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Antecedents, mediators, and moderators of employee benefit satisfaction: An empirical analysis

Lane, Matthew Colin, Ph.D.

The Ohio State University, 1992
ANTECEDENTS, MEDIATORS, AND MODERATORS OF EMPLOYEE BENEFIT
SATISFACTION: AN EMPIRICAL ANALYSIS

Dissertation

Presented in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy in the
Graduate School of The Ohio State University

By

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The Ohio State University

1992

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DEDICATION

I-D-A-H-O

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VARIABLE LABELS

AGE  = Age of employee
EDUC = Educational level of employee
       1=less than high school
       2=high school diploma or GED
       3=high school/GED plus some
           college or technical training
       4=2-yr. college degree
       5=4-year college degree
       6=some graduate school
       7=graduate or professional degree
SEX  = Gender of employee
       0=male
       1=female
RACE = Race of employee
       1=african american
       2=hispanic
       3=caucasian
       4= native american
       5= asian american or pacific islander
MAR  = Marital status of employee
       1=single, never married
       2=married
       3=divorced
       4=widow/widower
DEPEN = Number of dependents including employee
RELY = Degree of reliance of second source of benefits
       1=never rely
       2=rarely rely
       3=rely about half time
       4=majority rely
       5=always rely
TEN  = Years of service with present company
FUL  = Work status of employee
       0=part-time
       1=full-time
UN   = Union affiliation
       1=do not belong to union
       2=belong to union
WANT = Benefit wants vs. benefits received
ENT  = Entitlement to more benefits
PAST = Comparison of past benefits to current benefits
FUT  = Future benefit expectancy
RES  = Personal responsibility for benefit situation
COMP = Benefit comparison others
Variable Labels (continued)

<table>
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<td>THOR</td>
<td>Benefit communication thoroughness</td>
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<td>LOG</td>
<td>Benefit communication logic</td>
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<tr>
<td>GEN</td>
<td>Benefit communication genuineness</td>
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<tr>
<td>MAN</td>
<td>Manipulative intent of benefit communications</td>
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<td>COM</td>
<td>Trust and belief in individual who communicates benefits</td>
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<td>RISK</td>
<td>Employee risk taking disposition</td>
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<td>PAY</td>
<td>Pay level</td>
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<td>DEP</td>
<td>Benefits relative deprivation</td>
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<td>BSAT</td>
<td>Satisfaction with employee benefits</td>
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<td>Benefit communications x benefit wants</td>
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<td>COMENT</td>
<td>Benefit communications x benefit entitlement</td>
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<td>COMPAST</td>
<td>Benefit communications x past benefit comparisons</td>
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<td>COMRES</td>
<td>Benefit communications x personal responsibility for benefit situation</td>
</tr>
<tr>
<td>COMFUT</td>
<td>Benefit communications x future benefit expectancies</td>
</tr>
<tr>
<td>COMCOM</td>
<td>Benefit communications x benefit comparison others</td>
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<tr>
<td>RISKWAN</td>
<td>Risk propensity x benefit wants</td>
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<tr>
<td>RISKENT</td>
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CHAPTER I

BACKGROUND OF EMPLOYEE BENEFITS
AND RESEARCH IMPORTANCE

Introduction to the Topic

Providing employee benefits has become a significant and critical factor of employer pay systems. Employee benefits as a percentage of total wages have risen from 5% of pay in 1943 to an average of 39.3% in 1986 according to the U.S. Chamber of Commerce (McCaffery, 1988). The private sector spent 691 billion on benefits in 1985, increasing to 813 billion in 1987 (U.S. Chamber of Commerce). More recently, it was estimated that 700 billion a year was spent on health care alone -- an amount equal to 12.5% of the U.S. Gross National Product (Croweak, 1991). From 1965 to 1985, healthcare spending in the United States increased 934% (Forstadt, 1989), and employer costs of providing health care benefits increased 70% between 1987 and 1989 (Klingberg, 1990).

Rising benefit costs, a constant concern for organizations and human resource professionals, make it critical for organizations to develop an understanding of
their employee benefit programs. However, understanding the impact of employee benefits goes beyond the recitation of benefit costs. Increasing our knowledge of employee benefits through empirical research is important for human resources management researchers and professionals. Such empirical studies will contribute to compensation research, particularly pay and benefit satisfaction research.

Why Benefits Research?

Human resource professionals are beginning to realize the importance of understanding how benefit plans influence an organization's success in recruiting and retaining employees, motivating employees, and enhancing other organizational functions (McCaffery, 1992). A recent survey of 422 human resource management (hrm) professionals rated employee benefit issues first in importance to their organization out of thirty-six rated issues (some other issues included mergers and acquisitions, downsizing, union organizing, compensation, recruiting, productivity, competitiveness, workforce productivity) (Maxwell Macmillan Professional and Business Reference Publishing, 1991).

An additional indication of the importance of benefits to hrm professionals is the ranking assigned to employee benefit specialists in organizations. Today, many large firms have directors of benefits, and some organizations classify the position at the vice-president level. This
positional ranking of employee benefits positions reflects organizational concern for employee benefits and is comparable to positions in training and development, labor relations, and recruitment and staffing (McCaffery, 1992).

Finally, understanding employee benefits is important to HRM professionals because benefit plans are an important way that organizations communicate their human resource philosophy to employees. For example, an organization may choose to promote a philosophy of organizational commitment by developing their benefits plan around profit sharing and/or stock ownership plans. Or the organization may wish to convey an egalitarian philosophy by ensuring that all employees receive the same benefit plan, regardless of position or rank. Conversely, the organization may choose to communicate a hierarchical philosophy by providing high level employees with benefits not received by low level employees (McCaffery, 1992).

The rising importance of employee benefits to HRM professionals is well founded. Several factors make it increasingly important for organizations to improve their understanding of this area. First, changing U.S. workforce demographics affect benefit costs. Census data indicate that 31 million people in the U.S. are age sixty-five and older, about 12.7% of our population. By 2030, the over age sixty-five population will number sixty-five million or almost 22% of the population—an increase of over 120% more
elderly people than today (Freidland, 1990). The increase in health care needs associated with the aging population of workers increases the financial strain on many employer health benefit systems. This strain will be compounded by continued increases in life expectancy, and exacerbated with the passage of the Age Discrimination in Employment Act (ADEA), prohibiting forced age-related retirement for workers (Harper, 1988).

Second, although the importance of employee benefits has been ranked first by HRM professionals, there is evidence that U.S. firms have not responded strategically to the benefits situation. A recent survey of 100 senior-level health benefits executives of large industrial and service companies found that 71% of the companies had no formal strategic plan for controlling health care costs over the long term; 68% reported their companies had no health care information system to monitor claims; and 44% indicated they used a "quick fix" approach to health care cost problems (Harper, 1988). Such findings in the presence of the enormous cost of benefits suggests attention to increasing knowledge of employee benefits is long overdue.

Finally, the importance of benefits to employees is strongly evident. A study of over 12,000 employees found that 28% of the respondents rated employee benefits as more important than direct pay; 56% of the respondents indicated benefits and pay were equal in importance; only 16% rated
employee benefits as less important than pay (Hewitt and Associates, 1985). As organizations compete for quality labor, the ability of their benefits package to attract and retain employees becomes increasingly significant. Thus, organizational decision-makers need to learn how potential and current employees react to their benefits.

Future successful organizations will understand (a) practical methods of benefit cost containment, and (b) the causes of, and organizational outcomes related to, employees' reactions to their benefits. Given the increasing costs of benefits, it is logical that organizations derive a commensurate return on this investment (Milkovich & Newman, 1987). If organizations fail to produce employee satisfaction with the benefits they provide, then the cost of coverage is not likely to be justified (Dreher, Ash, & Bretz, 1988). Compensation research can perform an important function in the development of effective benefit plans.

An important role of compensation research is to generate knowledge about factors related to employee satisfaction with their benefits. This significance is illustrated by the fact that the increasing cost of employee benefits has not been paralleled with an increase in employee satisfaction with their benefits. A survey by the Opinion Research Corporation (1987) found that between 1970 and 1984, employee satisfaction with benefits dropped 17%.
Additionally, a recent Wyatt survey of more than 3,500 employees found that satisfaction with health care benefits had dropped 5% in the previous two years, and of those employees indicating satisfaction with their benefits, 77% intended to remain with their current employer, whereas among those dissatisfied with their benefits only 53% intended to remain (Parkington, 1990).

The inverse relationships between benefit expenses and benefit satisfaction and between benefit satisfaction and intent to turnover should signal employers and compensation researchers of the importance of increasing our knowledge of how employees view and react to benefits.

Purpose of This Study

This study will add to the benefit satisfaction literature in several ways (see Figure 1, page 121). First, this study will examine benefit satisfaction as a variable distinct from other pay dimensions. Historically, pay satisfaction research included employee benefit satisfaction as part of the unidimensional concept of pay satisfaction rather than as a separate construct. Only as recently as 1979 did H. Heneman & Schwab first introduce the concept of the multidimensionality of pay. They considered "pay" to comprise four distinct dimensions: pay level, an average of several wages or salaries in an organization; pay system, the method the organization uses to determine pay;
pay structure, the hierarchy of pay rates or levels among jobs in an organization; and pay form, the type of pay the employee receives such as direct remuneration, or indirect remuneration such as fringe benefits or services (H. Heneman & Schwab, 1979). Since 1979 there have been revisions to their multidimensionality pay concept. Most recently, H. Heneman & Schwab (1985) proposed a multidimensional concept of pay with four distinct components, pay level, benefits, raises, and structure/administration. Within this framework, the benefit satisfaction dimension has been repeatedly supported as distinct from other pay forms and, therefore, deserving of separate and original research (Ash et al. 1985; R. Heneman et al. 1988; Scarpello et al. 1988; Ziemak, 1988; Orpen and Bonnici, 1987; Miceli, Mulvey, & Near, 1990; Lance & Scarpello, 1989; Mulvey, 1990).

A second contribution of this study will be to investigate correlates of employee benefit satisfaction using theoretically-guided hypotheses based on relative deprivation theory, a theory based on social comparison. Other completed studies of employee benefit satisfaction have been primarily atheoretical, relying on common sense and post hoc explanations. While these contributions are important, theoretically guided employee benefit research adds an important element: "Good theory is practical precisely because it advances knowledge in a scientific discipline, guides research toward crucial questions, and
enlightens the profession of management" (Van de Ven, 1989).

Third, this study will also look empirically at the effects of organizational benefit communications on employee benefits satisfaction. The need for good communication of benefits to employees is an issue that has emerged frequently in the conceptual practitioner literature but has lacked equivalent empirical investigation by compensation researchers (Bowen and Wadley, 1989; Chauran, 1989, Tane, 1987). Benefits communication has been called the "keystone" of employee benefit programs (McCaffery, 1988, p.210), and effective communication of employee benefits should result in high levels of employee awareness, understanding, and trust in the explanations regarding their benefits package. This research need is illustrated by the fact that employees are frequently not aware of the benefits offered to them, and they underestimate the value of their benefits (Parkington, 1990; Wilson, Northcraft, & Neale, 1985).

This lack of employee understanding and undervaluation of their benefits is alarming considering the huge sums organizations are spending on employee benefits. Empirical research is needed to explain the role of communication in an organization's delivery of an efficient and effective employee benefits system.

Finally, this study will add to the re-emerging individual disposition literature by exploring the role of
risk taking, a personality variable, in explaining employee benefit satisfaction. The study of personality trait effects on organizations suggests that "individuals possess unobservable mental states or dispositions (e.g., needs, values, attitudes, or personalities) that are relatively stable over time and that determine, at least to some extent, their attitudes and behavior in organizations" (Weiss & Adler, 1984).

Past trait/organizational research has focused on aspects such as leadership traits (Fleishman, 1953; Stogdill, 1974), need for achievement (McClelland, 1961), and growth need strength (Hackman & Oldham, 1976). Recently, interest in trait/organization research has again resurfaced due to recent findings such as the effect of negative affectivity on long-term job satisfaction (Staw, Bell, & Clausen, 1986; Staw & Ross, 1985). The investigation of employee risk-taking disposition may also prove useful in understanding employee reactions to their benefits.

Statement of Research Questions

Specifically, this study is designed to investigate antecedent, moderating, and mediating variables which may be related to employee benefit satisfaction.

The research questions to be investigated are:

(1) Do the relative comparisons employees make concerning the benefits they receive correlate with how satisfied they are with their benefits? (2) Do the employee perceptions of
the employer benefit communication efforts and employee risk taking dispositions moderate this relationship? And, (3) Do employee feelings of deprivation act as a mediator between the relative comparisons and employee benefit satisfaction?

The results of this study are intended to enhance the understanding researchers and practitioners have concerning how people evaluate and feel about their employee benefits.

Benefits Research Limitations

A number of limitations are inherent to benefits research. A description of how this study will attempt to overcome some of these limitations follows.

First, there is no broadly accepted definition of employee benefits. Official agencies such as the United States Department of Commerce (DOC), the Bureau of Labor Statistics (BLS), and the U.S. Chamber of Commerce (USCC) include several forms of indirect compensation in describing what is considered an employee benefit. Their definitions include compensation as legally required payments (e.g. Social Security, unemployment and worker's compensation), private pensions and welfare plans (e.g. pensions, health insurance, life insurance and profit sharing), pay for time not worked (e.g. vacations, sick leave), and miscellaneous payments such as employee purchase discounts and child care services (McCaffery, 1988).
However, besides the types of benefits listed above, employees may have different and/or additional ideas on what is considered a benefit. It has been suggested that "Ultimately, if employees refer to any employer consideration as a benefit, it is by definition a benefit" (McCaffery, 1983, p.4). This suggests that a no-cost work rule such as flexitime may be a highly valued benefit to the employee and yet not be considered a benefit by the employer.

This lack of a solid definition of employee benefits is one limitation of benefits research. This study seeks to deal with this problem by giving the respondent employees a definition of employee benefits. This definition is similar to that of the professional agencies; it was placed on the cover sheet of the questionnaire completed by the employees:

Note: While completing this questionnaire please consider the term "benefits" to refer to the following basic definition: Social security, unemployment payments, worker's compensation, private pensions, health insurance, life insurance, profit sharing, vacations, sick leave, and other employer provided forms of compensation other than direct wages.

This definition will help focus the employees' attention more directly on the concept of benefits that is consistent with the purpose of this study.

A second limitation of benefits research is the difficulty of obtaining accurate records of individual benefit level contributions and valuation. In direct pay research, pay level is known or can be obtained. This is
not the case with employee benefits. Problems such as separating out employer health care contributions to individual employees and accounting for constantly increasing employee retirement benefits (e.g. pension levels) make it difficult to accurately estimate actual individual employee benefit levels.

There are additional related issues such as whether child care should be considered a benefit if the employee does not have children. Should this benefit count toward a childless employee's benefit valuation?

The benefit measurement issue is important to employee benefit research. Past research has documented that pay level is an important predictor of pay level satisfaction. Benefit levels may also need to be controlled to accurately investigate various correlates of benefit satisfaction. At this time there is no encompassing solution to this problem. However, employee pay level will be controlled in this study to serve as a partial surrogate for employee remunerative level.

A third limitation of employee benefits research has been a general lack of theoretical approaches toward understanding employee satisfaction with their benefits. Looking at the underlying psychological processes that contribute to benefit satisfaction is important if researchers are to understand this affective state. This study will correct this limitation by offering a
theoretically guided exploration of the correlates of employee benefit satisfaction and by examining a cognitive process underlying benefit satisfaction.
CHAPTER II

PREVIOUS BENEFIT SATISFACTION RESEARCH

Empirical research on employee benefit satisfaction covers a broad range of topics. For example, research concerning higher status offices, executive washroom keys, and employee retirement plans may all be considered potential topics of employee benefits research. Employees may consider any employer consideration a benefit. It is important to keep this in mind when examining the following review of benefit satisfaction research.

The following review of the literature is separated into three parts. The first part reviews the literature that investigated benefits in broad, eclectic forms. The second covers only the literature on benefits communication. Last, the personality disposition variable, risk taking, is introduced and its application to this study is discussed.

Benefits Research as a Broad Topic

A little more than a decade has passed since empirical studies began to separate benefit satisfaction from global pay satisfaction research. Most studies focus on employee
benefits as a variable closely associated with employer-defined notions of employee benefits. A singular study, by Greeenberg (1988), expanded the employee benefits concept to include potential employee definitions.

Due to its eclectic nature, benefit satisfaction research is not readily organized into a unified theme. However, one noticeable focus is the concentration on antecedents of benefit satisfaction rather than outcomes associated with benefit satisfaction. Three broad research findings about antecedents have emerged. First, some evidence suggests that employee voice, choice, etc., in benefit selection impacts employee benefit satisfaction. A second finding is that employee personal and job inputs affect benefit satisfaction. Finally, it appears that the amount contributed to employee benefits by the company is positively related to benefit satisfaction.

Barber, Dunham, & Formisano (1992) empirically explored use of flexible (cafeteria) employee benefit plans. They found that flexible benefit plans can lead to increases in both employee satisfaction with their benefits and understanding of their benefits. The increase in benefit satisfaction and employee understanding observed in this study was strongly significant. These findings imply that benefit plan designs that incorporate employee choice and/or voice into benefit selection may have a positive effect on employee benefit satisfaction as well as increased employee
awareness of benefits. However, the authors failed to control for pay level in this study, thereby leaving the interpretation of the results somewhat in doubt.

Similarly, Klein's (1987) study of employee stock ownership plans (ESOP) found support that an instrumental ESOP satisfaction model, i.e., being an owner increases employee influence, was satisfying to employees. She also found that an extrinsic ESOP satisfaction model, i.e., being an owner is financially rewarding through receipt of company contributions, was satisfying to employees. She failed to find support for an intrinsic satisfaction model which posits that being an owner is ego-enhancing.

Additionally, Klein & Hall (1988) found a significant negative relationship between employee's desired level of nonmanagerial employee influence in company decision-making and ESOP satisfaction. The authors proposed that this negative relationship may have occurred because only 10-15% of private companies allow employee voting on stock, and very few employees have enough stock in public companies to have any real influence on voting outcomes.

All three of the above studies support the contention that employee choice or influence on employee benefits impacts benefit satisfaction. However, the Barber et al. (1992) and Klein (1987) studies imply that choice, voice, and employee influence were positively related to benefit satisfaction, while the Klein & Hall (1988) study found that
influence by nonmanagerial employees was negatively related to benefit satisfaction. These studies are similar to the proposed study in the analysis of voice or choice. The present study will also investigate employee choice/preference through the use of relative deprivation theory.

Dreher, Ash, & Bretz (1988) found that job inputs such as job position, age, years of service, and tenure in position were correlates of benefit satisfaction. Position and education were weakly, though significantly, positively related to benefit satisfaction; age, years of service, and tenure in position were weakly, though significantly, negatively correlated with benefit satisfaction. Increased costs of benefits to employees were found to be negatively correlated with benefit satisfaction. Employees were especially sensitive to the increased cost of health care.

Additionally, Klein & Hall (1988) discovered a significant positive relationship between employee salary level, age, tenure with the organization, and level of vesting in the program and employee stock ownership plan (ESOP) satisfaction. A significant negative relationship was found between employee education level and ESOP satisfaction. The authors proposed that more educated employees may have a better understanding of the risks involved with company stock ownership and therefore, may experience lower satisfaction with ESOPs.
Wilson, Northcraft, & Neale (1985) also showed that the amounts the employee contributes toward benefits also affects benefit satisfaction. But it may be that this relationship will be affected to some degree by the employee's assessment of the desirability of each benefit.

Berger's (1984) research on benefit satisfaction suggests that the cost of benefits may be related to the impact the benefit has on employee satisfaction. While controlling for pay level and pay importance, he found that six of twelve benefits studied contributed significantly toward explaining pay satisfaction. The rank-order of the significance of the variance explained by the benefits coincided with the rank-order of the cost of the benefits.

An apparent summary finding from the above studies is that organizational contribution to benefits seems to be positively related to benefit satisfaction while employee contribution (cost) is negatively related to benefit satisfaction. However, again there seems to be conflicting evidence surrounding correlates of benefit satisfaction. Employee age, tenure, and education were all found to be both negatively and positively related to benefit satisfaction.

In another (unfinished) study, Joseph, Miceli, Lane, & Mulvey (1989) have conducted preliminary investigations into a longitudinal study of employee health care satisfaction, employee benefit system satisfaction, and employee benefit
level satisfaction. The study proposes to look at the effects of health care cost, health care comparisons to past history, overall health care communication, perceptions of manipulation of health care information, health care worker helpfulness, benefit system efficiency, benefit system consistency, benefit system processing speed, benefit system bias, employee use of health care benefits, and different comparisons of health care system, with their effects on the dependent variables of health care level satisfaction, health care system satisfaction, benefit level satisfaction, and benefit system satisfaction. The study also proposes to look at outcomes related to benefit satisfaction such as organizational citizenship behavior, perceived organizational support, organizational commitment, and union commitment. The study is longitudinal which should help fill this research gap should any significant results occur. The study by Joseph's et al. study is similar to the one presented here in its use of comparison others and its investigation of the benefit communication process.

Research focusing on outcomes associated with benefit satisfaction is very limited. Ziemak (1988) found that benefit satisfaction was negatively related to employee absenteeism, while Klein (1987) and Parkington (1990) found negative relationships between benefit satisfaction and intent to turnover. This research focus has not been well developed nor has it explained why these variables are
related.

Greenberg's (1988) study is also tied to outcomes associated with benefit satisfaction, and Greenberg expands the concept of employee benefits. He found that employees who received a higher status office location (than they had previously) had better subsequent job performance, and those receiving a lower status office performed worse than workers who received offices of equal status. While this is an indirect measure of employee benefits (and benefit satisfaction) this study does suggest the potential differences in worker-related outcomes (job performance) associated with employees' perceptions of one specific type of employee benefit, office location.

A first overall response to the benefits satisfaction literature is that a dearth of research prevents long-term, reliable findings from emerging. A second finding is that many of the correlates of benefit satisfaction were both negatively and positively correlated depending on the study. This inconsistency precludes development of a clear understanding of correlates of employee benefit satisfaction. Perhaps the most dependable finding within the benefit satisfaction literature is that employer contributions to benefits are positively correlated and employee contributions (cost) are probably negatively correlated. This unsurprising finding fulfills intuitive expectations.
Overall, the employee benefit satisfaction literature is fuzzy with few reliable findings. At least two reasons may be offered for this lack of consistency. First, the measure of benefit satisfaction was not consistent across studies, leading to contradictory findings. Second, the eclectic nature of benefits makes it difficult to be sure that employees and employers were both focusing on the same benefit issues.

The above studies all contribute to our understanding of employee benefits. However, these studies use of different benefit variable measures has resulted in a lack of integration of the literature summary. For example, the topics included flexible benefit plans, ESOPS, higher status offices, and paper and pencil reactions to benefit scales. While this fragmentation is a limitation of the present benefits literature, it also emphasizes the need to continue filling the research gaps until the benefit satisfaction literature is more integrated and complete.

Previous Benefits Communications Research

For several reasons benefit communications is important to employee benefit research. First, benefits, unlike direct pay, can be very confusing to employees. Employee benefits packages include multiple components, many of which are explained with technical and confusing language. The ability of the organization to effectively
communicate this technical information probably impacts employee perceptions of their benefits. Second, due to the number of benefit options contained in benefit plans, effective communication of benefits likely increases employee knowledge of what they receive from the company and may contribute to employees' ability to estimate the benefits they receive. Finally, organizations need to know employee reactions to these benefit communications. Organizations may believe they are effectively communicating benefits to employees, but their employees may feel that the communication is scant or that the communication is unbelievable, or both.

Communication of benefits is defined in this study as the written, verbal, or taped conveyance of information from the organization to employees regarding their benefits. The following review summarizes the brief empirical research investigating the effects that communication of benefits has on benefit satisfaction (see Figure 1, page 121).

Klein (1987) found that employee stock ownership plan (ESOP) communications (based on the number of communications strategies the company used) were positively correlated ($R=.40, p<.05$) with ESOP satisfaction but did not explain significant unique variance in ESOP satisfaction ($\Delta R^2=.06$). However, Klein & Hall (1988) found that ESOP communications were positively correlated with ESOP satisfaction ($R=.25, p<.001$) and that ESOP communication interacted
significantly with employee education ($R^2=.01, p<.001$). In addition to providing initial empirical findings about benefit communications Klein & Hall also established benefit communications as a useful moderator in affecting benefit satisfaction.

Dreher et al. (1988) found that sum benefit coverage had a weak, positive relationship with benefit satisfaction, but those individuals who had accurate information about benefit coverage levels had more pronounced reactions to their benefits. While this study did not directly test the effect of benefit communications on benefit satisfaction it did explain why studies of benefit communications are important—providing accurate and complete communication of benefits to employees helps determine how those benefits are viewed by employees. The authors suggest that good communication about positively perceived benefits may positively impact benefits satisfaction, whereas good communication of benefits that are not desired may result in benefit dissatisfaction.

Josephs, et al., (1989) have proposed that communication of health care information may impact health care level and system satisfaction. Additionally, the study proposes to look at a (communication?) manipulation aspect as it affects health care level satisfaction, but this is not directly tested as a communication variable.

In summary, the benefit communication literature has
provided important initial empirical evidence towards understanding the impact of communication of employee benefits. This study will add to the benefit communication literature by measuring multiple dimensions of the communication process, and by measuring employee attitudes about the organization's communication of their benefits.

Risk Taking and Benefit Satisfaction Research

No previous research has look at the effect of the personality variable, risk taking, on employee benefit satisfaction; nor could any research be located on its effect on any reward satisfaction research. However, risk taking has been used in other behavioral, organizationally-related research such as studies of entrepreneurship (Sexton & Bowman-Upton, 1986; Sexton & Bowman, 1984; Sexton & Bowman, 1983).

While risk taking does not have a history in rewards satisfaction (including benefits) research it justifies inclusion in this study (see Figure 1, page 121). Individuals considered high risk takers are characterized as people who enjoying gambling, taking chances, willingly exposing themselves to situations with uncertain outcomes, enjoying adventures having an element of peril, and being unconcerned with danger (Jackson, 1974). Insurance coverage in our society protects individuals from forms of uncertainty or peril as well as safeguards longterm well
being. Therefore, insurance is a hedge against exposure to risk.

Many benefits are a type of insurance such as health insurance, unemployment insurance, life insurance, as well as pension plans, a form of long-term financial insurance; all these are designed to protect the employee from differing exposures to risk. Risk-averse individuals may desire maximal benefit insurance coverage in comparison to high risk taking individuals and, therefore, may be less satisfied than the high risk takers with the same benefit amounts. For example, present benefits received by employees may be lower than past benefits. A risk-averse employee, who feels threatened by this loss of benefits, may then be dissatisfied with his/her benefit plan. On the other hand, a more risk-accepting employee, more accepting of danger, peril, etc., may experience less benefit dissatisfaction given the same decline in benefit levels.

However, the usefulness of risk taking in explaining employee benefit satisfaction must be considered speculative at this time. This study is the first empirical attempt to link it to benefit satisfaction.

Theoretical Foundations of the Study

Relative Deprivation Theory (Crosby, 1976) and the interpersonal aspects of procedural justice (a.k.a. interactional justice) (Bies & Moag, 1986) provide the
primary theoretical foundations underlying this study.
Relative deprivation theory is similar to other social
comparison theories, such as equity theory (Adams, 1965) and
social comparison theory (Festinger, 1954). These theories
all suggest that an individual's satisfaction with
organizational outcomes is influenced by the perceived
outcomes of a "comparison other." Social comparison
theory/relative deprivation theory suggests that people
choose to compare themselves with similar others (Festinger,
1954).

Relative deprivation theory was selected for use in
this study because, first, it provides a method of analyzing
comparative levels or amounts of benefits that employees
receive and is thereby useful in estimating a distributive
aspect of employee perceptions of their benefits. Second,
relative deprivation theory was selected because there has
been an acknowledged need for applying this theory in
organizational settings (Crosby, 1984) (see Figure 1, page
121).

Interactional justice was chosen for several reasons.
First, this theory provides a good conceptual basis for
understanding how employees evaluate organizational
communication. Reilly and DiAngelo, Jr. (1990) suggest that
communication is rarely what it appears to be in
organizations and is more than the "transfer of information
which leads to action" (p.129). It is more than the
objective wording of the organizational messages. Instead, they suggest that organizational communication is understood by the employee in terms of the subjective rules, symbols, etc. that are part of a particular organization's culture. Thus, the "real" message contained in the organizational communication is a subjective interpretation by the employee.

Interactional justice is concerned with the individually perceived fairness of interpersonal communications, a subjective evaluation of communication. An employee's judgment that the organization's benefit communications he/she has received is manipulative or relevant is the result of his/her subjective interpretation of the communication rather than the objective nature of the message.

A second reason for using interactional justice theory is that its utility as a moderating variable has been demonstrated in explaining individuals' reactions to levels of outcomes received. This study provides more insight into the usefulness of this relatively new theory for understanding peoples' reactions to organizational outcomes.

Third, interactional justice theory works well in explaining the effects of organizational communication of employee benefits. Historically, communication of benefits has been deemed important by organizations, but little empirical research has been completed to investigate its
effect on employee reactions. This study will provide more evidence for this important but under-researched area.

Relative Deprivation Theory

Relative deprivation is generally perceived to be "an attitude based on feelings that one has been unjustly deprived of some desired thing" (Crosby, 1976, p.88). Relative deprivation is generally perceived to be an attitude based on feelings that one is getting less than one deserves. It has most frequently been treated in the literature as a latent construct operationalized by measures of dissatisfaction or injustice (Martin, 1981).

Modern relative deprivation theory is the result of the propositions of Stouffer, Suchman, Devinney, Star, & Williams (1949). They coined the term relative deprivation as a post hoc explanation for the paradoxical finding that black soldiers stationed in the South were more satisfied with army life than black soldiers stationed in the North, who had better promotion opportunities and, thus, better objective job opportunities than soldiers stationed in the South. They surmised that the Southern black soldiers positively compared themselves relative to other blacks living in the South, whereas the Northern soldiers had a less positive self comparison to other blacks living in the North.
Crosby (1976) suggests six judgements as important preconditions for determining whether an individual will feel resentful and/or dissatisfied with an organizational outcome:

1. There is a discrepancy between the outcome they want and the outcome they receive.
2. The individual feels they are entitled to or deserving of more of the outcome.
3. Past experience has led the individual to expect more of the outcome than they currently receive.
4. The individual does not accept personal responsibility for the lack of better outcomes.
5. The individual sees that a comparison other has more of an outcome than they have.
6. The individual's future expectancies for achieving better outcomes are low.

Runciman (1966) derives a distinction between two types of relative deprivation. First, egoistic deprivation is believed to occur when a personal comparison to a similar referent results in a feeling of deprivation. It is called egoistic deprivation because the comparer is concerned about his or her own personal welfare. For example, an employee may feel egoistic deprivation if another employee with similar job inputs (tenure, education, responsibility, etc.) is perceived to receive more benefits. Second, fraternal relative deprivation occurs when a comparison to a
dissimilar referent results in a feeling of deprivation. Fraternal deprivation refers to group membership and is considered to be the more broad of these two types of deprivation. For example, fraternal deprivation may result if females perceive that males, based on their gender, are receiving more benefits than females.

Both types of deprivation can be felt and are not thought to be mutually exclusive constructs, although previous research has consistently found egoistic deprivation to occur more frequently than fraternal deprivation (Martin, 1981). The outcomes associated with feelings of deprivation are also different depending on whether one experiences egoistic or fraternal deprivation. Feelings of egoistic deprivation result in behavior aimed at the individual; examples of this are self-improvement or depression. Feelings of fraternal deprivation tend to result in attempts to change the system, for example race riots, or voting for political change (Martin, 1981).

Relative deprivation theory was recently used by Sweeney, McFarlin, & Inderrieden (1990) as a way to explain how individuals use comparative judgements about their pay in determining their level of pay satisfaction. They found that pay level alone was not the only significant explanation of pay level satisfaction. In at least one of the four studies they conducted, each of the following preconditions were found to be significant explanations for
pay level satisfaction: (1) pay wanting exceeding pay received, (2) a negative similar-other pay comparison, (3) negative past-self pay comparisons, (4) low future expectancies about pay increases, (5) a feeling of entitlement or deservingness of more pay, and, (6) low levels of personal responsibility for job outcomes.

Relative deprivation theory may also be useful in explaining an individual's reaction to benefit comparisons. Sweeney et al. (1990) acknowledged a lack of investigation into other dimensions of pay satisfaction, including benefits. The present study uses relative deprivation theory to explain individuals' satisfaction with their benefits.

Interactional Justice

Interactional justice concerns the fairness of interpersonal communications (Bies & Moag, 1986) and is considered to be an interpersonal aspect of procedural justice evaluations (Greenberg, 1990a). Interactional justice means that "people are sensitive to the quality of interpersonal treatment they receive during the enactment of organizational procedures" (Bies, 1987; Bies & Shapiro, 1987; Sheppard & Lewicki, 1987).

Benefit communications from the organization to the individual employee can be considered a form of interpersonal treatment between management and employees. Thus, interactional justice may be useful in explaining how
employer communication of benefits impacts the relationship between the employee's relative benefit comparisons and benefit satisfaction.

Not all communication efforts are deemed fair by employees. Current research suggests that to be effective, explanations need to be considered logical (i.e., based on relevant information) and sincere (Bies, Shapiro, & Cummings, 1988). In fact, communication of explanations that are believed to be manipulative and ingenuine may backfire and lead to hostile and negative reactions by employees (Greenberg & Ornstein, 1983).

Several recent studies support interactional justice as an important concept in understanding individual reactions to organizational actions or outcomes. Bies (1986) found that MBA students considered the interpersonal aspects of honesty, courtesy, timely feedback, and respect for rights as important determinants of fairness during employment interviews. Research by Bies & Shapiro (1987) found that individuals who received explanations for negative outcomes showed significantly higher perceived fairness of the procedures leading to the outcomes than those individuals who did not receive such explanations. They postulate that the actual practice of explaining procedures leads to enhancement of both the procedures and outcomes.

Bies & Shapiro (1988) also found that fairness perceptions were enhanced in both a laboratory recruitment
study and in a study of subjects' reactions to budget decisions with the presence of adequate justifications as a form of interactional justice.

Finally, Bies, Shapiro, & Cummings (1988) studied conflict between a boss and subordinate arising when the boss refuses a subordinate request. They found that conflict was lessened between the boss and subordinate when explanations that were judged by the subordinate to be adequate and sincere were given by the boss, but generalized claims of mitigating circumstances had no effect of reducing the conflict.

Greenberg has also contributed to the justice literature. In a performance appraisal study (1991a), he found that employees who received written explanations of their performance appraisal ratings felt more fairly treated than those employees who did not receive a written explanation. In studying the acceptance of a new organizational ban on smoking, Greenberg (1991b) found that thorough information presented in a sensitive manner had significant effects on smokers' acceptance of the new policy. These effects were greatest among the heaviest smokers.

In another study, Greenberg (1990b) found that stealing occurred least among inequitably paid subjects who received both high levels of valid information and high levels of sensitive information. Additionally, Greenberg (1990c), in
a field experiment, found that while employees who received a 15% pay cut stole more than other employees, thorough and sensitive explanations of the pay cut significantly moderated the level of theft by the employees.

In short, increasing evidence suggests that procedural aspects such as competent, reasonable and sincere explanations of organizational outcomes influence employees' evaluation when judging the fairness of a process (McCarty, 1990).

The Research Model

The hypothesized relationship between relative benefit comparisons, employee benefit communications perceptions, risk taking disposition, benefits relative deprivation, pay level, and employee benefit satisfaction are presented in Figures 2-4 (see pages 122-124).

The six antecedent variables are based on the preconditions of relative deprivation theory and are thought to have a direct relationship with employee benefit level satisfaction. These variables focus on the employees' relative comparisons with (1) benefit wants vs. benefits received, (2) benefit entitlements, (3) past benefits received versus current benefits received, (4) personal responsibility for benefit situation, (5) benefit comparison others, (6) future benefit expectancies. As a group these variables are referred to as relative benefit comparisons.
Employee perceptions of employer benefit communications are believed to moderate the relationship between the relative benefit comparisons and employee benefit satisfaction. Specifically, employee perceptions of the information they receive about their benefits as fair (i.e., thorough, logical, genuine, nonmanipulative) will moderate the relationship between the relative benefit comparisons and benefit satisfaction.

A second variable, risk taking disposition, is also believed to moderate the relationship between relative benefit comparisons and employee benefit satisfaction. Recent studies have indicated that individuals are predisposed to elements of job satisfaction (Arvey, Bouchard, Segal, & Abraham, 1989; Gerhart, 1987; Staw, Bell, & Clausen, 1986; Staw & Ross, 1985), and risk taking disposition is one of a number of individual personality traits that may affect estimations of benefit satisfaction. A feeling of benefits relative deprivation is believed to mediate the relationship between relative benefit comparisons and benefit satisfaction.

Research has indicated that the six relative comparisons listed above are preconditions to an individual's state of relative deprivation. The level of deprivation has historically been measured as an outcome variable usually represented by some type of satisfaction measure rather than directly measuring relative deprivation.
The relationships between the relative benefit comparisons, benefits relative deprivation, and employee benefit satisfaction are not clearly understood however, so they are tested in this study. The six preconditions are believed to be directly related to employee feelings of deprivation about their benefits, and the feeling of benefits deprivation is, in turn, believed to mediate between the relative benefit comparisons and benefit satisfaction. In essence, employee benefit comparisons are believed to be processed through feelings of benefit relative deprivation to employee benefit satisfaction.

Finally, pay level of employees will be controlled as a variable for all hypothesized relationships. Heneman (1985) has called such control "imperative" for partialling out correlates in compensation satisfaction research. Controlling for pay level of employees will provide more certainty that the study findings are not due to correlations between pay levels and benefit satisfaction. Pay level has been found to be a correlate of pay satisfaction (Capelli & Sherer, 1988; Dreher, 1981; Oliver, 1977; Shapiro & Wahba, 1978; Ronan & Organt, 1973) and therefore needs to be controlled if we are to better interpret other correlates of pay satisfaction, such as benefits.

It is important to understand the goals and limitations of this model. The goal is to provide useful theoretical
explanations of how individuals evaluate their employee benefits in an organizational setting. The model is not intended to be predictive; other aspects beyond the scope of this model may be useful in understanding employee reactions to benefits. Also, other variables such as organizational age, size, cultural differences, and industry specifics may serve as moderating variables in the benefit satisfaction relationship. A final limitation is that the results of this study based on the models presented may not generalize to other employee groups or organizational settings. The level of external validity associated with this model can only be evaluated through similar, future empirical studies.

General Propositions and Specific Hypotheses

The antecedent hypotheses are derived from the preconditions of Relative Deprivation Theory (Crosby 1976). Each hypothesis is based on a cognitive comparison between the benefits the individual employee receives and either other individuals or workplace/life benefit estimations. In general, it is believed that negative comparisons will lead to negative perceptions of benefit satisfaction and vice versa. The model in Figure 2 (see Appendix A, page 122) is a guide for the following set of hypotheses.

Relative Benefit Comparisons

Benefit Wants. Due to the idiosyncratic nature of an
individual's benefit wants, not all employees are expected to react similarly to the benefits they receive, even if the benefits are identical. It is believed that the more benefits an employee wants compared to the benefits the employee actually receives, the less satisfied the employee will be with his/her benefits. Thus, the following hypothesis is put forth:

Hypothesis 1: There will be a negative relationship between employee benefit wants and employee benefit satisfaction.

Benefit Entitlement. An employee's feeling of entitlement to better benefits is based on an individual's perception of a discrepancy between what actually exists in his/her world and what ought to exist in a truly ethical and just world (Crosby, 1976). This feeling of entitlement is conceptually close to Lawler's (1971) discrepancy model of pay satisfaction. Extrapolating from this model, employees may feel heightened benefit entitlement based on their cognitive estimates of their personal job inputs (skill, experience, training, performance, etc.), perceived inputs and outcomes of referent others, and perceived job characteristics (level, difficulty, timespan, and amount of responsibility) compared to the perceived benefits of referent others and the benefits the employee actually receives (see Lawler model, 1971).
Large differences between the perceived benefits that should be received and the perceived amount of benefits that are received should be related to low benefit satisfaction. Thus, the following hypothesis is proposed:

Hypothesis 2: There will be a negative relationship between employee benefit entitlement and employee benefit satisfaction.

Past Benefit Comparisons. An individual who has received an employee benefit for a long period of time would likely expect to continue to receive the benefit. It has been a compensation tradition in our society that one's economic rewards tend to increase rather than decrease with the passage of time (Miceli & Lane, 1991). Employee use of this "historical standard" of pay comparison has been supported in the compensation literature (Hills, 1980). Additionally, Messe & Watts (1983), in a laboratory experiment, found that reducing direct pay below an accustomed level had a more negative effect than when pay had been consistently low. The authors suggest that such "induced expectations" of pay levels may impact present day pay comparisons. Finally, Schnake (1986), in a laboratory experiment, found that subjects may not view lowering of direct pay as negative if it is based on lower performance. But lowering of outcomes such as benefits with no associated lowering of individual performance needs to be studied.

Loss or lowering of a previously received benefit level would also likely lead to a decrease in satisfaction with
benefits. Employee benefits such as health care provide a good example: recently, due to the rising cost of health care, companies have sought ways to reduce these costs. Specifying health care units or asking employees to share a portion of their health care premiums are new to some employee groups, and it is logical that reducing benefits such as health care that have been historically increased or stable would result in employee benefit dissatisfaction. Accordingly, a negative comparison to past benefit expectations should lead to lowered benefit satisfaction.

Hypothesis 3: There will be a negative relationship between past benefit comparisons and employee benefit satisfaction.

Personal Responsibility for Benefit Situation.
Personal responsibility may be related to, but is not the same as, personal control. The concept of personal responsibility concerns how much accountability or blame the individual accepts for his/her situation concerning an outcome, in this case employee benefits. Patchen (1961b, p.91), conceives the personal responsibility variable in this way "If Person blames himself for his plight, then automatically he cannot feel that his situation is unjust."

Conversely, Greenberger & Strasser (1986, p.165) define personal control as "an individual's beliefs, at a given point in time, in his or her ability to effect a change, in a desired direction, on the environment." Similarly, Alloy & Tabachnik (1984) describe personal control as the
individual's perception of covariation between his or her actions (as the causal agent) and outcomes. Thus, the personal responsibility condition focuses primarily on who is to blame for the outcomes received, e.g., employee benefits. A person who blames him/herself for the benefit situation (benefit costs are going up because employees are misusing or overusing their benefits) is less likely to be highly dissatisfied with his/her benefits than a person who does not accept personal responsibility or blame for the benefit situation (doctors are greedy, insurance companies are inefficient, etc.). The personal control condition focuses primarily on the individual's perceived ability to effect change rather than who is to blame.

Crosby (1984) offered a potential solution to this issue. An overview of her 1976 relative deprivation model suggests that personal control is one of the mediating variables between the state of felt deprivation and the resultant behaviors such as stress symptoms, self-improvement, violence against society, or constructive change of society. If an individual feels high levels of personal control then the individual would be more likely to behave more positively (e.g. self-improvement). An individual with less personal control would be more likely to behave more negatively (e.g. violence).

Conceptually, it is also possible to imagine personal control as a possible predictor of personal responsibility
(if you feel you have the ability to change a situation, you may be more likely to feel you are more responsible or to blame for the situation). But, the personal control measure is not the correct measure for assessing personal responsibility according to relative deprivation theory. Relative deprivation theory suggests that the less responsible the individual feels for having caused the current situation, the less satisfied or content the individual will be when outcomes (benefits) are low. Conversely, if the employee feels somehow personally responsible for the benefit situation, they will be more likely to accept at least part of the blame for any lowered benefit results and, thus, be more satisfied with the resultant outcome.

Hypothesis 4: There will be a positive relationship between personal responsibility for benefit situation and employee benefit satisfaction.


Positive comparisons of employee benefits between an individual and a benefit comparison other should also result in a higher level of benefit satisfaction. These
comparisons may be both Egoistic and Fraternal comparisons. Positive Egoistic benefit comparisons will result when the employee perceives that they have higher levels of benefits compared to a benefit comparison other who has substantially similar characteristics and/or job inputs. Positive Fraternal benefit comparisons will result when the employee perceives that they have higher levels of benefits in comparison to other groups, such as gender, racial, and job level comparisons. Both types of comparisons are believed to correlate positively with employee benefit satisfaction.

Hypothesis 5: There will be a positive relationship between benefit comparison others and employee benefit satisfaction.

Future Benefit Expectancy. An individual's expectations for future benefits are believed to impact benefit satisfaction in a direction opposite to that of past self-comparisons (see hypothesis three).

Future benefit expectancy in this sense follows Vroom's (1964) concept of expectancy. In general, expectancy can be considered the employee's estimate of the likelihood (subjective probability) that he/she will receive a certain level of benefits in the future. Employees who estimate that they will continue to receive or will be receiving high benefits in the future have high expectancy.

Low expectancy is anticipated if employees believe their benefits will be decreasing in the future due to such problems as decreases in organizational profit or increasing
health care costs. Future benefit expectancy is anticipated to be related to high benefit satisfaction and lower expectancies of benefits will be related to low benefit satisfaction. The following hypothesis will test this relationship.

**Hypothesis 6:** There will be a positive relationship between employee future benefit expectancy and employee benefit satisfaction.

**Moderating Relationships**

**Benefit Communications.**

Increasingly, research has established that interpersonal treatment and explanations for outcomes received by individuals enhances their reaction to potentially unfair situations (Lind & Tyler, 1988; Folger and Bies, 1989; Tyler, 1988; Lind & Lissak; Greenberg, 1986; Shapiro and Buttner, 1988; Bies, 1986; Bies & Moag, 1986; Tyler & Bies, 1990; Greenberg, 1990a; Greenberg, 1990b).

Employee perceptions are translated from the communication efforts that employers put forth to their employees. Communication has been called an "integral component" of the strategic formulation of employee benefit plans (Bowen & Wadley, 1989).

Several aspects of employer communication of employee benefits to their employees are presented below. Each aspect of the benefit communication is proposed to moderate the relationship between the relative comparisons employees
make about their benefit levels and the level of benefit satisfaction. Figure 3 (see Appendix A, page 123) is a guide to the following set of hypotheses.

Thorough Benefit Communications. Explanations as a form of interactional justice have been shown to be effective in reducing negative reactions to unfavorable outcomes (Bies & Shapiro, 1988; Greenberg, 1990; Greenberg, 1990).

Two reasons for this impact may be surmised. First, the content of a thorough explanation may provide reasonable accounts as to why the negative outcome was received and therefore lower negative reactions through better understanding of the situation as a whole. Secondly, it may also be that people merely expect explanations to bad outcomes and the content of the explanations is of little consequence. Instead, individuals are reacting positively to being given the consideration of an explanation for the unpleasant outcome (Bies & Shapiro, 1988 citing Bies & Moag, 1986; Langer, 1978).

Likewise, the perceived thoroughness of employer benefit communications is likely to affect the relationship between relative benefit comparisons and benefit satisfaction among employees for several reasons. First, given the lack of employee knowledge of the value of their benefits (Wilson et al. 1985), thorough benefit communications are apt to raise the employees knowledge of
the number or amount of benefits they receive resulting in enhanced individual benefit comparisons and increased benefit satisfaction.

Second, thorough communication will also likely contain information that justifies the reasons for the current level of benefits. Economic downturns and increased benefit costs for aging employees are examples of potential reasonable justifications given for current levels of benefits.

Finally, as noted above, the mere fact that employers try to communicate about benefits may bring more positive reactions because employees expect such efforts. Thereby employer communication affects relative benefit comparisons and benefit satisfaction. The results of this moderating variable may be of great importance because communication about employee benefits has been repeatedly called for by organizations. A recent survey of 265 human resources executives found however that most employers spend less than fifty dollars annually and less than four hours per employee annually on communication about benefits. Additionally, only 28% of the employers ranked their employees' benefit understanding as "very good" or "excellent" (Lewis, 1989). Results of this relationship may be important in convincing employers of the need for more thorough benefit explanations.
Hypothesis 7: Benefit communication thoroughness will moderate the relationship between employee relative benefit comparisons and employee benefit satisfaction.

Benefit Communication Logic. Shapiro and Buttner (1988) found that procedural justice perceptions were enhanced when logical explanations (based on relevant information) were given for rejection of loan requests.

Similarly, it is proposed that the relationship between an employee's relative benefit comparisons and benefit satisfaction may be enhanced when the employer benefit communications are perceived by the employee to be logical. Communication that contains irrelevant information is not likely to have a positive effect on this relationship. For example, an employee benefits memorandum that states that employee contributions to the cost of benefits will rise due to business complications resulting from the "greenhouse effect" would undoubtedly be perceived as illogical by employees.

However, a communication that states that such increases are due to the increased cost of health care services would presumably be perceived as a more logical excuse by employees and may possibly effect the relationship. Based on this logic:

Hypothesis 8: Benefit communications logic will moderate the relationship between employee relative benefit comparisons and employee benefit satisfaction.
Benefit Communication Genuineness. Greenberg (1990c) has suggested that excuses may be the most effective form of interactional justice perceptions in terms of facilitating inadequate outcome acceptance. But it is important that excuses have adequate substance. Recent studies have illustrated one important quality of excuses is that they are perceived to be sincere (Bies, 1987b; Bies et al. 1988; Baron, 1988).

The genuineness of the organization's benefit communication is determined subjectively, evaluated by the employee. Such subjective interpretation of communication is common. The method by which the organization may have some effect on employee perceptions of genuineness in benefit communication may be through the consistency of such messages and through experience with past organizational communications. For example, if the organization communicates that they provide a wide range of health care choices, then offer minimal health care provisions their communication may be determined to be insincere and may also affect future employee perceptions about subsequent communications. Therefore, in order to affect the relationship between relative benefit comparisons and benefit satisfaction, the benefits communication given by the company must be perceived as genuine by the employee.
Following this logic:

Hypothesis 9: Benefit communication genuineness will moderate the relationship between employee relative benefit comparisons and employee benefit satisfaction.

Benefit Communication Manipulativeness. While genuine benefit communications are believed to enhance an employee's perceptions of his/her benefits, employer communications that are perceived as manipulative will likely exacerbate an employee's negative feelings.

Manipulative communications are those the employee perceives to be an attempt to provide excuses merely to put the company in a good light or quell employee feelings of unrest associated with their benefits. The difference between benefit communication genuineness and benefit communication manipulativeness lies purely in the judgement of the employee. But it is likely that the organizational history of benefit communication, such as how often such excuses are repeated may influence the employee's perceptions.

In support of this proposition, Greenberg & Ornstein (1983) found that explanations perceived as manipulative in intent were found to be associated with disliking for the explaining person and the unfairness of the resulting actions. Similarly, such manipulative intent is thought to impact the relationship between relative benefit comparisons and employee benefit satisfaction.
Hypothesis 10: Benefit communication manipulativeness will moderate the relationship between employee relative benefit comparisons and employee benefit satisfaction.

Risk Taking. Some individuals can be considered high in risk taking. Risk taking may affect the relationship between the relative benefit comparisons and benefit satisfaction. Depending on its directional effect, a risk-taking disposition may either improve or reduce an employee's perceptions of the relative benefit comparisons. For example, a high risk taker may not be as concerned with comparing current benefits and past benefits. He/she may be more likely to accept uncertain outcomes and peril more readily than a low risk taker. Based on this logic, the following hypothesis is proposed.

Hypothesis 11: Employee risk taking disposition will moderate the relationship between the relative benefit comparisons and employee benefit satisfaction.

Mediating Relationships

A final set of hypotheses concerns mediating relationships. As noted previously, the six preconditions of relative deprivation are thought to be antecedents in predicting an individual's feeling of deprivation, an affective state or latent construct.

These preconditions and the feeling of deprivation are the theoretical basis for the initial set of hypotheses proposing the relative benefit comparisons as antecedent variables to benefit satisfaction. However, previous
research on relative deprivation has not explicitly examined whether deprivation is the latent construct for feelings of satisfaction or instead is a concept distinct from satisfaction that may a mediating variable between the relative benefit comparisons and benefit satisfaction. Simply to assume that feelings of deprivation and satisfaction are conceptually equivalent may be wrong. It is important to test specifically the relationships between these variables.

Baron and Kenny (1986) defined a variable as a mediator "to the extent that it accounts for the relationship between the predictor and criterion" (p. 1176). Baron and Kenny (1986) go on to differentiate moderators from mediators: "Whereas moderator variables specify when certain effects will hold, mediators speak to how or why (emphasis added) such effects occur" (p.1176). It is possible that relative deprivation serves as such a mediator.

The benefit comparisons employees make may result in a general feeling of deprivation which in turn may explain why the employees have the resultant level of satisfaction with their benefits. This relationship is shown in Figure 4 (see Appendix A, page 125). This test will help determine whether relative deprivation is a mediator between the relative benefit comparisons and benefit satisfaction or whether relative deprivation should be seen as a latent construct operationalized in this study by benefit
satisfaction.

The following three hypotheses are based on the conditions needed to detect the presence of a mediator variable (Baron & Kenny, 1986). The first condition is that variations in the independent variables (relative benefit comparisons) significantly account for variations in the presumed mediator (benefits relative deprivation). Based on this condition the following hypothesis is proposed:

Hypothesis 12: There will be a significant relationship between the relative benefit comparisons and benefits relative deprivation.

The second condition concerns the independent variables (relative benefit comparisons) and the dependent variable (benefit satisfaction) relationship. Relative benefit comparisons should account for significant variations in benefit satisfaction. Based on this condition the following hypothesis is proposed:

Hypothesis 13: There will be a significant relationship between relative benefit comparisons and benefit satisfaction.

The third and final condition concerns testing for the relationship between the dependent variable (benefit satisfaction) and the proposed mediating variable (benefits relative deprivation).

Based on Baron and Kenny (1986), the following conditions must hold to establish benefits relative deprivation as a mediating variable. First, the independent
variables must affect the mediator in the first equation (see hypothesis 12); second, the independent variables must be shown to affect the dependent variable in the second equation (see hypothesis 13); and third, the mediator must affect the dependent variable in the third equation (see hypothesis 14a). In addition, the relative benefit comparisons must be added to the equation after the benefits relative deprivation variable.

If these conditions all hold in the predicted direction, then the effect of relative benefit comparisons on benefit satisfaction must be less in this final condition (when controlling for the mediator, benefits relative deprivation) than the effect between the relative benefit comparisons on benefit satisfaction without controlling for the mediator, benefits relative deprivation.

Benefits relative deprivation will be considered to function as a mediator if, when statistically controlling for the mediating variable, benefits relative deprivation, the relationship between relative benefit comparisons and benefit satisfaction is less than when the mediator is not controlled in the regression equation. Perfect mediation would occur if relative benefit comparisons had zero effect on benefit satisfaction when controlling for the mediating effect of benefits relative deprivation.

Based on this condition the following two hypotheses are proposed:
Hypothesis 14a: There will be a significant relationship between benefits relative deprivation and benefit satisfaction.

Hypothesis 14b: When controlling for benefits relative deprivation the effect of relative benefit comparisons on benefit satisfaction will be less than when benefits relative deprivation is not controlled.

It would also be possible to test for moderating relationships involving the benefit communication process and the potential mediating relationships. However, the test of these relationships should be considered only after first establishing whether the mediating variable and moderating variable relationships exist. The test of the moderating relationships on this expanded model is therefore considered best reserved for future research.

Hypotheses Summary

The hypotheses presented above are concerned with three issues that should shed light on benefit satisfaction.

First, a series of antecedent variables, relative benefit comparisons, are put forth within a relative deprivation framework. Second, two sets of moderator variable hypotheses are explored: employee benefit communication effects (within an interactional justice framework), and a personality variable, risk taking disposition. Finally, benefits relative deprivation will be
explored as a mediating variable between the relative benefit comparisons and benefit satisfaction.

Combined, these hypotheses seek to explain how the relative comparisons employees make determine how satisfied they are with their benefits, and if the perceptions these employees have about their benefit communications along with their risk taking disposition interacts with their benefit comparisons to have an independent effect on their benefit satisfaction.

Additionally, the role of benefits relative deprivation as a mediator between the relative benefit comparisons and benefit satisfaction is explored as a potential underlying cognitive explanation as to why the relative benefit comparisons may affect benefit satisfaction.

In sum, the hypotheses presented here are intended to increase the understanding of what contributes to employees being satisfied with their benefits.
CHAPTER III

METHODS

This chapter outlines the research design and methodology used to conduct this study. The specific aspects of methodology covered include research design, sampling, measurement, and data analysis techniques.

Research Design

The field survey design used for this study was distributed within a large service-oriented organization with locations in five states east of the Mississippi, with its head office located in Columbus, Ohio. An identical 109-item questionnaire was distributed throughout the organizations' offices and locations to all employees. Total time estimated for completion of the survey by study participants is approximately one half hour.

All data analyses, including reliabilities, multiple regression, and moderated multiple regression, are computed utilizing SPSS/PC+, a personal computer version of SPSSX. This study was approved by the Human Subjects Committee at The Ohio State University.
Population / Sampling

The sample base was 2,275 employees located in Ohio, West Virginia, Missouri, North Carolina, Maryland, and Washington D.C. The questionnaires were delivered to each employee through the company-mail system and returned either directly to the researcher or mailed back through company mail and picked-up by the researcher. Employees were notified in a cover letter that their participation in the survey was encouraged yet voluntary; responses to the surveys were guaranteed to be confidential and seen only by the researcher.

Measures

The following measures were used to collect the data for the questionnaire (see Appendix B, page 125, for the complete questionnaire).

Antecedent Variables.

Benefit wants. This is a three-item scale designed for this study to examine an employee's assessment of benefit wants versus the benefits he/she currently receives.

Benefit wants are benefit items that the employee would like to receive from their employer if the employee were given the opportunity to obtain or choose these items. The three scale items assess the degree to which an employee can cognitively identify desired benefit items beyond those they currently receive. It was scored on a 5-point Likert scale
from Strongly Disagree = 1 to Strongly Agree = 5.

1. The benefits I receive closely match the benefits I want to receive.
2. There are other benefits I would rather receive than the ones offered by my company. (r)
3. I do not receive some benefits from my company that I wish I did receive.

Benefit Entitlement. This is a 3-item scale designed for this study to measure an employee's perceived entitlement or deservingness of more benefits than they currently receive.

The items reflect a general or overall feeling of deservingness rather than identifying specific benefit items (child care, parental leave, health care, etc.). The scale is scored on a 5-point Likert scale from 1 = Strongly Disagree to 5 = Strongly Agree.

1. I do not deserve more benefits than I currently receive. (r)
2. I am entitled to more benefits than I currently receive.
3. The benefits I receive are the benefits I deserve. (r)

Past Benefit Comparisons. This is a 3-item scale designed for this study to assess an employee's comparisons of the benefits they receive today versus the benefits they received in the past.
The items focus on the recent past to insure that employees compare benefits received with their current company versus benefits they may have received in the distant past from other employers. In addition, comparisons to recent past benefits lessens employee information retrieval problems due to employee memory loss concerning past employee benefits. The scale was scored on a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

1. Currently, I receive significantly less in employee benefits than I did in the recent past.

2. I receive significantly more now in employee benefits from this company compared to what I used to receive. (r)

3. What I currently receive in employee benefits from this company is a lot compared to what I did in the recent past. (r)

**Personal Responsibility For Benefit Situation.** This scale was designed for this study to assess an employee's perceived level of personal responsibility or blame for their current state of employee benefits.

The items identify the degree to which the employee places the benefit blame on themselves or outside entities such as the company, doctors, insurance companies, etc. The scale was scored using a 5-point Likert scale ranging from 1
1. Employees such as myself are the primary cause of the current benefit situation.

2. My company or other individuals (doctors, insurance companies, etc.), are the ones to blame for the current state of my employee benefit levels, not employees like me.(r)

3. Employee behaviors (such as my excessive use of benefits, etc.), are primarily responsible for employee benefit levels today.(r)

Benefit Comparison Other. This is an 11-item scale similar to the Scholl, Cooper, & McKenna (1987) and Josephs et al. (1989) set of items. It has been redesigned to assess an employee's perceptions of benefit comparison others whereas Scholl et al. (1987) utilized the seven items as independent 1-item scales (therefore, no scale reliabilities are available).

This scale combines the eleven items into a single scale measuring multiple benefit comparison others. The items are separated into egoistic comparisons and fraternal comparisons to identify both individual and group comparisons. As recommended by Crosby (1984), fraternal comparisons are best focused by concentrating on perceived group differences within a particular organization. Thus, those items are worded to reflect this suggestion. The
egoistic items reflect individual comparisons both within and outside of the employees' parent organizations.

The scale is scored using the Scholl et al. (1987) 10-point scale ranging from 1 = 40% less, 5 = about the same, 9 = 40% more, and 10 = I don't know.

Compared with:

1. other people with similar education, seniority, effort, and job responsibility in my company, I receive ___.
2. other people with similar education, seniority, effort, and job responsibility in other companies similar to my company, I receive ___
3. unionized employees, I receive ____
4. non-unionized employees, I receive ____
5. other racial groups in my company, I receive ___
6. members of the opposite sex in my company, I receive ___
7. hourly paid employees, I receive ____
8. salaried employees, I receive ____
9. younger-age employees, I receive ____
10. older-age employees, I receive ____
11. upper management employees, I receive ____

Future Benefit Expectancy. This is a 3-item scale designed for this study to assess the employees future
benefit expectancies.

The items are designed to tap an employee's subjective estimation as to whether they will receive more benefits in the near future. A "near future" orientation is used because employee perceptions of the near future are more likely to tap attitudes based on their current experience or information received from the company than is a long-term focus.

The scale is scored on a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

1. My benefits in the near future will probably decrease. (r)
2. It is unlikely that my benefits will increase in the future with this company.
3. My benefits in the near future will probably decrease. (r)

Moderator Variables

Benefit Communication Thoroughness. This scale was designed for this study to assess an employee's perceptions of the thoroughness of their employers explanations concerning their benefits.

Effective benefit communications packages must be (1) complete, (2) clear, and, (3) lack complex jargon (Milkovich & Newman, 1990). The scale contains six items that reflect these three dimensions.

The scale is scored on a 5-point Likert scale ranging
from 1 = strongly disagree to 5 = strongly agree.

1. The information I receive fully explains all of my employee benefits.
2. When I want information about my employee benefits I am always able to get answers.
3. I clearly understand the information I receive concerning my employee benefits.
4. I get as much information concerning my employee benefits as I want.
5. The information I receive on my employee benefits leaves out important information about my benefits. (r)
6. Information pertaining to my employee benefits contains words or phrases that I do not understand. (r)

Benefit Communication Logic. This scale was designed for this study to assess an employee's perceptions of whether the company refers to pertinent information in communicating employee benefits.

The items tap employee perceptions of whether the benefit information they receive is based on information relevant to their particular benefit situation. The scale was scored on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.
1. My company gives me employee benefit information that is based on information particularly relevant to this company.

2. My employee benefit information is based on facts that are not logical for our company. (r)

3. The explanations I receive from my company concerning my employee benefits make good sense to me.

Benefit Communication Genuineness. This scale was designed for this study to assess an employee's perceptions of the degree of genuineness of the communications they receive from the company concerning benefits.

Genuine communications are those perceived to present no false appearance or false intention and not meant to deceive or misrepresent the facts concerning benefits. The scale is scored on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

1. The explanations I receive concerning my employee benefits are not sincere. (r)

2. The explanations to me concerning my employee benefits are genuine and not meant to misrepresent the facts.

3. What I see happening to my employee benefits and what the company tells me what is happening are quite similar.
Benefit Communication Manipulativeness. This scale is similar to the Joseph's et al. (1989) scale. The items are designed to assess an employee's subjective opinion concerning whether the company attempts to mislead employee benefit perceptions through communications that are thought of as "scheming" or intended to unrealistically alter employees' perception to the advantage of the organization. The scale was scored on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

1. I feel manipulated by the information I receive concerning my employee benefits.

2. I do not feel that the employee benefit information I receive is in any way meant to control my attitudes toward my benefits. (r)

3. My employee benefits information tries to unrealistically alter my perceptions about my benefits. (r)

Risk Taking. Risk Taking is measured with the 20-item risk taking subscale of the 16-scale, 320-item Jackson Personality Inventory (JPI) (Jackson, 1974), "developed to provide in one convenient form a set of measures of personality reflecting a variety of interpersonal, cognitive, and value orientations likely to have important implications for a person's functioning" (Jackson, 1976, p.9).
The JPI has been tested and been shown to be reliable, accurate, and valid (Hogan, 1978). Jackson (1977) reports reliabilities (chronbach alphas) of .81 (n=81) and .84 (n=307) for the risk taking scale in two separate data collections. Below are two examples of the risk taking items.

  * I would enjoy bluffing my way into an exclusive club or private party.
  * I rarely make even small bets.(r)

Mediator Variable

Benefits Relative Deprivation. Benefits relative deprivation is used to investigate the possibility that an employee's feelings of deprivation towards his/her benefits are separate from that of his/her feelings of satisfaction associated with his/her benefits. Therefore, to check and control for this possibility, benefits relative deprivation will be directly measured as a mediating variable.

The items measuring this variable are added at the end of the survey so as not to bias or influence subjects reactions to the satisfaction items. Significant, independent findings associated with this variable will result in the model being changed as reflected in figure 3 (see Appendix A, page 123).

The items designed for this study tap this construct and reflect the degree to which an employee feels deprived
of organizational benefit outcomes in relative terms. The items are scored on a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

1. I feel resentful about the benefits that people in my age group receive.
2. I do not feel that the people of my gender group have been unjustly deprived of benefits. (r)
3. I do not feel that my wage group (hourly or salaried) has been unjustly deprived of benefits. (r)
4. There are not groups of employees in this company that are unjustly deprived of benefits compared to others. (r)
5. I feel resentful that others receive benefits that I do not receive.
6. I feel resentful about the employee benefits I receive.

Control Variable

Pay level. Employee pay level is obtained through self-report of wages by the employee. The employee indicates his/her rate of pay along with whether this pay level is an hourly, monthly, or yearly rate.

Verification of reported pay was obtained by providing the organization with wide examples of the particular job types, reported tenure with the organization, and self-
reported pay level. The organization then reported as to whether the self-reported pay level was possible given the job type and tenure standards. All selected jobs and their reported pay levels were affirmatively verified by the organization. See Appendix C (page 136) for the completed report.

Standardization of reported pay levels is achieved through simple multiplication. An hourly reported wage is multiplied by 2,080 hours for full-time employees and is multiplied by 1,040 hours for part-time employees (Henderson, 1986). Monthly reported pay rates are multiplied by 12 for full-time employees and 6 for part-time employees. Yearly reported pay rates are reported as given.

Dependent Variable

Benefit Satisfaction. Two combined scales are used to measure the benefit satisfaction. The first measure is the four items of the employee benefit dimension of the eighteen-item Pay Satisfaction Questionnaire (PSQ) (Heneman & Schwab, 1985). The PSQ measures four aspects of pay satisfaction including benefit level satisfaction along with pay level satisfaction, raises satisfaction, and structure/administration satisfaction.

The benefits satisfaction subscale has been shown to be a consistently reliable dimension of the PSQ as noted by the following studies:
Ash, Lee, & Dreher (1985) reported reliability estimates (coefficient alphas) of .94 for the benefits scale; .95 for the pay level scale; .73 for the raises scale; and .83 for the structure/administration scale. Ash, Dreher, & Bretz (1986), in a test-retest reliability evaluation of the PSQ found that the static measurement of the PSQ, dimensions at two different times revealed relatively high reliabilities for both time 1 and time 2; (pay level, .94, .93; benefits, .90, .90; raises, .59, .54; structure/administration, .76, .73). However, the retest of the scale revealed that the reliabilities had fallen, with the benefit dimensions retaining the highest reported reliability (pay level, .73; benefits, .77; raises, .58; structure/administration, .63). Additionally, Dreher et al. (1988) reported reliability of .931 for the benefits subscale. Furthermore, Barber et al. (1992) found a .89 coefficient alpha for the PSQ benefits subscale. Finally, Mulvey (1991) suggested that the pay level and benefits dimensions of the PSQ could be considered the most stable and distinct elements of the PSQ.

The above evidence suggests that while there may be some question concerning the reliability of the raises and structure/administration dimensions, the pay level and benefits dimensions appear stable and reliable.

The second scale used is the Wisconsin Benefit Scale (WBS), a relatively new six-item scale developed by Barber.
et al. (1992). The scale for the Barber et al. (1992) study was revised to include only five items (item three was removed for low factor analysis loading) and the reported reliabilities (chronbach alphas) were .78 for the pretest and .73 for the posttest. With a second data source Barber et al. (1992) found reliability estimates of .91 for the five-item scale.

These reported WBS scale reliabilities suggest relatively adequate findings compared to the PSQ benefits subscale, and therefore merit inclusion in the study. However, due to the lack of overwhelming historical evidence beyond the initial two Barber et al. (1992) study findings the third item that was dropped from the original study will be included in the scale for this study.

The two scales, the PSQ benefits subscale and the WBS, are combined into a single ten-item scale for this study (see Barber et al. 1992). Barber et al. (1992) found that the two scales positively correlated with each other .85 and that principle component analysis verified that the two scales represented a single factor.

The 10 items are scored with two different sets of scale anchors. The PSQ is scored using a 5-point Likert scale ranging from 1= Very Dissatisfied to 5= Very Satisfied. The Wisconsin Benefits Scale items is scored on a 5-point Likert scale ranging from 1= Strongly Disagree to 5= Strongly Agree.
Pay Satisfaction Questionnaire (PSQ) Benefit Subscale:
1. My benefit package.
2. Amount the company pays toward my benefits.
3. The value of my benefits.
4. The number of benefits I receive.

Wisconsin Benefit Scale:
1. The benefits I receive from my company provide me (and my family) with a sense of security.
2. My needs are not satisfied by the benefits I receive from my company.
3. My overall attitude toward my job is favorably influenced by the benefits I receive from my company.
4. I wish the benefits I receive from my company would be changed.
5. Considering what services cost in this area, the benefits I receive from my company are adequate.
6. I am satisfied with my company's benefit plan.

Data Analysis

Moderated multiple regression (Cohen & Cohen, 1983) was used for the data analysis of this study. Stepwise and hierarchical analysis methods of entering the data are used for examining the antecedent variable relationships, the mediating relationships, and the moderating relationships.

The relative benefit comparison relationships are
analyzed with the stepwise method because of a lack of a priori reasoning ordering the relative benefit comparison variables (Norusis, 1990). Stepwise begins by selecting the independent variable which has the largest positive or negative correlation with the dependent variable, then selects the next variable with the highest partial correlation. After selection of the second variable, the first variable is analyzed to see whether it should be removed. At each step of the inclusion process all variables are reanalyzed for acceptance and removal criteria. This process is continued until all significant variables have been included in the multiple regression equation (Norusis, 1990).

Nonsignificant variables in the analyses are analyzed via hierarchical regression. The hierarchical method consists of entering the variables in an a priori predetermined sequence based on the purpose and/or logic of the research (Cohen and Cohen, 1983). First, the significant variables identified by stepwise regression will be entered as a set. Next, the nonsignificant variable that correlates highest with the dependent variable will be entered hierarchically first, and so on, until all nonsignificant antecedent variables are entered. This ordering of nonsignificant variable entry is the only salient a priori information available to use as a guide for the hierarchical entry method.
For all analyses, employee pay level will be entered first in the regression equation as a control variable. Therefore, the resulting significance of the hypotheses are considered beyond what unique variance pay level may contribute toward explaining benefit satisfaction.

The moderating relationships are analyzed with moderated multiple regression. A moderator variable is defined as "a variable that interacts with another variable in predicting scores on and accounting for variance in a criterion variable of interest" (Stone, 1988, p.194). An interaction (moderating effect) between the two independent variables will be said to occur if the joint effects of the relative benefit comparison variables and interactional justice benefit communication variables accounts for a significant amount of variance in the dependent variable, benefit satisfaction, over and above any additive combination of the independent variables separate effects (Cohen & Cohen, 1983).

Following Stone (1988) the strategy used for identifying moderator variables involves using hierarchical ordinary least squares regression to determine if an interactional relationship exists between the independent variables (relative benefit comparisons and benefit communication) and the dependent variable (benefit satisfaction). This approach is based on Saunders' (1956) description of moderated multiple regression known as the
traditional strategy versus the backward strategy purported by Blood & Mullet (1977), and the subgrouping method proposed by Arnold (1982).

The backward approach was developed by Blood & Mullet's as the result of their belief that entering the interaction effect as the last step in the hierarchical regression "robs the moderator term of covariance with the dependent variable" (p.11). Thus, Blood and Mullet advocate entering the interaction term before adding in the main effects terms which is a backward strategy as compared to the traditional approach of entering the interaction term last. This approach has been suggested as being the best method of detecting an interaction relationship (Darrow & Kahl, 1982).

However, Stone (1988) finds several reasons to doubt the claims put forth by backward strategists: (1) "subsequent simulations by Stone and his colleagues (Stone & Hollenbeck, 1984a; Stone, Austin, & Shetzer, 1986;) and Wise, Peters, & O'Connor (1984) have shown that not only is traditional MMR capable of detecting moderating effects, but the backward MMR strategy provides highly misleading information about such effects" (p. 221); (2) even if backward MMR was capable of better detecting moderating effects it is not legitimate since main effects terms must precede interaction terms; and (3) Stone contends that the results of Darrow & Kahl's (1977) backward simulations suggested that ironically, the traditional approach was
superior to the backward approach for detecting moderators. Finally, Stone (1988) contends that his criticisms of the backward approach has been supported by other researchers (Evans, 1985b; Peters, O'Connor, & Wise, 1984; Wise et al. 1984).

The subgrouping method is a strategy of assessing differences between subgroup correlation coefficients, and was developed by Arnold (1982, 1984). It is based on Arnold's (1982) assertions that: (1) a distinction needs to be made between form and degree types of moderators in moderated regression analysis; (2) traditional moderated regression is only appropriate in detecting the form (the slope of the regression line differs across varying levels of a moderator variable (Stone & Hollenbeck, 1989)) variety of moderator; and (3) when a researcher is interested in degree type moderators, zero-order correlation coefficients (r's) should be tested using subgroups. Stone & Hollenbeck (1989) disagree with Arnold's method based on several arguments including: (1) Arnold's strategy violates numerous assumptions of moderated regression; (2) subgrouping tended to lead to Type II error; and (3) failure to replicate results of Arnold's findings.

Due to the presence of different strategies (mentioned above) moderated regression analysis is a somewhat controversial topic in the statistics literature. However, Stone (1988) and Stone & Hollenbeck (1989) and others
discussed above have successfully supported the traditional MMR approach as well as weakened the psychometric arguments of the backward and subgrouping methods. Based on these findings as well as support for the traditional approach from Cohen & Cohen (1983), I utilized the traditional approach to moderated multiple regression (MMR) approach.

The antecedent variables will be added in the following sequence: salary levels were added in step one; the six relative benefit comparison antecedent variables and the four benefit communications variables will be added in step two; lastly, the cross-product variables of relative benefit comparison variables multiplied by the four benefit communications variables will be added in step three.

The mediating relationships are also investigated utilizing the hierarchical data entry method. The test for the presence of the benefits relative deprivation mediating variable consists of the following series of multiple regression models that were estimated as recommended by Baron and Kenny (1986) and Judd and Kenny (1981b).

First, I regressed the mediator, benefits relative deprivation, on the independent variables, relative benefit comparisons. Second, I regressed the dependent variable, benefit satisfaction, on the independent variables, relative benefit comparisons. Finally, I regressed the dependent variable, benefit satisfaction, on the mediator variable, benefits relative deprivation (with the relative benefit
comparisons added after benefits relative deprivation in this equation).

As previously stated, and as put forth by Baron & Kenny (1986), to establish benefits relative deprivation as a mediational variable, the following conditions must hold: First, relative benefit comparisons must affect benefits relative deprivation in the first equation; second, the relative benefit comparisons must affect benefit satisfaction in the second equation; third, benefits relative deprivation must affect benefit satisfaction in the third equation. Further, if all of these conditions hold in the predicted directions, then the effect of the relative benefit comparisons on benefit satisfaction must be less in the third equation than in the second equation after controlling for the mediation variable, benefit relative deprivation.

Perfect mediation is present if the relative benefit comparisons have no effect on benefit satisfaction when benefits relative deprivation is controlled.
CHAPTER IV

RESULTS

This chapter includes analyses of the scales and variables included in the study in addition to reporting the conclusions of the tested hypotheses.

Respondent Demographics

Surveys were delivered to 2,275 employees with 243 being returned; a response rate of 10.68%. The majority of the respondents were female, representing 78% of the returned surveys, while males returned 21% of the surveys. This is consistent with the company percentages of 73% female employees and 27% male employees.

The average age of the respondents was 34 with 68.8% of the respondents between the ages of 22-40. Average company-wide employee mean age was not available but 64.8% of the company employees are between the ages of 22-40.

Average tenure of the respondents was 33 months (2 years, 9 months) with 61.5% of the respondents having worked with the company between 1-5 years. Company information reports that 58.8% of the employees have been with the firm between 1-5 years.
While the company did not have specific information on average educational level, a company representative reported that the majority of their employees should fall between the "high school plus" and a "4-year college degree" categories. The respondents educational level indicated that 98.7% had at least a high school education. In addition, 44.5% of the respondents had at least a four-year college degree.

Caucasians represented 80.7% of the respondents and African Americans 15.6%. In comparison, company statistics indicate that 61.2% of their employees are caucasian and 37.9 are African American.

Of the five state locations those employees living in Ohio represented 64.2% of the respondents, with the next largest groups of respondents coming from North Carolina (16.0%) and West Virginia (13.2%). This is somewhat different from company statistics indicating 46% of their employees are from Ohio, 10% from North Carolina, and 23% from West Virginia. The large relative Ohio employee response rate may be due to a simplified survey return method for some of the Ohio employees. Company head-office employees hand-delivered their surveys to company representatives rather than mailing the surveys to the company or the researcher.

The respondents also indicated that 70% were not affiliated with a union and 28% were union represented. This is the most skewed reported demographic. Company
estimates indicate that 65% of their employees are represented by a union and 35% are not represented. This statistic indicates a much higher response rate for nonunion employees than unionized employees. It was mentioned by a company representative that the union was generally distrustful of management. If this sentiment was communicated to members or shared by the union members it may explain the low relative return rate by the unionized employees. Low union member response rate may also be due to distribution logistics.

A t-test to analyze the differences between unionized and nonunionized employees indicated that mean benefit satisfaction levels reported by the union member employees (M=2.60, n=63) was significantly different and lower than the mean benefit satisfaction level reported by the nonunionized members (M=3.14, n=166). Table 1 below, provides a more detailed report of the respondent population for the survey.

TABLE 1
RESPONDENT DEMOGRAPHICS

(n=243)

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M= 34 years
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The following, Table 2, reports the mean and standard deviations for the variables included in the study except for the interaction variables.
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MEANS AND STANDARD DEVIATIONS
OF STUDY VARIABLES

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Table 3 reports the standardized chronbach alpha for each scale.
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SCALE RELIABILITIES

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</table>

Scale reliabilities generally indicate adequate scale strength with the strongest scale reliabilities reported for benefit satisfaction, $a = .92$, and benefit communication thoroughness, $a = .88$. The weakest scale reliabilities were $a = .69$ for reliability of benefit wants and $a = .54$ for personal responsibility for benefit situation scales.

Table 4 reports the correlations for all study variables reported with a pairwise method of matching variables.
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<td>24)</td>
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<td>-.10</td>
<td>-.28</td>
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<td>-.03</td>
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<td>-.01</td>
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<td>.24</td>
<td>.27</td>
<td>.65</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** For variable name explanations see variable labels pages x, x.

p<.01 = Correlations in bold face type

p<.001 = Correlations underlined

Minimum pairwise n of cases: 69

1-tailed significance
Analysis of the correlations suggests general support of the predicted variable relationships. The antecedent variables benefit wants, benefit entitlement, past benefit comparisons, and personal responsibility for benefits, are all significantly correlated with benefit satisfaction in the predicted direction $p<.001$ while future benefit expectancy and benefit comparison others are significantly correlated with benefit satisfaction $p<.01$.

Furthermore, the antecedent variables, benefit wants, benefit entitlement, past benefit comparisons, future benefit expectancy, and personal responsibility for benefits, are all significantly correlated with benefit relative deprivation, $p<.001$ while benefit comparison other is significantly correlated with benefit relative deprivation, $p<.01$.

These findings along with the significant correlation between benefit relative deprivation and benefit satisfaction ($p<.001$) present initial support for the hypothesized mediating relationships. However, pay level is also significantly correlated with both benefit relative deprivation ($p<.001$) and benefit satisfaction ($p<.001$). Controlling for pay level in both the antecedent variable hypotheses and the mediating hypotheses may result in eliminating the initial significance of the relationships suggested by the above correlations.
A potential problem concerns the significant relationships between the benefit communication moderating variables, relative benefit comparisons and benefit satisfaction. The abundance of significant correlations between the benefit communications moderator variables and both the relative benefit comparisons and benefit satisfaction may limit the significance of the benefit communication moderator variable hypotheses results (Baron & Kenny, 1986).

Risk taking as a moderator variable was also, to a lesser degree, significantly correlated with the relative benefit comparisons and benefit satisfaction.

Analysis of the correlation results between the antecedent variables and also between the moderator variables indicates multicollinearity may be a problem. Highly collinear antecedent or moderator variables may indicate shared explained variance in the dependent variable.

While eight of the sixteen antecedent variable intercorrelations were statistically significant only two variable relationships show intercorrelations above the R=.4 level. Benefit wants is positively correlated with benefit entitlement, R=.63, and benefit wants is positively correlated with past benefit comparison, R=.40.

A second test of collinearity is tolerance. Tolerance levels range from 0 to 1.0 and refers to whether a
particular independent variable is a linear combination of the other independent variables in the regression equation. If the tolerance level of a particular variable is small, that variable is considered almost a linear combination of the other independent variables in the equation (Norisus, 1990).

The tolerance levels of the antecedent relative benefit comparisons are as follows: benefit wants, .57; benefit entitlement, .54; past benefit comparison, .77; personal responsibility for benefits, .88; future benefit expectancy, .95; and, benefit comparison other, .94. Most of the relative benefit comparisons are clearly distinct variables. Only benefit wants and benefit entitlement are potentially suspect, but neither approaches zero.

More serious multicollinearity exists between the benefit communication moderator variables. All four moderator variables are largely and significantly intercorrelated with each other. The correlations range from $R=-.54$ between communication thoroughness and communication manipulativeness ($p<.001$) to $R=.64$ ($p<.001$) between communication thoroughness and communication genuineness. The correlations indicate that the communication variables may explain similar variance in benefit satisfaction. Due to the size and consistency of these intercorrelations a principle component analysis was performed to analyze factor loadings.
The results indicated that a single factor explains all four variables and therefore the four benefit communications variables should be collapsed into a single benefit communications moderator variable. This single benefit communication variable, "communication," is used as the moderator variable in the regression analyses that follow.

Finally, an examination of the dependent variable, benefit satisfaction, was needed. As mentioned previously, the dependent variable is a combination of the four PSQ benefit items and the six items from the WBS. The four benefit PSQ items and the WBS items were positively correlated with each other ($R=.79, p<.001$) and principle component factor analysis revealed a one-factor solution for the two scales. These results support use of as a single, combined scale to measure benefit satisfaction.

Hypotheses Results

Antecedent Variable Hypotheses

The following discussion of results involves analyses of the hypotheses proposed to study the effects of the antecedent variables, relative benefit comparisons, on the dependent variable, benefit satisfaction (see Figure 2, page 122).

Table 5 reports the variance explained by the antecedent hypotheses with the benefit satisfaction dependent variable.
TABLE 5

Variance Explained By Antecedent Variables

Dependent Variable = Benefit Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>$\text{Adj.} R^2$</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
<th>$\Delta R^2$</th>
<th>$\text{Sig. } F\Delta$</th>
<th>$B$</th>
<th>$SE$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
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<td>.07</td>
<td>.07</td>
<td>15.22</td>
<td>$p&lt;.001$</td>
<td>.27</td>
<td>.78</td>
<td></td>
</tr>
<tr>
<td>Want</td>
<td>.52</td>
<td>.51</td>
<td>.44</td>
<td>182.07</td>
<td>$p&lt;.001$</td>
<td>-.36</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Ent</td>
<td>.61</td>
<td>.61</td>
<td>.10</td>
<td>50.48</td>
<td>$p&lt;.001$</td>
<td>-.32</td>
<td>.51</td>
<td></td>
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<tr>
<td>Past</td>
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<td>.64</td>
<td>.03</td>
<td>17.21</td>
<td>$p&lt;.001$</td>
<td>-.20</td>
<td>.49</td>
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<tr>
<td>Res</td>
<td>.65</td>
<td>.64</td>
<td>.01</td>
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<td>$p&lt;.01$</td>
<td>.09</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td>Fut</td>
<td>.65</td>
<td>.65</td>
<td>.00</td>
<td>1.82</td>
<td>$p&lt;.18$</td>
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<tr>
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<td>.00</td>
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<td>.03</td>
<td>.48</td>
<td></td>
</tr>
</tbody>
</table>

Note. For variable name and explanations see variable labels pages ix and x.

Minimum pairwise n of cases: 212.

H1: There will be a negative relationship between benefit wants and employee benefit satisfaction.

Support is found for this hypothesis. Benefit wants is significantly and negatively correlated with benefit satisfaction ($R=-.70, p<.001$) (see Table 4). In addition, benefit wants contributed significant, unique variance in explaining benefit satisfaction ($\Delta R^2=.44, p<.001$) above the variance explained by pay level ($R^2=.07, p<.001$) (see Table 5). The more employees want benefits beyond what they already receive, the less satisfied they are with their benefits.

H2: There will be a negative relationship between benefit entitlement and employee benefit satisfaction.
Support is found for this hypothesis. Employees' feelings of entitlement to more benefits are significant and negatively correlated to benefit satisfaction ($R=-.70, p<.001$) (see Table 4). In addition, benefit entitlement contributed significant, unique variance in benefit satisfaction ($\Delta R^2=.10, p<.001$) above the variance explained by pay level and benefit wants ($R^2=.52, p<.001$) (see Table 5).

H3: There will be a negative relationship between past benefit comparisons and employee benefit satisfaction.

Support is found for this hypothesis. Employees' past benefit comparisons are significant and negatively correlated with benefit satisfaction ($R=-.46, p<.001$) (see Table 4). And, in addition, past benefit comparisons explained significant, unique variance in benefit satisfaction in the regression analyses ($\Delta R^2=.03, p<.001$) (see Table 5).

H4: There will be a positive relationship between personal responsibility for benefit situation and employee benefit satisfaction.

Support is found for this hypothesis. Employees' acceptance of personal responsibility for their current benefit situation was significant and positively correlated with benefit satisfaction ($R=.32, p<.001$) (see Table 4), and explained significant, unique variance in benefit satisfaction ($\Delta R^2=.01, p<.03$) (see Table 5).
H5: There will be a positive relationship between benefit comparison others and employee benefit satisfaction.

Support was not found for this hypothesis. While benefit comparison others is significant and positively correlated with benefit satisfaction ($R = .21, p < .01$) (see Table 4), it does not explain significant, unique variance in benefit satisfaction ($\Delta R^2 = .00, p < .385$) beyond that already explained by pay, benefit wants, benefit entitlement, past benefit comparisons, and personal responsibility for benefits situation ($R^2 = .65, p < .001$) (see Table 5).

H6: There will be a positive relationship between future benefit expectancies and employee benefit satisfaction.

Support was not found for this hypothesis. While future benefit expectancies is significant and positively correlated with benefit satisfaction ($R = .20, p < .01$) (see Table 4), it did not explain significant, unique variance in benefit satisfaction ($\Delta R^2 = .00, p < .179$) beyond that already explained by pay, benefit wants, benefit entitlement, past benefit comparisons, personal responsibility for benefits situation, and comparison other benefits ($R^2 = .65, p < .001$) (see Table 5).

Summary Antecedent Hypotheses

Together, the six relative benefit comparisons explained significant variance ($\Delta R^2 = .58, p < .001$) in benefit
satisfaction above that explained by employee pay level \((R^2 = .07, p < .001)\). The hypotheses concerning benefit wants, benefit entitlement, past benefit comparisons, personal responsibility for benefits situation were supported whereas the future benefit expectancy and benefit comparison others hypotheses were not supported.

These findings suggest that the antecedent relative benefit comparisons performed reasonably toward explaining employee attitudes concerning their satisfaction with their benefits. In comparison, Klein's (1987) antecedent variables explained \(R^2 = .60\) \((p < .01)\) in ESOP (employee stock ownership plan) satisfaction and Klein & Hall's (1988) antecedent variables explained \(R^2 = .55\) \((p < .01)\) variance in ESOP satisfaction.

Moderator Hypotheses

The original hypotheses proposed that a set of benefit communications variables (benefit communication thoroughness, benefit communication logic, benefit communication genuineness, and benefit communication manipulativeness) and a personality variable, risk taking, would have a moderating effect on the relationship between the relative benefit comparisons and employee benefit satisfaction (see Figure 3, page 123).

Due to problems with multicollinearity between the benefit communications variables the original set of four
moderator hypotheses were collapsed into a single benefit communication variable labeled communication. The moderator hypotheses concerning risk taking remain as originally stated.

Table 6 presents the variance explained by the moderator variables above that contributed by pay level and the additive variance explained by the proposed moderator variables of communication with the relative benefit comparisons.

**TABLE 6**

Variance Explained by Communication Moderator Variable

Dependent Variable = Benefit Satisfaction

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables</th>
<th>R²</th>
<th>Sig. ΔR²</th>
</tr>
</thead>
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<tr>
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<td>p&lt;.001</td>
</tr>
<tr>
<td>2</td>
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</tr>
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<td></td>
<td>Want</td>
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<td>p&lt;.001</td>
</tr>
<tr>
<td></td>
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<td>p&lt;.001</td>
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<td></td>
<td>Past</td>
<td>.29</td>
<td>p&lt;.001</td>
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<td></td>
<td>Comp</td>
<td>.13</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Fut</td>
<td>.12</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>3</td>
<td>Comwant</td>
<td>.00</td>
<td>p&lt;.57</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Comres</td>
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<td></td>
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<td></td>
<td>Comfut</td>
<td>.01</td>
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</tr>
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</table>

Note. For variable name and explanations see variable labels pages ix and x.

Minimum pairwise n of cases: 212
Benefit Communications

H7: Communication will moderate the relationship between relative benefit comparisons and employee benefit satisfaction.

Support was not found for these hypotheses. Additively, communication combined with each of the six relative benefit comparison variables explained unique variance in benefit satisfaction beyond that explained by pay level (see Step 1 & Step 2, Table 6). However, none of the interaction variables (comwant, coment, compast, comres, comcom, comfut) explained significant variance beyond that explained by the additive combination of communication and each of the relative benefit comparison variables and pay level (see Step 3, Table 6).

Table 7 presents the variance explained by the moderator variables above that contributed by pay level and the additive variance explained by the proposed moderator variables of risk taking with the relative benefit comparisons.
TABLE 7

Variance Explained by Risk Taking Moderator Variable

Dependent Variable = Benefit Satisfaction

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables</th>
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<th>Sig. $\Delta R^2$</th>
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<td>$p&lt;.001$</td>
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<td></td>
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<td>Riskpas</td>
<td>.01</td>
<td>$p&lt;.14$</td>
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<td></td>
<td>Riskres</td>
<td>.00</td>
<td>$p&lt;.65$</td>
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<td>Riskcom</td>
<td>.00</td>
<td>$p&lt;.49$</td>
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<tr>
<td></td>
<td>Riskfut</td>
<td>.02</td>
<td>$p&lt;.01$</td>
</tr>
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</table>

Note. For variable name and explanations see variable labels pages ix and x.

Minimum pairwise n of cases: 212.

Risk Taking

$H_8$: Employee risk taking will moderate the relationships between relative benefit comparisons and employee benefit satisfaction.

Support was generally not found for these hypotheses.

Additively, risk taking combined with each of the six relative benefit comparison variables explained unique
riskcom) failed to explain significant variance beyond that explained by the additive combination of risk taking, the five relative benefit comparison variables, and pay level (see Step 3, Table 7).

Only riskfut explained significant variance ($\Delta R^2 = .02, p < .05$) (see Step 3, Table 7) beyond that explained by the additive variables risk taking and future benefit expectancy and pay level.

Moderating Hypotheses Summary

The moderating effects of communication and risk taking on relative benefit comparisons did a poor job explaining unique variance in benefit satisfaction. However, risk taking and future benefit expectancy had a significant interactive effect on benefit satisfaction.

Additionally, included in the survey is a single item which served as a manipulation check on the benefit communication variables. The variable, com, or communication of the individual, is a single item that tapped the individuals' belief and trust in the individual who communicated the benefits information. This is in contrast to the benefit communication variables which only concerned the employee's reactions to the messages themselves.

This item was included to see if the individuals were reacting to the actual messages, and/or the individuals who
sent them. Large differences between the reactions employees have to the com variable and the benefit communication variables would suggest that employees may have different perceptions regarding the message and the messenger; i.e., it may be that the message sent is logical but the employee does not trust the messenger.

The results indicate that com is significantly correlated (p<.001) with all four of the original benefit communications variables. This suggests that the employees do not differentiate greatly between the message and the individual(s) who sent them. Therefore, the message only communication variables may be considered as valid reactions to the communications issues.

Mediating Hypotheses

The mediating hypotheses investigated the degree to which the relative benefit comparisons effect on benefit satisfaction are mediated by benefit relative deprivation (see Figure 4, page 124). The mediation hypotheses results are considered successful if the relative benefit comparison relationships with benefit satisfaction are lessened when controlling for benefits relative deprivation.

Table 8 presents the variance explained by the relative benefit comparisons on benefits relative deprivation above the variance explained by employee pay level.
TABLE 8

Variance Explained By Antecedent Variables

Dependent Variable = Benefits Relative Deprivation

<table>
<thead>
<tr>
<th>Variable</th>
<th>( R^2 )</th>
<th>Adj.( R^2 )</th>
<th>( \Delta R^2 )</th>
<th>( F \Delta R^2 )</th>
<th>Sig.( F \Delta )</th>
<th>B</th>
<th>SE</th>
</tr>
</thead>
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<tr>
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<td>.12</td>
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<td>.62</td>
</tr>
<tr>
<td>Want</td>
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<td>.28</td>
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<td>48.41</td>
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<td>.23</td>
<td>.55</td>
</tr>
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<td>.54</td>
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<td>.01</td>
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<td>.54</td>
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<td>4.87</td>
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<td>p&lt;.18</td>
<td>-.08</td>
<td>.53</td>
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</tbody>
</table>

Note. For variable name and explanations see variable labels pages ix and x.

Minimum pairwise n of cases: 212.

H9: There will be a significant relationship between the relative benefit comparisons and benefits relative deprivation.

Support was found for this hypothesis. The combined six relative benefit comparisons explain significant, unique variance in the mediator variable, benefits relative deprivation, \( (\Delta R^2=.25, p<.001) \) beyond the variance explained in the mediator by pay level \( (R^2=.12, p<.001) \) (see Table 8).

H10: There will be a significant relationship between relative benefit comparisons and employee benefit satisfaction.

Support was found for this hypothesis. As reported previously, the six relative benefit comparisons explain significant, unique variance in benefit satisfaction.
(R²=.58, p<.001) beyond the variance explained by pay level (R²=.07, p<.001) in benefit satisfaction (see Table 8).

H1la: There will be a significant relationship between benefits relative deprivation and benefit satisfaction.

H1lb: When controlling for the mediator, benefit relative deprivation, the effect of the relative benefit comparisons on benefit satisfaction will be less than the effect of the relative benefit comparisons on benefit satisfaction without controlling for the mediator.

Support was found for both hypotheses. The mediator variable, benefits relative deprivation, explains significant, unique variance in benefit satisfaction (R²=.36, p<.001) above the variance in benefit satisfaction explained by pay level (R²=.07, p<.001) (see Table 8).

Additionally, while controlling for the mediator, the explained variance of benefit satisfaction by the relative benefit comparisons was reduced compared to the relative benefit comparisons explained variance of benefit satisfaction without the mediator control. The amount of unique, explained variance of the relative benefit comparisons effect on benefit satisfaction was reduced to R²=.29 a reduction in unique, explained variance of R²=.29 (R².58 less R².29 = R².29).
Mediator Hypotheses Summary

The mediator hypotheses results suggest that the mediator, benefits relative deprivation, does somewhat mediate the relationship between the relative benefit comparisons and benefit satisfaction. However, the remaining effects of the relative benefit comparisons on benefit satisfaction was still significant (R² = .29, p < .001) even while controlling the mediator, benefits relative deprivation.

Perfect benefits relative deprivation mediation would have the effect of reducing residual relative benefit comparison explained variance in benefit satisfaction to R² = .00. Therefore, while benefits relative deprivation can be considered to have a mediating effect on the relationship between the relative benefit comparisons and benefit satisfaction, the results suggest that benefits relative deprivation only partially explains the cognitive processes underlying the relationship between relative benefit comparisons and employee benefit satisfaction.

Summary

Overall, the antecedent, moderator, and mediating hypotheses explained a moderate level of variance in the dependent variable, benefit satisfaction.

Relative benefit comparisons of benefit wants, benefit entitlement, past benefit comparisons, and personal
responsibility for benefit situation all showed significant relationships to employee benefit satisfaction. Future benefit expectancy and benefit comparison others failed to establish significant relationships to benefit satisfaction.

Benefits relative deprivation did reduce the size of the relationship between the relative benefit comparisons and benefit satisfaction by about half of their original explained variance. This finding established the capacity for benefit relative deprivation as a mediator. But, the residual, significant relative benefit comparison relationship with employee benefit satisfaction suggests that benefits relative deprivation is not a perfect mediator.

The weakest relationships were found to be the moderating effects of communication and risk taking. Only one of these hypothesis yielded significant results. Risk taking was found to have a significant multiplicative relationship with future benefit expectancy.
CHAPTER V

DISCUSSION

This goal of this study has been to investigate correlates of employee benefit satisfaction by examining three sets of variables. First, the study investigated relative benefit comparisons, a set of variables proposed to be antecedent to benefit satisfaction. Second, the study investigated benefit communications and risk taking, two variables believed to moderate the relationship between the relative benefit comparisons and benefit satisfaction. Finally, relative deprivation as a mediating variable between the relative benefit comparisons and benefit satisfaction was analyzed.

The following is a discussion of the hypotheses results, contributions and limitations of this study, suggestions for future research in employee benefits, and closing remarks.

Discussion of Hypotheses Results
Antecedent Hypotheses

Based on the analyses, the preconditions of relative deprivation proved useful as a theoretical basis for
investigating antecedents of employee benefit satisfaction. Four of the six proposed antecedent hypotheses were supported.

Benefit wants were negatively related to benefit satisfaction and explained significant variance in benefit satisfaction. In many employment settings benefit offerings are becoming more restricted. Employees in such situations may be more focused on matching remaining benefits to their personal needs than if there was no threat to benefit resources.

This finding suggests that benefit systems such as cafeteria benefits may be effective as a means of positively affecting employee benefit satisfaction in the face of shrinking benefit resources (Barber et al. 1992). The benefit wants finding also adds to previous literature (Barber et al., 1992; Klein, 1987; Klein & Hall, 1988) supporting the notion that voice, choice, etc. has an impact on employee benefit satisfaction.

Benefit entitlement also explained significant, unique variance and was negatively related to employee benefit satisfaction. The benefit entitlement finding can be explained through the historical development of employee benefits that began as a small percentage of total pay and grew to become a large and significant part of total pay. The distribution of benefits during this growth has generally been based on an equality reward distribution.
norm, i.e., rewarding all employees equally (e.g., similar health care plans) in contrast to an equity distribution norm, i.e., rewarding benefits based on performance (e.g., more vacation to good performers).

This pattern of benefit growth combined with an equality reward norm has resulted in employees considering benefits a pay system entitlement—a stable, reliable, and ever-increasing reward offered simply for being a member of an organization rather than for individual performance. Unsurprisingly, the recent upsurge of benefit givebacks or increases in employee copay levels has resulted in employees feeling upset about losses of previous benefit entitlements.

The significant relationship between past benefit comparisons and benefit satisfaction reflects employee first-hand experience in recent benefit givebacks and increasing employee share of benefit costs. Employees may not be aware of their actual benefit worth (Wilson et al. 1985), but are likely to be aware of their own benefit devaluation in a relative sense.

When employees experience decreases in relative benefits, displeasure is voiced through dissatisfaction with their current benefits. This finding also complements the pay level research of Meese & Watts (1983), who found reducing pay below an accustomed level had a more serious negative effect than pay that is already consistently low. It seems that reducing benefit levels below past historical
levels also has a detrimental effect on employee benefit satisfaction.

Finally, personal responsibility for the benefit situation was significant and positively related to benefit satisfaction. This finding indicates employee awareness of their own role in the current benefit scarcity condition. It may also be a reflection of employee usage of their benefits. It has been suggested that employees who use their benefits more may be more likely to be satisfied (Miceli & Lane, 1991). Employees who use their benefits frequently (and possibly overuse them) may tend to be more satisfied with their benefits.

Benefit comparison others was not significant in explaining benefit satisfaction. At least two reasons may explain this lack of significance. First, if employees are not aware of their own benefit levels (see Parkington, 1990; Wilson et al. 1985), they may have difficulty comparing their benefits to others inside or outside their company. Second, this nonsignificant result may reflect between-employee equality that is inherent in many benefit systems. Since most employees receive similar benefits to others in the organization, it is understandable that employees did not report significant results concerning comparisons others.

Future benefit expectancies was also a nonsignificant finding in this study. It is reasonable to have expected
employee negative past benefit experiences to strengthen employee negative future benefit expectations. However, the employee's frame of reference may still be aimed more toward past benefit experiences rather than speculating on future benefits.

Declining benefit services and rising employee benefit costs result in salient, reality-based employee past benefit comparisons whereas future benefit expectancies can be less clear to employees. Changes in present benefits compared to past benefits is a part of an employee's work/life history whereas future benefit expectancies may not be as realistically perceived or salient as the fact-based past benefit comparisons. Therefore, employee future benefit expectancies may be less concretely formulated than past benefit comparisons.

Moderator Hypotheses

The benefit communication and risk taking moderating effects on the relationship between relative benefit comparisons and benefit satisfaction were generally nonsignificant. This lack of significant moderating effects is likely due to the significant correlations between the moderator variables, communication and risk taking, and the antecedent variables, relative benefit comparisons and the dependent variable, benefit satisfaction.
Overwhelmingly, the effects of the relative benefit comparisons additively combined with benefit communications variables and risk taking explained significant variance in benefit satisfaction beyond variance explained by pay level whereas the interaction terms added in the last step were largely insignificant.

While the results of this study did not generally support a significant interactive relationship between the antecedent relative benefit comparisons and moderators benefit communications and risk taking on benefit satisfaction, the moderators did exhibit significant relationships with benefit satisfaction and, therefore, deserve future research attention.

The single significant moderating effect was the interaction between future benefit expectancies and risk taking on benefit satisfaction. The interaction of the positively related future benefit expectancy and negatively correlated risk taking on benefit satisfaction had the effect of a lower, yet still negative relationship to benefit satisfaction. A risk-oriented employee interacting with an employee's positive outlook on future benefits suggests that these employees believe that somehow, possibly through their own risky initiative, his/her benefits will increase in the future even in the face of the current evidence of benefit reductions.
Mediator Hypotheses

The mediator variable hypotheses were significant to the predictions of this study. How and why relative benefit comparisons are related to benefit satisfaction can be partially explained by benefits relative deprivation. To a degree, employee relative benefit comparisons are explained through employee feelings of deprivation about their benefits. This feeling of benefits relative deprivation, in turn, relates to benefit satisfaction. These results add credence to the view that the underlying processes that explain variable relationships should be investigated (Barber et al. 1992).

Although the residual relationship between relative benefit comparisons and benefit satisfaction was significant, benefits relative deprivation was not an ineffective mediator. Perfect mediation would result in a residual relationship of zero between the relative benefit comparisons and benefit satisfaction when benefits relative deprivation is controlled. Perfect mediation is unlikely to occur in most variable relationships. Therefore, benefits relative deprivation should be evaluated in terms of its degree of mediating effectiveness. Benefits relative deprivation reduced by half the original direct relationship between relative benefit comparisons and benefit satisfaction.
Overall, benefits relative deprivation did help explain the connection between relative benefit comparisons and benefit satisfaction and does support future research efforts aimed at explaining the underlying relationship between independent and dependent variables such as relative benefit comparisons and benefit satisfaction.

Contributions of This Study

The results of this study add to the benefit satisfaction literature in several ways. First, this study provided evidence that relative deprivation theory is useful in explaining employee benefit satisfaction. The results indicated that four of the six preconditions explained significant variance in benefit satisfaction. This study justifies the Sweeney et al. (1990) call for investigation of employee benefit satisfaction using relative deprivation theory.

While the results of the benefits communication hypotheses were not significant, this study also contributed to future benefit communications research by establishing a significant correlation to employee benefit satisfaction. Communicating benefits to employees as means of positively impacting employee perceptions of their benefits has been repeatedly cited. Yet, there has been very little empirical benefits communication research. This study went beyond other benefit communication studies (Dreher et al. 1988;
by directly measuring employee responses to the communication of benefits.

However, due to the high multicollinearity between the four originally conceived benefit communications variables, it may be that benefit communications is a unidimensional construct, as inferred from the Josephs et al. study (1989).

Additionally, this study contributed to the call by Barber et al. (1992) to investigate underlying cognitive processes by which employees evaluate their employee benefits. Benefits relative deprivation's role as a mediator helped explain how and/or why employees develop reactions to their benefits beyond an understanding of what impacts employees reactions to their benefits.

Finally, the use of employee risk taking as a personality variable related to benefit satisfaction is a contribution of this study. Human resources management and organizational behavior literatures have come full circle to again recognize the importance of studying innate personality characteristics as a means of understanding individual reactions to outcomes such as employee benefit satisfaction. For example, Staw & Ross (1985) and Staw et al. (1986) have established the long-term relationship between negative affectivity and job satisfaction.

This study's use of the risk taking moderator variable was unique to benefit satisfaction research and did provide initial yet limited explanation for employee benefit
satisfaction. At the very least, this study established that risk taking was significantly related to benefit satisfaction, opening the door for future investigations of this relationship. However, future research should consider the direct effects of risk taking on benefit satisfaction rather than moderating effects.

Limitations of This Study

There are also several limitations of this study that should be considered when reviewing its results and contributions.

First, this study had a low response rate—only 10.68% of the employees returned their surveys. Low response rates are not uncommon in pay-related research. For example, Rice, Phillips, & McFarlin (1990) had a 29% response rate and R.Heneman, Greenberger, & Strasser (1988) had a 25% overall response rate. But, low response rates generate concern over whether the study findings are representative of the organization's population of employees.

Analysis of the demographics of the respondents compared to the entire employee population demographics indicated that most respondent demographics are generally representative of the population. Nevertheless, some respondent demographics did not match the employee population and therefore deserve discussion.

The union/nonunion response rates were skewed from the
employee population and may misrepresent the findings of this study. The respondents included 70% nonunion and 28% unionized employees. These respondent results are significantly different from the company population of 35% nonunion and 65% unionized employees.

Additionally, there was an over-representation of respondents living in Ohio. Ohio respondents represent 64.2% (156/243) of the surveys returned but only account for 45% of the company population. And of the 156 Ohio respondents, 100 of the returned surveys were from nonunionized employees. Given the nonunionized employee rate of 35%, nonunionized Ohio respondents should have accounted for only about 55 returned surveys (35% nonunionized rate x 156 Ohio respondents). However, company head office employees are located in Ohio and are all nonunionized employees. The head office employees had an easier method of survey return than did other employees (dropping off surveys in the office rather than mailing them), a difference that may explain why the nonunionized head office employees returned an unusually high number of the Ohio surveys. Since there was no coding for head office employee versus other state of Ohio employees, however, this reasoning is speculative.

Regardless, the over representation by nonunionized employees, Ohio residents, and nonunionized Ohio employees questions the representativeness of the responses as
compared to the entire employee population.

Finally, these results may not be generalizable to other populations and environments. The study data were collected from a single organization, and it is possible that different populations may provide different results. Therefore, the generalizability of these findings can only be tested through future research.

A second limitation of this study is its cross-sectional rather than longitudinal design. A longitudinal design would have reduced doubts associated with paper and pencil method of collection, such as common method variance. However, a verified sampling by the organization of employee self-report pay levels indicated accurate self-reporting (see Appendix C, page 136).

Another limitation of this study is its use of newly created survey items. Many of the items used in the survey instrument have not been psychometrically validated beyond this study. This concern was evidenced by the high multicollinearity between the original four benefit communications variables. Even with overall adequate new scale reliability, the results should be viewed with caution until future research verifies scale stability.

The lack of significant impact by the study moderator variables, benefit communications and risk taking, is another limitation of this study. Both were significantly correlated with benefit satisfaction, but neither variable
when combined interactively with the relative benefit comparisons contributed strongly to the study findings.

Suggested Future Benefit Research

Many future research directions for employee benefit satisfaction are suggested. First, longitudinal data research is needed in this area. Longitudinal study designs avoid psychometric hazards (e.g., common method variance) inherent to one-time survey designs. At this time only the Dreher et al. (1988) study and Josephs et al. (1989) study were identified as longitudinal, indicating a severe lack of this research approach.

A second direction for benefits research is to investigate outcomes associated with employee benefit satisfaction. More benefits research is needed using benefit satisfaction as the independent variable and variables such as organizational commitment, trust in management, etc., as dependent variables.

This study and others have focused on antecedent relationships, with benefit satisfaction as the dependent variable, whereas Dreher (1991) has called for more pay outcome research. Research into the outcomes of benefit satisfaction would balance the benefits research focus that has been dominated by antecedent variable research. Benefits research on organizational outcomes would also help bridge the academic/practitioner gap by providing useful
information to human resources practitioners.

Research on outcomes related to benefit satisfaction is especially critical to human resources practitioners understanding of the effects that their benefit systems have on organizational outcomes.

A third area of needed research is for theoretically-based studies of employee benefit satisfaction. Theoretically driven hypotheses should be developed rather than post hoc explanations. The Barber et al. (1992) call for theoretical research is partially answered by this study. However, only a minority of benefit studies (see Klein, 1987, Josephs et al. 1989) offer theoretical guidance.

Future benefits research should also continue investigating innate employee characteristics such as risk taking. The measure of risk taking in this study was broad. Future research on risk taking should concentrate more specifically and narrowly on dispositions toward financial risk taking.

Another useful benefit research direction would be to investigate the direct effects of benefit communications rather than their moderating effect. The high correlations between benefit communications and benefit satisfaction found in this study suggests that communications may contribute understanding of benefit satisfaction more directly than via the moderating role developed in this
study.

It would also be useful to understand which methods of benefit communication are most helpful in increasing employee knowledge of their employee benefits. For example, are videotapes more effective than written explanations? Or are group discussion meetings with benefits staff more effective than video information? This knowledge would assist practitioners in designing efficient benefit systems as well as positively affect employee understanding and valuation of their benefits.

Additionally, the best timing for benefits communication should be identified. Most employees receive benefit plan details when they are first hired, a period of employee information overload resulting in little chance of their being able to comprehend and retain complex benefits information. It would be useful to know when benefits information is best delivered to employees, how much information should be given at each interval, and how often the communications should occur. An understanding of the information processing literature would be a helpful guide toward developing research in this area.

Finally, more benefits research needs to be conducted concerning demographic data. For example, does the number of dependents in the family affect benefit usage and satisfaction? Is there an effect on benefit satisfaction in the presence of a second benefit source? And does reliance
on this second plan affect the employee's satisfaction with their own benefit plan?

The results of this study suggest that demographics may be important when studying benefit satisfaction. For example, employee education level was positively correlated to benefit satisfaction ($p < .01$). This finding is consistent with the Dreher et al. (1988) study, but it conflicts with the findings of Klein & Hall (1988), who found a negative relationship between education and benefit satisfaction.

Furthermore, some demographic variables such as age and number of people in the respondent family may prove useful as moderator variables. Older employees may be more sensitive to benefit levels than younger employees. Many benefits are forms of insurance (e.g., health insurance, life insurance). Since older employees are likely to be ill more often, they may rely on benefits more heavily and, therefore, be more sensitive to drops in benefit levels or increases in health insurance copayer costs. Age may also impact benefit satisfaction due to higher anticipated reliance on life insurance coverage by older employees. Also, since age and tenure tend to be positively correlated (in this study $p < .001$), older employees may have increased pension levels and therefore more concern or interest invested in employee benefits.

Each of these demographic variables as well as others could have been investigated in this study. But the
variable/respondent number ratio in the study was adequate (11 variables/n=243), and increasing the variable count would have decreased the statistical power of the study and robbed significance from the primary variables of interest. Therefore, investigation of the role of these variables is recommended for future empirical analysis.

Conclusions

This study contributes to benefit satisfaction research in several ways. First, it offers a theoretically guided exploration into antecedents of benefit satisfaction while controlling for employee pay level. It was found that benefit wants, benefit entitlements, past benefit comparisons, and personal responsibility for benefit situation all contributed significant explanation of employee benefit satisfaction.

This study also provided a modest contribution of the moderating effects of one variable, employee risk taking disposition. Employee risk taking disposition was found to interact significantly with employee future benefit expectancies to provide unique explanation of benefit satisfaction.

Finally, benefits relative deprivation, a mediating variable, provided a significant explanation as to how and/or why the relative benefit comparisons are related to benefit satisfaction.
Together, the findings of this study contribute to the understanding of employee benefit satisfaction, an organizational variable important to researchers and practitioners of human resources.

Employee benefits are becoming a more scarce and valued organizational reward. As organizations struggle to provide adequate and satisfying employee benefit plans, the future task of employee benefit research is to guide development of efficient and satisfying benefit plans.
APPENDIX A:

FIGURES
Relative Deprivation Theory

Benefit Communications

Risk Taking

Benefit Satisfaction

FIGURE 1
General Correlates of This Study
RELATIVE BENEFIT COMPARISONS:

- Benefit Wants
- Benefit Entitlement
- Past Benefit Comparison
- Personal Responsibility for Benefits
- Future Benefit Expectancy
- Benefit Comparison Others

FIGURE 2

Relative Benefit Comparisons and Benefit Satisfaction
RELATIVE BENEFIT COMPARISONS:
Benefit Wants
Benefit Entitlement
Past Benefit Comparison
Personal Responsibility for Benefits
Future Benefit Expectancy
Benefit Comparison Others

MODERATOR VARIABLES:
BENEFIT COMMUNICATIONS
Thoroughness
Logic
Genuineness
Manipulativeness
Risk Taking

FIGURE 3
Relative Benefit Comparisons, Benefit Satisfaction, and Benefit Communications
Relative Benefit Comparisons, Benefit Satisfaction, Benefit Communications, and Benefits Relative Deprivation
APPENDIX B:

STUDY QUESTIONNAIRE
Dear Employee:

My name is Matthew C. Lane. I am a Ph.D. Candidate in Labor and Human Resources at The Ohio State University. Presently, I am writing my dissertation on employee benefit satisfaction. I am interested in your perceptions on several aspects concerning the benefits you receive from your company and how these perceptions relate to how satisfied you are with your benefits. Your company has given me permission to conduct part of my study in your workplace. I am asking your cooperation in completing the attached questionnaire. Please read it carefully as the quality of the study depends on your thoughtful responses to the statements presented.

YOUR RESPONSES ARE COMPLETELY CONFIDENTIAL
YOUR PARTICIPATION IS VOLUNTARY

No one in your company will have access to the questionnaire you are completing. Your responses will be part of anonymous, grouped response results. Your participation in the study is voluntary and you may discontinue participation at any time.

I ask that you provide your initials and last four social security number digits to me only so that I can match your survey with a second survey that will follow in a couple of months.

YOUR HELP WITH MY STUDY IS CRITICALLY IMPORTANT. The results of my study will provide valuable information concerning aspects of employee benefits that employees find important. I hope to publish the findings in scholarly journals to help others better understand and design employee benefit packages.

INITIALS (PLEASE PRINT)                  LAST 4 SSN DIGITS

I appreciate your assistance with the completion of my dissertation study. If you have any questions or concerns related to the survey or your participation in the study please contact me.

Matthew C. Lane
356 Hagerty Hall
The Ohio State University
1775 College Road
Columbus, Ohio 43210
(614)-292-5317

Note: While completing this questionnaire please consider the term "benefits" to refer to the following basic definition: "Social security, unemployment payments, worker’s compensation, private pensions, health insurance, life insurance, profit sharing, vacations, sick leave and other employer provided forms of financial compensation other than direct wages".
**EMPLOYEE BENEFITS SURVEY**

1. **Age**

2. **Education level (check one)**

   - Less than high school diploma
   - High school diploma or GED
   - High school diploma or GED plus some college or technical training
   - 2-yr college degree
   - 4-yr college degree
   - Some graduate school training
   - Graduate or professional degree

3. **Gender**
   - Male
   - Female

4. **Race (Check one)**

   - African American
   - Hispanic
   - Native American
   - White, non-Hispanic
   - Asian or Pacific Islander

5. **Marital status**:  
   - Single, never married
   - Married
   - Divorced
   - Widow/Widower

6. **Number of dependents (including yourself)**

7. **Is there a second benefit plan provided in your family? (e.g., spouse's benefit plan)**
   - Yes
   - No

8. **If yes, please indicate how much you rely and depend on this second employee benefit source (check one). I:**

   - never rely on this plan
   - rarely rely on this plan
   - rely on this plan about half of the time
   - always rely on this plan

9. **Years of service with present company**

10. **Job title**

    - Years
    - Months

11. **Rate of pay $ per hour per month per year**

12. **Work location**:  

    - Ohio
    - W. Virginia
    - N. Carolina
    - Missouri
    - Wash. D.C.
    - Maryland

13. **Union affiliation**:  

    - None
    - SEIU
    - 1199
    - 1199EC
    - Teamsters
INSTRUCTIONS: Please circle either True or False as the answer which best describes your own response toward the statements presented below.

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. When I want something I'll sometimes go out on a limb to get it.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>15. I rarely make even small bets</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>16. I would enjoy bluffing my way into an exclusive club or private party.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>17. If I invested any money in stocks, it would probably only be in safe stocks from large, well-known companies.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>18. If the possible reward was very high, I would not hesitate putting my money into a new business that could fail.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>19. When in school, I rarely took the chance of bluffing my way through an assignment.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>20. People have told me that I seem to enjoy taking chances.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>21. Skindiving in the ocean would be much too dangerous for me.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>22. The thought of investing in stocks excites me.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>23. I rarely, if ever, take risks when there is another alternative.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>24. I enjoy taking risks.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>25. I would prefer a stable position with a moderate salary to one with a higher salary but less security.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>26. Taking risks does not bother me if the gains involved are high.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>27. I consider security an important element in every aspect of my life.</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>28. I would enjoy the challenge of a project that could mean either a promotion or loss of a job.</td>
<td>T</td>
<td>F</td>
</tr>
</tbody>
</table>

CONTINUED NEXT PAGE...
29. I try to avoid situations that have uncertain outcomes.  
30. I think I would enjoy almost any type of gambling.  
31. I would participate only in business undertakings that are relatively certain.  
32. In games I usually "go for broke" rather than playing it safe.  
33. I probably would not take the chance of borrowing money for a business deal even if it might be profitable.

STOP! READ NEXT INSTRUCTIONS

INSTRUCTIONS: The following items concern your perceptions of your employee benefits. Please circle the number that represents the answer which best describes your reaction to the items presented.

SD = Strongly Disagree  
D = Disagree  
N = Neither disagree or agree  
A = Agree  
SA = Strongly Agree  

34. The benefits I receive closely match the benefits that I want to receive.  
35. There are other benefits I would rather receive than the ones offered by my company.  
36. I do not receive some benefits from my company that I wish I did receive.  
37. Currently, I receive significantly less employee benefits from this company than I did in the recent past.  
38. I receive significantly more now in employee benefits from this company compared to what I used to receive.

CONTINUED NEXT PAGE...
39. What I currently receive in employee benefits from this company is a lot more than I did in the recent past.

40. The information I receive fully explains all of my employee benefits.

41. When I want information about my employee benefits I am always able to get answers.

42. I clearly understand the information I receive concerning my employee benefits.

43. I get as much information concerning my employee benefits as I want.

44. The information I receive on my employee benefits leaves out important information about my benefits.

45. Information pertaining to my employee benefits contains words or phrases that I do not understand.

46. The explanations I receive concerning my employee benefits are not sincere.

47. The explanations to me concerning my employee benefits are genuine and not meant to misrepresent the facts.

48. What I see happening concerning my employee benefits and what the company tells me is happening are quite similar.

49. I expect to receive more benefits in the near future from my company.

50. My benefits in the near future will probably decrease.

51. It is unlikely that my benefits will increase in the future with this company.

52. I do not deserve more benefits than I currently receive.

53. I am entitled to more benefits than I currently receive.

CONTINUED NEXT PAGE...
54. The benefits I receive are the benefits I deserve. 1 2 3 4 5
55. My company or others such as doctors, insurance companies, etc., are the ones to blame for the current state of my benefit levels, not employees like me. 1 2 3 4 5
56. Employees such as myself are to blame for the current benefit situation. 1 2 3 4 5
57. Employee behaviors (such as my excessive use of benefits, etc.), are primarily responsible for employee benefit levels today. 1 2 3 4 5
58. The explanations I receive concerning my employee benefits make good sense to me. 1 2 3 4 5
59. My employee benefit information is based on facts particularly relevant to this company. 1 2 3 4 5
60. My employee benefit information is based on facts that are not logical for our company. 1 2 3 4 5
61. I feel manipulated by the information I receive concerning my employee benefits. 1 2 3 4 5
62. I do not feel that the employee benefit information I receive is in any way meant to control my attitudes toward my benefits. 1 2 3 4 5
63. My employee benefits information tries to unrealistically alter my perceptions about my benefits. 1 2 3 4 5

STOP!
GO TO NEXT PAGE & READ INSTRUCTIONS CAREFULLY
INSTRUCTIONS: In the space AFTER each statement, indicate how much you believe you receive in benefits compared with other persons. Please write in the number using the scale below.

Example: If you think you receive somewhat more in benefits (about 20% more) (see scale) than "other people in other companies with similar education, seniority, effort and job responsibility", you would fill in a 7 (see scale) after the second question presented below.

<table>
<thead>
<tr>
<th>A lot less (40%)</th>
<th>Much less (30%)</th>
<th>Somewhat less (20%)</th>
<th>A little less (10%)</th>
<th>About the same</th>
<th>A little more (10%)</th>
<th>Somewhat more (20%)</th>
<th>Much more (30%)</th>
<th>A lot more (40%)</th>
<th>I don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

Compared with:

64. other people with similar education, seniority, effort, and job responsibility in my company, I receive ____

65. other people with similar education, seniority, effort, and job responsibility in other companies similar to my company, I receive ____

66. unionized employees, I receive ____

67. non-unionized employees, I receive ____

68. other racial groups in my company, I receive ____

69. members of the opposite sex in my company, I receive ____

70. hourly paid employees, I receive ____

71. salaried employees, I receive ____

72. upper management, I receive ____

73. younger-age employees, I receive ____

74. older-age employees, I receive ____

STOP!

GO TO NEXT PAGE & READ INSTRUCTIONS
INSTRUCTIONS: The following statements are about how satisfied you are with your employee benefits and pay. Please circle the number which best describes your satisfaction using the scale below.

VD = Very Dissatisfied
D = Dissatisfied
N = Neither
S = Satisfied
VS = Very Satisfied

<table>
<thead>
<tr>
<th>Statement</th>
<th>VD</th>
<th>D</th>
<th>N</th>
<th>S</th>
<th>VS</th>
</tr>
</thead>
<tbody>
<tr>
<td>75. My take-home pay.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>76. My benefit package.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>77. My most recent raise.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>78. Influence my supervisor has on my pay.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>79. My current salary.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>80. Amount the company pays toward my benefits.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>81. The raises I have typically received in the past.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>82. The company's pay structure.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>83. Information the company gives about pay issues of concern to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>84. My overall level of pay.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>85. The value of my benefits.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>86. Pay of other jobs in the company.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>87. Consistency of the company's pay policies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>88. Size of my current salary.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>89. The number of benefits I receive.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>90. How my raises are determined.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>91. Differences in pay among jobs in the company.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>92. How the company administers pay.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
93. The benefits I receive from my company provide me (and my family) with a sense of security.  

94. My needs are not satisfied by the benefits I receive from my company.  

95. My overall attitude toward my job is favorably influenced by the benefits I receive from my company.  

96. I wish the benefits I receive from my company would be changed.  

97. Considering what services cost in this area, the benefits I receive from my company are adequate.  

98. I am satisfied with my company's benefit plan.  

99. I feel resentful about the benefits that people in my age group receive.  

100. I do not feel that the people of my gender group have been unjustly deprived of benefits.  

101. I do not feel that my wage group (hourly or salaried) has been unjustly deprived of benefits.  

102. There are not groups of employees in this company that are unjustly deprived of benefits compared to others.  

103. I feel resentful that others receive benefits that I do not receive.  

104. I feel resentful about the employee benefits I receive.  

CONTINUED NEXT PAGE...
105. Financially, I live paycheck to paycheck. 1 2 3 4 5
106. My savings are large. 1 2 3 4 5
107. Due to other sources of income I do not rely on the wages I receive on this job. 1 2 3 4 5
108. If I retired right now I have enough money to live on. 1 2 3 4 5

PERSONAL COMMENTS:

STOP!

THANK YOU FOR COMPLETING THE QUESTIONNAIRE

Please fold and place your completed questionnaire in the provided envelope. Seal the envelope but DO NOT put your name or any other identifying information on the envelope. Finally, return your questionnaire/envelope to the person instructed to gather the envelopes. Again, thank you for your cooperation with my study.

Matthew C. Lane
APPENDIX C:

SELF-REPORT PAY VERIFICATION
<table>
<thead>
<tr>
<th>Job</th>
<th>Reported Pay</th>
<th>Within pay range?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Habilitation Specialist part-time 6 months</td>
<td>$4.99/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Licensed Practical Nurse 2 years full-time</td>
<td>$10.08/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Habilitation Specialist 2 yrs./8 mo. full-time</td>
<td>$6.59/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Habilitation Specialist Trainee 1 month part-time</td>
<td>$4.67/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Operations Coordinator 1yr./6mo. full-time</td>
<td>$6.88/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Maintenance Technician 10yrs./6mo.</td>
<td>$11.08/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Sr. Habilitation Specialist 3yrs./8mo. full-time</td>
<td>$6.09/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Licensed Practical Nurse 4 months full-time</td>
<td>$7.35/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>9. Laboratory Specialist III 6yrs./3mo. full-time</td>
<td>$7.04/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>Job</td>
<td>Reported Pay</td>
<td>Within pay range?</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$21,000/year</td>
<td>Yes</td>
</tr>
<tr>
<td>10 yrs./6 mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Food Service Manager</td>
<td>$10.50/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>10 yrs./7 mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Program Director</td>
<td>$12.38/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>6 yrs./8 mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Accounting Clerk</td>
<td>$6.50/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>3 yrs./7 mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Personnel Administrator</td>
<td>$8.94/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>6 yrs./6 mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. RN Consultant</td>
<td>$15/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>4 yrs./5 mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Operations Manager</td>
<td>$37,000/year</td>
<td>Yes</td>
</tr>
<tr>
<td>9 years full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Accountant</td>
<td>$22,000/year</td>
<td>Yes</td>
</tr>
<tr>
<td>10 months full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Social Worker</td>
<td>$17,500/year</td>
<td>Yes</td>
</tr>
<tr>
<td>1 yr./2 mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Habilitation Director</td>
<td>$17.66/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>5 yrs./3 mo.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Bookkeeper</td>
<td>$8.50/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>3 yrs./8 mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Architect</td>
<td>$34,000/year</td>
<td>Yes</td>
</tr>
<tr>
<td>9 yrs./3 mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job</td>
<td>Reported Pay</td>
<td>Within pay range?</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Admin. Assistant I</td>
<td>$7.92/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>4yrs./2mo. full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodian</td>
<td>$4.25/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>10 months part-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional Training</td>
<td>$39,292/year</td>
<td>No</td>
</tr>
<tr>
<td>Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4yrs./3mo.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel Administrator</td>
<td>$9.25/hour</td>
<td>Yes</td>
</tr>
<tr>
<td>2yrs./3mo.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LIST OF REFERENCES


Blood, M. R. & Mullet, G. M. (1977). Where have all the moderators gone: The perils of Type II error. College of Industrial Management, Georgia Institute of Technology.


Jackson, D. N. (1977). Reliability of the Jackson Personality Inventory. Psychological Reports, 40, 613-614.


Kidder, L. H., & Judd, C. M. (1986). Research methods in social relations


