristics and related item numbers are shown in Table 2.

A total job characteristics score for each employee was calculated by summing responses for all 30 items. Subscale scores for each of the six characteristics were calculated by summing the responses to the items for the subscale and dividing by the number of items for the particular characteristic. For example, an employee's variety score would equal the sum of his/her responses to items 1, 7, 12, 17 and 22, divided by five. A higher score would indicate that the employee perceived a higher level of the characteristic in his/her job.

Questions 31 through 36 on both surveys related to employee's perception of job satisfaction. A total job satisfaction score was obtained by summing the responses to

Table 2

Job Characteristics and Related Items in Survey Instrument

Characteristic	Item Numbers
Variety	1, 7, 12, 17, 22
Autonomy	2, 8, 13, 18, 23, 28
Task Identity	3, 19, 24, 29
Feedback	4, 9, 14, 20, 25, 30
Dealing With Others	6, 11, 27
Friendship Opportunities	5, 10, 15, 16, 21, 26

these six questions. The lowest possible score was 6 and the highest possible score was 30 on a continuous scale, with a larger number representing greater perceived job satisfaction.

Questions 43 through 49 on the non-supervisory survey and questions 43, 44, and 47 through 49 on the supervisory survey comprised the demographic factors. Responses for each question were reported as frequency counts and percentages.

Analysis

The internal consistency of the research instruments was determined using the Cronbach alpha coefficient (Cronbach, 1951). The Statistical Package for the Social Sciences (SPSS-X, 1985) was used to calculate the alpha coefficient for the 30 JCI questions. The Statistical Analysis Systems (SAS, 1985) was used for all other analysis.

Descriptive statistics for each item on the survey instrument was done using SPSS-X. For the demographic variables, frequencies and percentages for each category were determined. For each survey item, the mean, standard deviation, and frequency distribution were calculated.

All three hypotheses were analyzed using multiple regression procedures. Hypothesis 1 tested the relationship between job characteristics and job satisfaction. An F-test was used to determine significant differences. Hypothesis 2 tested differences in job characteristics and job satisfaction between supervisory and non-supervisory employees. The F-statistic was used to test for significant differences. Hypothesis 3 tested the relationship of demographic variables to job satisfaction. Separate analyses were run for supervisory and non-supervisory employees. When the model was significant, Duncan's Multiple Range multiple comparison test was used to determine significant differences in means. For all tests of significance, a .05 alpha level was used.

CHAPTER IV

RESULTS

The purposes of this study were to:

1) determine the relationship between perceived job characteristics and job satisfaction of foodservice employees;

2) determine differences in perceived job characteristics and job satisfaction between supervisory and non-supervisory employees; and

3) determine the relationship between job satisfaction and selected demographic variables.

A written survey instrument was administered to 179 university foodservice employees. The instrument consisted of three components: the Job Characteristics Inventory, a general job satisfaction scale, and questions to obtain demographic information. A general description of the survey sample will be presented followed by the results of each research objective.

Description of Sample

Of the 179 participants, 100 percent (n=32) of supervisory employees and 98 percent (n=143) of non-supervisory employees completed a survey. The high response rate was attributed to the method of administering

the survey; employees were given time to complete the survey in their work units. A much lower response rate would be expected if employees were asked to complete the survey on their own time and return it later, or if a mail survey had been used.

Demographic characteristics of the sample are presented in Table 3. Both the supervisory and non-supervisory groups contained a larger percentage of female employees. The supervisory group was more concentrated in the 30 to 39 and 40 to 49 year old age category while the non-supervisory group was spread out more evenly among the age categories. The smallest percentage of employees for both groups were in the less than 20 and in the 60 or older age categories.

All of the supervisory and most of the non-supervisory employees were employed full-time. The largest percentage of non-supervisory employees were foodservice workers and the smallest percentage were storeroom/receiving personnel.

Over half of the supervisory employees had attended or completed college, compared with less than one-fourth of non-supervisory employees. However, almost half of the non-supervisory employees had completed high school.

About one-third of the supervisory and non-supervisory employees had five years or less of tenure with the foodservices department. Almost one-half of the

Table 3

Characteristics of Samples

Characteristic	supervisory employees (N=32)	non-supervisory employees (N=143)
	<--------- % --------->	
Sex		
male	43.7	28.0
female	56.3	71.3
	100.0	99.3
Age		
<20	0.0	2.8
20-29	9.4	18.9
30-39	46.9	25.9
40-49	21.8	21.0
50-59	15.6	21.7
60 or older	6.3	6.3
	100.0	93.8
Employment status		
full-time	100.0	83.9
part-time		12.6
		96.5
Job classification		
cook or baker		18.9
food service worker		27.3
food production worker		20.3
storeroom/receiving clerk/storekeeper		7.0
cashier/sales clerk		11.9
clerical/bookkeeper		12.6
		98.0
Education		
some grade school	0.0	2.1
completed grade school	0.0	6.3
some high school	12.5	17.5
completed high school	15.6	44.8
some technical school	9.4	4.9
completed technical school	3.1	4.2
some college	15.6	16.8
completed college	43.8	2.8
	100.0	99.4

Table 3

(continued)

Characteristic	supervisory employees (N=32)	non-supervisory employees (N=143)
	<--------- % --------->	
Years foodservice experience		
Less than 1	3.1	9.1
1 to 5	31.3	21.7
6 to 10	9.4	32.9
11 to 15	9.4	16.1
16 to 20	25.0	11.9
21 or more	21.8	6.3
	100.0	98.0
Hourly wage		
$3.75 - 5.00		49.7
$5.01 - 6.25		34.3
$6.25 - 7.50		10.5
$7.51 or higher		2.8
		97.3
Yearly salary		
$10,000 - 14,999	18.8	
$15,000 - 19,999	40.6	
$20,000 - 24,999	28.1	
$25,000 or higher	12.5	
	100.0	

Note. All percentages do not total 100.0 due to missing data.

supervisory employees had 16 or more years, compared with less than one-fourth of non-supervisory employees.

One-half of the non-supervisory employees were in the lowest hourly wage category, with one-third in the next highest category. Most supervisory employees were concentrated in the middle two salary ranges.

Instrument Reliability and Validity

The reliability coefficient (Cronbach's alpha) was .91 for the supervisory instrument. For the non-supervisory instrument, the reliability coefficient was .88.

The intercorrelation of job characteristics and job satisfaction is shown in Table 4. All six job characteristics demonstrated a moderate correlation with job satisfaction, with feedback correlating the highest (r=.46). The highest correlation among job characteristics was between task identity and autonomy (r=.61), while the lowest was between dealing with others and feedback (r=.15).

Hypothesis 1

Hypothesis 1 stated that foodservice employees with higher perceived job characteristics scores would express higher job satisfaction. The survey results support this hypothesis. Table 5 shows the multiple regression model which tested the degree to which job characteristics

Table 4

Intercorrelation of Job Characteristics and Job Satisfaction

	1	2	3	4	5	6	7
1. Satisfaction	1.00						
2. Variety	.33*	1.00					
3. Autonomy	.36*	.33*	1.00				
4. Task Identity	.32*	.31*	.61*	1.00			
5. Feedback	.46*	.26	.40*	.30*	1.00		
6. Dealing With Others	.35*	.41*	.43*	.33*	.15	1.00	
7. Friendship Opportunities	.40*	.28*	.46*	.41*	.44*	.37*	1.00

*Statistically significant ($p<.05$).

Table 5

Multiple Regression Analysis for Predicting Job Satisfaction From Job Characteristics

Source	DF	SS	MS	F	PR>F
Model	6	1196.04	199.34	15.42	0.0001*
Error	113	1461.13	12.93		
Corrected Total	119	2657.17			

$R^2 = 0.450$

Source	DF	SS	F Value	PR>F
Variety	1	39.63	3.06	0.0827
Autonomy	1	.75	0.06	0.8098
Task Identity	1	5.87	0.45	0.5017
Feedback	1	338.26	26.16	0.0001*
Dealing With Others	1	107.89	8.34	0.0046*
Friendship Opportunities	1	18.66	1.44	0.2321

*Statistically significant ($p<.05$).

predicted the dependent variable job satisfaction. Overall, the model was significant ($p<.0001$), indicating that job satisfaction was positively related to the total job characteristic score. The R^2 indicates that 45 percent of the variance in job satisfaction could be accounted for by the six job characteristics measured by the JCI. In a test of significance for the individual job characteristics, feedback ($p<.0001$) and dealing with others ($p<.0046$) were found to be related to job satisfaction.

Hypothesis 2

Hypothesis 2 stated that there was no significant difference in perceived job characteristics and job satisfaction between supervisory and non-supervisory employees. These data tend to support this hypothesis with the exception of one job characteristic, dealing with others. Dealing with others was significantly higher for supervisory employees.

Mean scores by role for each of the six job characteristics are presented in Table 6. Regression analysis was conducted for each characteristic by role. Table 6 also shows the levels of significance for each analysis. Dealing with others was the only characteristic which was significantly higher ($p<.0002$) for supervisory employees.

Table 6

Mean Scores and Significance Levels
of Job Characteristics By Role

Characteristic	Mean Job Characteristic Scores		p>F
	Supervisory	Non-Supervisory	
Variety	3.7±.57	3.7±.71	0.6575
Autonomy	3.8±.80	3.7±.73	0.8988
Task Identity	4.1±.92	3.9±.83	0.3274
Feedback	3.2±1.06	3.1±.84	0.6213
Dealing With Others	4.7±.50	4.0±.86	0.0002*
Friendship Opportunities	3.4±.92	3.4±.96	0.8298

Note. Scores were standardized by dividing sums by total number of items in JCI. Scores represent response on one of two scales: 1 - Very little to 5 - Very much" and "1 - A minimum amount to 5 - A large amount."

*Significantly different ($p<.05$).

The addition of role to the multiple regression analysis model only increased the R^2 from .450 to .463, with role having a significance level of p>.1083. This result indicated that job satisfaction could not be predicted on the basis of whether the employee was supervisory or non-supervisory.

Hypothesis 3

Hypothesis 3 stated that there was no significant relationship between job satisfaction and the variables age, sex, job title, education, hourly wage or yearly salary, tenure, or full-time versus part-time employment.

Multiple regression analyses by role were done to determine the relationship between satisfaction and demographic variables (Tables 7 and 8). For supervisory employees, the model was not significant (p<.2728). For non-supervisory employees, the model was significant (p<.0388). The variable age was the only demographic variable that was significantly related to satisfaction (p<.0031).

Since the variable age was significant, a multiple comparison was done using the Duncan's multiple range test to determine where the significant differences lie. The less than 20 years of age (n=2) and older than 60 years of age (n=8) groups were discarded from the Duncan's test due

Table 7

Multiple Regression Analysis for Predicting Job Satisfaction From Demographic Variables for Supervisory Employees

Source	DF	SS	MS	F	PR>F
Model	19	371.32	19.54	1.44	0.2728
Error	11	149.65	13.60		
Corrected Total	30	520.968			

$R^2 = 0.713$

Source	DF	SS	F Value	PR>F
Sex	1	0.79	0.06	0.8143
Age	4	77.29	1.42	0.2909
Education	1	18.58	0.27	0.9184
Tenure	5	64.22	0.94	0.4903
Annual Salary	3	88.92	2.18	0.1482

Table 8

Multiple Regression Analysis for Predicting Job Satisfaction From Demographic Variables for Non-Supervisory Employees

Source	DF	SS	MS	F	PR>F
Model	27	911.19	33.75	1.67	0.0388*
Error	90	1822.64	20.25		
Corrected Total	117	2633.84			

$R^2 = 0.333$

Source	DF	SS	F Value	PR>F
Sex	1	11.75	0.58	0.4482
Age	5	365.37	3.61	0.0051*
Employment Status	1	9.72	0.48	0.4902
Job Class	5	90.44	0.89	0.4892
Education	7	275.12	1.94	0.0722
Tenure	5	96.61	0.95	0.4504
Hourly Wage	3	46.88	0.77	0.5129

*Statistically significant ($p<.05$).

to extremely small sample sizes. Results of the multiple comparison indicated that employees in the 40 to 49 and 50 to 59 year old age group expressed a higher level of job satisfaction than did younger employees.

CHAPTER V

DISCUSSION

This study examined the relationship between job satisfaction and job characteristics for supervisory and non-supervisory foodservice employees. Job characteristics describe those factors in a work situation which can influence an employee's attitude toward his or her job. In addition, the study examined differences in job characteristics and job satisfaction between supervisory and non-supervisory employees. The study also examined the influence of employee demographic characteristics on job satisfaction.

Job characteristics, as measured by the JCI, were found to be a significant predictor of job satisfaction in a group of 32 supervisory and 143 non-supervisory university foodservice employees. With the exception of the characteristic dealing with others, supervisory and non-supervisory employees did not differ in their perception of job characteristics or job satisfaction. Demographic characteristics, with the exception of age, were not related to job satisfaction.

The intercorrelation results in Table 6 are fairly consistent with Sims et al. (1976), who also found the highest correlation between task identity and autonomy

(r=.49) and a lower correlation between dealing with others and feedback (r=.22). Sims et al. also found a low correlation between friendship opportunities and variety (r=.22), although the present study demonstrated a lower correlation between feedback and variety (r=.26) than between friendship opportunities and variety (r=.28).

Earlier research on job characteristics found that employee satisfaction was positively correlated with job characteristics. The present study found dealing with others and feedback to be the strongest predictors of job satisfaction. Interestingly, Hackman & Lawler's (1971) research found dealing with others and friendship opportunities to be least significantly related to job satisfaction. A later study by Griffin (1982) tested the relationship between job characteristics and job satisfaction using the JCI. Variety, autonomy, feedback, and task identity were positively correlated with job satisfaction. The researcher purposely omitted dealing with others and friendship opportunities, apparently because these two characteristics were not believed to be related to the actual tasks that employees perform.

In the present study, supervisory employees perceived a significantly higher level of dealing with others than did non-supervisory employees. Sneed (1987) found that supervisory employees reported higher levels of dealing

with others, variety, and autonomy than did non-supervisory employees. Sims and Szilagyi (1976) studied job characteristics and job satisfaction in a group of administrative employees (high occupational level) versus a group of professional, technical, clerical, and service employees (low occupational level). This study showed that the high occupational level demonstrated higher levels of dealing with others and variety, and lower levels of feedback and task identity. Both of these studies, along with the present study, agreed on the finding that dealing with others is substantially greater in the supervisor's job. This probably reflects the nature of the supervisor's activities which involve dealing with people, rather than with things such as equipment and materials.

The job characteristics means in the present study are fairly similar to those obtained by Sneed (1987) in a sample of school foodservice employees using the JCI. Table 9 compares the mean scores from both studies. The Sneed study used a smaller sample size and a more homogenous group of supervisory employees, i.e. fewer management layers and mostly front-line supervisors. For non-supervisory employees, identical scores were obtained for variety and autonomy. The greatest differences in scores were for the characteristic feedback in both groups, and dealing with others in the non-supervisory group.

Table 9

Comparison of Job Characteristics Mean Scores in Two Studies Using Foodservice Samples

	Mean Job Characteristic Scores			
	Supervisory		Non-supervisory	
Characteristic	(A)[a] n=32	(B)[b] n=23	(A) n=143	(B) n=114
Variety	3.7	4.1	3.7	3.7
Autonomy	3.8	4.3	3.7	3.7
Task Identity	4.1	4.3	3.9	4.3
Feedback	3.2	4.2	3.1	4.4
Dealing With Others	4.7	3.4	4.0	3.0
Friendship Opportunities	3.4	3.9	3.4	3.5

Note. Both studies used the JCI with same number of items for each characteristic. Scores were standardized by dividing sums by total number of items in JCI. Scores represent response on one of two scales: 1 - Very little to 5 - Very much" and "1 - A minimum amount to 5 - A large amount."

[a]Present study.

[b]Sneed, 1987.

No relationship was found between employee demographic characteristics and job satisfaction, except for age. Much of the literature is contradictory on the relationship of the characteristics sex, education, job title, and tenure to job satisfaction. Age, however, has been shown to have a strong, positive relationship to job satisfaction. Part-time employment status has also been correlated with higher levels of job satisfaction, although this was not demonstrated in the present study.

Limitations

When interpreting these data, several limitations must be recognized:

(1) A non-random, convenience sample in a limited geographical setting was used, rather than a more widely selected random sample.

(2) Respondents could have altered or inflated responses to enhance results.

(3) There were some missing data, possibly due to respondents not clearly understanding survey questions.

(4) The objective, structured nature of the survey instrument could have prohibited respondents from fully explaining attitudes which might further clarify research results.

Summary

This study demonstrated that employees who rated their jobs higher in the six job characteristics tended to express a higher level of job satisfaction. Feedback and dealing with others were stronger predictors of job satisfaction than were the other job characteristics. Whether the employee was a supervisor or non-supervisor did not influence the level of job characteristics or job satisfaction, except for the characteristic dealing with others, which was perceived to be higher among supervisory employees. In addition, employee demographic characteristics did not influence job satisfaction, except for age.

Recommendations

The Job Characteristics Inventory was used to measure employees' perceptions of characteristics present in their jobs. It is important to note that this instrument measures perceptions and not the actual presence of any one characteristic. It is the employee's perception of that characteristic that determines whether or not the employee is satisfied with his or her particular work situation. Two employees performing similar jobs could perceive different levels of a characteristic.

Efforts to alter employee satisfaction should begin with assessing and understanding the employee's perception of job characteristics. The use of a written survey instrument such as the Job Characteristics Inventory can be used to measure employee perceptions. Once perceptions are understood, methods such as job design, job enrichment, or job rotation could be applied based on those characteristics which most strongly influence employee satisfaction. After modifications in job design have been implemented, changes in employee attitudes should be evaluated. Bobeng (1977) suggested that problems resulting from redesigning jobs are caused by inadequately diagnosing problems and failing to evaluate change.

This study focused on job characteristics in relationship to employee job satisfaction, which is one outcome of the job characteristics model. In addition, the job characteristics model proposes that the core dimensions lead to high motivation, high performance, low absenteeism, and low turnover. This study did not address these outcomes, nor does it imply that job satisfaction influences motivation, performance, absenteeism, or turnover. Additional study in this area could include measurement of these other outcomes in addition to job satisfaction. A reasonable hypothesis would be that employees who rate their jobs higher in the job

characteristics would be more highly motivated, have higher quality/quantity performance, and lower absenteeism and turnover.

This study also did not address the presence of employee growth need strength, an important factor in the job characteristics model. Presence of a high growth need strength is theorized to moderate the link between job characteristics and the four work outcomes. Additional studies using the job characteristics model could include measurement of growth need strength to further validate the relationship between job characteristics and job satisfaction or other performance outcomes.

For purposes of this study, selected demographic characteristics were chosen for comparison with job satisfaction scores. Although there was little correlation between these particular demographic characteristics and job satisfaction, there may be other employee characteristics which are more closely related to satisfaction. It is certainly worthwhile to continue investigating employee-related characteristics or individual differences, as well as job-related characteristics, which might affect job satisfaction.

Finally, it is recommended that related studies be conducted in other foodservice settings, such as public schools, health care, and commercial facilities.

Satisfaction and job characteristics may be affected by contextual variables. This study showed feedback and dealing with others to be significantly related to job satisfaction. Several sources of feedback, such as formal rewards, co-workers, supervisors, and comparisons with others could vary significantly in different foodservice settings. The study would provide evidence to indicate if differences exist in perceived job characteristics and job satisfaction due to setting.

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APPENDIXES

APPENDIX A

Certification of Exemption From Review For Research Involving Human Subjects

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

Office of
Research
Compliances

February 2, 1987

Ms. Kelly Duke
405 Student Services Bldg.
CAMPUS

Dr. Jeannie Sneed
229 Jessie Harris Bldg.
CAMPUS

Dear Ms. Duke and Dr. Sneed:

The project which you submitted entitled, "Job Characteristics as Related to Job Satisfaction of College Foodservice Employees," CRP #2267-A, has been reviewed and certified exempt from review by the Committee on Research Participation.

This certification is for a period ending February 2, 1988. Please make timely submission of renewal or prompt notification of project termination (see item #2 below).

The responsibility of the project director includes the following:

1. Prior approval from the Director of Research Compliances must be obtained before any changes in the project are instituted.

2. A statement must be submitted (Form D) at 12-month intervals attesting to the current status of the project (protocol is still in effect, project is terminated, etc.).

The Committee wishes you success in your research endeavors.

Sincerely,

L. B. Cebik, Director

cc: Dr. Thomas C. Collins, Vice Provost for Research
Dr. Betty Ruth Carruth

404 Andy Holt Tower Knoxville, Tennessee 37996-0140 (615) 974-7697

APPENDIX B

Letter Requesting Permission to Use The Job Characteristics Inventory

THE UNIVERSITY OF TENNESSEE
KNOXVILLE

Department of
Food Services

January 5, 1987

Dr. Henry P. Sims, Jr.
Associate Professor
Organizational Behavior
Pennsylvania State University
University Park, Pennsylvania

Dear Dr. Sims,

I would like to request your permission to use the Job Characteristics Inventory for research that I am conducting at the University of Tennessee. The survey will be administered to approximately 193 food service employees at this campus. The results of this study will form a major portion of my master's thesis and may possibly be submitted to a scholarly journal.

I would appreciate your forwarding a letter of permission. A self-addressed stamped envelope is enclosed for your convenience.

Sincerely,

Kelly Duke

Kelly Duke
Registered Dietitian

Permission granted
Henry P Sims
Jan 12, 1987

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APPENDIX C

Survey Instrument for Non-Supervisory Employees

Part I

There are many characteristics about your job that are important to you. Please describe your job by answering the following questions. Circle the number that you feel best answers the question about your job.

		Very little		A moderate amount		Very much
1)	How much variety is there in your job?	1	2	3	4	5
2)	How much are you left on your own to do your own work?	1	2	3	4	5
3)	How often do you see projects or jobs through to completion?	1	2	3	4	5
4)	To what extent do you find out how well you are performing as you work?	1	2	3	4	5
5)	How much opportunity is there to meet individuals with whom you would like to develop friendship?	1	2	3	4	5
6)	How much of your job depends upon your ability to work with others?	1	2	3	4	5
7)	How repetitious are your duties (i.e. do the same thing over and over again?	1	2	3	4	5
8)	To what extent are you able to act independently of your supervisor in performing your job function (i.e. work without supervision?)	1	2	3	4	5
9)	To what extent do you receive information from your supervisor on your job performance?	1	2	3	4	5
10)	To what extent do you have the opportunity to talk informally with other foodservice employees while at work?	1	2	3	4	5
11)	To what extent is dealing with other people a part of your job?	1	2	3	4	5
12)	How similar are the tasks you perform in a typical work day?	1	2	3	4	5
13)	To what extent are you able to do your job independently of others?	1	2	3	4	5

Part II

To further describe your job, please circle the number that best answers the following questions.

		A minimum amount		A moderate amount		A large amount
14)	How much feedback (information) do you get from your supervisor on how well you are doing on your job?	1	2	3	4	5
15)	How much opportunity for friendship do you have with your co-workers?	1	2	3	4	5
16)	How much opportunity do you have to talk to others on your job?	1	2	3	4	5
17)	How much opportunity do you have to do a number of different tasks in your job?	1	2	3	4	5
18)	How much freedom do you have to do pretty much what you want on your job?	1	2	3	4	5
19)	To what degree do you handle your work by yourself from beginning to end?	1	2	3	4	5
20)	How much opportunity do you have to find out how well you are doing on your job?	1	2	3	4	5
21)	How much opportunity do you have to get to know other people at work?	1	2	3	4	5
22)	How much variety is there in your job?	1	2	3	4	5
23)	How much opportunity do you have for independent thought and action (i.e. to decide how you are going to do your job)?	1	2	3	4	5
24)	How much opportunity do you have to complete work you start?	1	2	3	4	5
25)	To what extent do you feel that you know whether you are performing your job well or poorly?	1	2	3	4	5
26)	How much opportunity do you have to develop close friendships in your job?	1	2	3	4	5
27)	To what extent does your job involve meeting with others?	1	2	3	4	5
28)	How much control do you have over the pace of your work?	1	2	3	4	5
29)	How much opportunity do you have to do a job from the beginning to end (i.e., the chance to do a whole job)?	1	2	3	4	5
30)	How much feedback (information) do you receive from individuals other than your supervisor?	1	2	3	4	5

Part III

Each of the following are statements related to your satisfaction with different aspects of your work situation. Circle the number of the statement that most agrees with your feelings.

		Strongly disagree		Neutral		Strongly agree
31)	I am satisfied with the supervision I receive on my job.	1	2	3	4	5
32)	I enjoy the people that I work with.	1	2	3	4	5
33)	I enjoy the work I do.	1	2	3	4	5
34)	I am proud to work for the University of Tennessee Food Services Department.	1	2	3	4	5
35)	I am satisfied with my opportunities for promotion.	1	2	3	4	5
36)	In general, I am satisfied with my job.	1	2	3	4	5
37)	The Employee of the Month is a good way to recognize outstanding employees.	1	2	3	4	5
38)	We should continue to have the Christmas workshop every year.	1	2	3	4	5
39)	I receive proper training for my job.	1	2	3	4	5
40)	I have adequate tools and/or equipment to do my job.	1	2	3	4	5

41) I read the Platter Chatter newsletter. (Circle answer)
Yes No

(If answer is NO, go on to question 43) →
(If answer is YES, please answer question 42)

42) The Platter Chatter helps keep me informed of current news in Food Services. (Circle answer)

1 Strongly disagree 2 3 Neutral 4 5 Strongly agree

Part IV

Finally, we would like to ask some questions about you to help interpret the results. Please circle the number of the correct answer.

43) Your sex:
1 Male
2 Female

44) Your present age:
1 Less than 20
2 20-29
3 30-39
4 40-49
5 50-59
6 60 or older

45) What is your current employment status?
1 Full-time (40 or more hours per week)
2 Part-time (Less than 40 hours per week)

46) What is your job category?
1 Cook or Baker
2 Food Service Worker
3 Food Production Worker
4 Storeroom/Receiving Clerk or Storekeeper
5 Cashier/Sales Clerk
6 Clerical/Bookkeeper

47) Which is the highest level of education that you have completed?
1 Some grade school
2 Completed grade school
3 Some high school
4 Completed high school
5 Some technical school
6 Completed technical school
7 Some college
8 Completed college

48) Number of years that you have been employed at University of Tennessee Food Services Department:
1 Less than 1 year
2 1 to 5 years
3 6 to 10 years
4 11 to 15 years
5 16 to 20 years
6 21 years or more

49) What is your present hourly pay?
1 $3.75 to 5.00 per hour
2 $5.01 to 6.25 per hour
3 $6.26 to 7.50 per hour
4 $7.51 or higher

APPENDIX D

Survey Instrument for Supervisory Employees

Part I

There are many characteristics about your job that are important to you. Please describe your job by answering the following questions. Circle the number that you feel best answers the question about your job.

		Very little		A moderate amount		Very much
1)	How much variety is there in your job?	1	2	3	4	5
2)	How much are you left on your own to do your own work?	1	2	3	4	5
3)	How often do you see projects or jobs through to completion?	1	2	3	4	5
4)	To what extent do you find out how well you are performing as you work?	1	2	3	4	5
5)	How much opportunity is there to meet individuals with whom you would like to develop friendship?	1	2	3	4	5
6)	How much of your job depends upon your ability to work with others?	1	2	3	4	5
7)	How repetitious are your duties (i.e. do the same thing over and over again?	1	2	3	4	5
8)	To what extent are you able to act independently of your supervisor in performing your job function (i.e. work without supervision?)	1	2	3	4	5
9)	To what extent do you receive information from your supervisor on your job performance?	1	2	3	4	5
10)	To what extent do you have the opportunity to talk informally with other foodservice employees while at work?	1	2	3	4	5
11)	To what extent is dealing with other people a part of your job?	1	2	3	4	5
12)	How similar are the tasks you perform in a typical work day?	1	2	3	4	5
13)	To what extent are you able to do your job independently of others?	1	2	3	4	5

Part II

To further describe your job, please circle the number that best answers the following questions.

		A minimum amount		A moderate amount		A large amount
14)	How much feedback (information) do you get from your supervisor on how well you are doing on your job?	1	2	3	4	5
15)	How much opportunity for friendship do you have with your co-workers?	1	2	3	4	5
16)	How much opportunity do you have to talk to others on your job?	1	2	3	4	5
17)	How much opportunity do you have to do a number of different tasks in your job?	1	2	3	4	5
18)	How much freedom do you have to do pretty much what you want on your job?	1	2	3	4	5
19)	To what degree do you handle your work by yourself from beginning to end?	1	2	3	4	5
20)	How much opportunity do you have to find out how well you are doing on your job?	1	2	3	4	5
21)	How much opportunity do you have to get to know other people at work?	1	2	3	4	5
22)	How much variety is there in your job?	1	2	3	4	5
23)	How much opportunity do you have for independent thought and action (i.e. to decide how you are going to do your job)?	1	2	3	4	5
24)	How much opportunity do you have to complete work you start?	1	2	3	4	5
25)	To what extent do you feel that you know whether you are performing your job well or poorly?	1	2	3	4	5
26)	How much opportunity do you have to develop close friendships in your job?	1	2	3	4	5
27)	To what extent does your job involve meeting with others?	1	2	3	4	5
28)	How much control do you have over the pace of your work?	1	2	3	4	5
29)	How much opportunity do you have to do a job from the beginning to end (i.e., the chance to do a whole job)?	1	2	3	4	5
30)	How much feedback (information) do you receive from individuals other than your supervisor?	1	2	3	4	5

Part III

Each of the following are statements related to your satisfaction with different aspects of your work situation. Circle the number of the statement that most agrees with your feelings.

		Strongly disagree		Neutral		Strongly agree
31)	I am satisfied with the supervision I receive on my job.	1	2	3	4	5
32)	I enjoy the people that I work with.	1	2	3	4	5
33)	I enjoy the work I do.	1	2	3	4	5
34)	I am proud to work for the University of Tennessee Food Services Department.	1	2	3	4	5
35)	I am satisfied with my opportunities for promotion.	1	2	3	4	5
36)	In general, I am satisfied with my job.	1	2	3	4	5
37)	The Employee of the Month is a good way to recognize outstanding employees.	1	2	3	4	5
38)	We should continue to have the Christmas workshop every year.	1	2	3	4	5
39)	I receive proper training for my job.	1	2	3	4	5
40)	I have adequate tools and/or equipment to do my job.	1	2	3	4	5

41) I read the Platter Chatter newsletter. (Circle answer)
Yes No

(If answer is NO, go on to question 43) →
(If answer is YES, please answer question 42)

42) The Platter Chatter helps keep me informed of current news in Food Services. (Circle answer)

1 Strongly disagree 2 3 Neutral 4 5 Strongly agree

Part IV

Finally, we would like to ask some questions about you to help interpret the results. Please circle the number of the correct answer.

43) Your sex:
1 Male
2 Female

44) Your present age:
1 Less than 20
2 20-29
3 30-39
4 40-49
5 50-59
6 60 or older

45) What is your current employment status?
1 Exempt
2 Non-exempt

46) Number of employees you supervise each day: (Fill in answer)
_____ Full-time
_____ Part-time

47) Which is the highest level of education that you have completed?
1 Some grade school
2 Completed grade school
3 Some high school
4 Completed high school
5 Some technical school
6 Completed technical school
7 Some college
8 Completed college

48) Number of years that you have been employed at University of Tennessee Food Services Department:
1 Less than 1 year
2 1 to 5 years
3 6 to 10 years
4 11 to 15 years
5 16 to 20 years
6 21 years or more

49) What is your present yearly (gross) salary?
1 $10,000 to 14,999
2 $15,000 to 19,999
3 $20,000 to 24,999
4 $25,000 or higher

APPENDIX E

Foodservices Newsletter Article

Platter Chatter

UTK Food Service Department Newsletter — January 1987, Vol. 2, No. 1

FOOD SERVICES TO PARTICIPATE IN ATTITUDE SURVEY

How do you feel about your job? Are you satisfied, or is there somthing you'd like to change?

During Winter Quarter, you will have a chance to express feelings about your job. Every employee in Food Services, including management, may volunteer to participate in an attitude survey.

This survey is designed especially for Food Service employees and is part of a research study conducted by Kelly Duke, RD, Graduate Assistant, along with Jeannie Sneed, PhD. RD; Jean Skinner, PhD, RD; and Mark McGrath, MS, Professors in Nutrition and Food Science at UTK.

Your individual responses to the survey will remain confidential. When you fill out the survey, no one in Food Services will ever see your individual answers, and you will not be asked to sign your name. When the survey is completed, the responses will be compiled into a typewritten report so that your managers can share the results with you. Results will also be reported in *Platter Chatter*. Again, only group results will be discussed; your individual response will be kept confidential.

Norman Hill, Director, and Jamie Miller Associate Director, will be filling out the survey along with management. But they are most interested in how you feel about working for UTK Food Services. They ask that you feel free to be completely honest in your answers.

Food Services continues to strive to be the best. The most important part of Food Services are our employees, and your opinions really do matter. Stay tuned for further details about the upcoming attitude survey!

APPENDIX F

Cover Letter for Survey

UTK FOODSERVICES EMPLOYEE ATTITUDE SURVEY

Dear Employee,

You have been asked to participate in a UTK Foodservices Employee Attitude Survey. This survey is being conducted as part of a research study for a Master's degree thesis. In addition, results of this survey will be utilized by Foodservices management to better understand the needs of employees and to determine areas in working conditions where improvements may need to be made.

Your responses to this survey will remain completely confidential. No one in Food Services will ever see your completed survey. All results will be reported as group data. You are encouraged to be completely honest in your answers. **Please do NOT sign your name to the survey, and do not indicate in which unit you are presently working.**

Participation in this survey is completely voluntary. If for any reason you do not wish to complete this survey, please leave the entire survey packet blank. You may return the blank survey to the researcher and leave the room, or you may remain in the room until the others have finished and turn in your blank survey along with the other surveys. Please do not carry any surveys out of the room with you.

If you have any questions before you begin taking the survey, please do not hesitate to ask the researcher.

Thank you.

Kelly Duke

Kelly Duke, R.D.
Graduate Student
Nutrition and Food Sciences
College of Human Ecology
University of Tennessee

VITA

Kelly Mollica Duke is a Registered Dietitian. She received a Bachelor of Science degree in Food, Nutrition and Dietetics from Western Carolina University, Cullowhee, North Carolina in 1983. In 1984, she completed a dietetic internship at Hines Veterans Administration Hospital in Chicago, Illinois. She accepted a position as Clinical Dietitian at a Veterans Administration Medical Center in Temple, Texas. She later transferred to a position as Foodservice Director for a Texas nursing facility operated by Manor Healthcare Corporation.

In 1986, Ms. Duke began study toward a Master of Science Degree in Food Systems Administration at the University of Tennessee, Knoxville. During this time she worked as an Administrative Graduate Assistant for the campus residence halls foodservice department, and as a Teaching Assistant for Quantity Foods.

The author is a member of The American Dietetic Association, Knoxville District Dietetic Association, Phi Kappa Phi and Omicron Nu. Prior to graduation, she accepted a position as Healthcare Systems Director for Biggers Brothers Foods, Inc. in Knoxville, Tennessee. Ms. Duke plans to eventually pursue a Doctorate degree in Business Administration.