



**LIBRARY**  
**Michigan State**  
**University**

This is to certify that the

dissertation entitled

Factors Influencing the Perceived Importance of Pay  
Reference Groups in a Unionized Hospital  
Setting

presented by

Paul M. Reagan

has been accepted towards fulfillment  
of the requirements for

Ph.D. degree in Philosophy

Major professor

Date 11/11/86



RETURNING MATERIALS:  
Place in book drop to  
remove this checkout from  
your record. FINES will  
be charged if book is  
returned after the date  
stamped below.

OCT 11 1999

OCT 25

~~NOV 11 1999~~

NOV 26 1999

NOV 28 1999  
340

FACTORS INFLUENCING THE PERCEIVED IMPORTANCE  
OF PAY REFERENCE GROUPS IN A UNIONIZED  
HOSPITAL SETTING

By

Paul Marion Reagan

A DISSERTATION

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

School of Labor and Industrial Relations

1935



Es

the mor

Fairnes

sources

is an e

determi

standar

their i

So

both eq

comple

factors

groups.

persona

tificat

ories

tance o

ity of

of draw

was also

On

## ABSTRACT

### FACTORS INFLUENCING THE PERCEIVED IMPORTANCE OF PAY REFERENCE GROUPS IN A UNIONIZED HOSPITAL SETTING

By

Paul Marion Reagan

Establishing fair and equitable pay practices is one of the more important activities carried out by organizations. Fairness implies comparisons. Single and multiple reference sources have been hypothesized to exist. The present study is an examination of the perceptual processes involved in the determination of pay equity with specific emphasis upon the standards or referents used and the factors which influence their importance.

Social comparison processes are a central construct in both equity theory and reference group theory. Both of these complementary frameworks are integrated in a model of the factors influencing the perceived importance of pay reference groups. The model incorporates three categories of factors: personal characteristics, job characteristics and group identification/membership. Variables within each of these categories were hypothesized to influence the perceived importance of pay referents depending upon the perceived similarity of the referent to the comparer and the instrumentality of drawing the comparison. The use of multiple pay referents was also hypothesized.

On the basis of pilot testing, five pay referents

relevant

workers)

of these

rise multi

value of

equity ma

were also

variables

erent on

The

1.

2.

3.

4.

Not

ations,

proposed

inconclu

models o

relevant to the respondent population (unionized health care workers) were identified. The perceived importance of each of these referents then served as a dependent variable. Stepwise multiple regression was used to establish the predictive value of each factor in the model. Direct estimates of pay equity made in relation to each of the five pay referents were also collected. These estimates served as predictor variables to determine the independent influence of each referent on a criterion variable of pay satisfaction.

The major findings can be summarized as follows:

1. Personal characteristics, job characteristics and group identification variables do influence the perceived importance of pay referents. Limited support for the model was demonstrated.
2. As expected, the predictive value of variables within each category depended upon the particular referent in question.
3. The amount of variance which could be accounted for in the perceived importance of any of the five referents was modest.
4. Convincing evidence is seen to exist for the usage of multiple pay referents.

Noting several methodological and statistical considerations, these findings are discussed in terms of the model proposed and social comparison issues. The results, although inconclusive, underscore the importance of developing further models of the pay referent selection process.

Th

sied an

labor f

interes

final p

signifi

time, r

No

opment

sonal e

of prof

point o

tiveness

like to

indivis

is dedi

On

experie

the acti

Block i

On

statist

## ACKNOWLEDGMENTS

Throughout my graduate career I have maintained and pursued an interest in pay and its effects upon the people who labor for it. This dissertation is the culmination of that interest. As a research piece it stands on its own. This final product, however, is also the result of a number of significant individuals whom I would like to thank for their time, resources and support.

No single individual has affected my intellectual development more greatly than Dr. Thomas H. Patten Jr. His personal example has led to my admiration for the very highest of professional, ethical and human standards; each serving as point of reference to judge the quality of my life and effectiveness in dealing with other individuals. I would also like to thank him for the insight that the development of all individuals is ultimately self-motivated. This dissertation is dedicated to him.

Other committee members have also shaped my academic experiences. Dr. Daniel H. Kruger has unfailingly provided the acid test of practicality for my ideas. Dr. Richard Block instilled the importance of academic rigor.

Dr. J. Kevin Ford provided valuable methodological and statistical suggestions. Dr Stanley Stark's reading of the

manuscript

like to

Relative

communi

Fi

loving

made po

manuscript provided assistance in revision. I would also like to thank the staff of the School of Labor and Industrial Relations who demonstrated the meaning of service to the community. I will be indebted to them always.

Finally, I am especially fortunate to be blessed with my loving wife Cheryl and her support. This dissertation was made possible by her.



LIST OF

LIST OF

CHAPTER

34

Re

01

CHAPTER

IN

Re

Eng

31

21

## TABLE OF CONTENTS

	PAGE
LIST OF TABLES . . . . .	vii
LIST OF FIGURES. . . . .	viii
CHAPTER I. INTRODUCTION . . . . .	1
General Introduction. . . . .	1
Research Objectives and Potential Contributions. . . . .	5
Outline of This Study . . . . .	8
CHAPTER II. LITERATURE REVIEW . . . . .	10
Introduction. . . . .	10
Reference Group Theory and Relative Deprivation .	11
Normative, Membership and Comparative Groups. . . . .	11
Group Identification and Membership. . . . .	14
Organizational Commitment and Professionalism . . . . .	16
Cosmopolitan - Localism. . . . .	13
Relative Deprivation - Social Comparison Origins . . . . .	19
Elements of Relative Deprivation Theory. . . . .	21
Egoistic and Fraternal Deprivation: Similar versus Dissimilar Referent Choices . . . . .	22
Evolution of the Relative Deprivation Concept . . . . .	24
Empirical Literature - Pay Referents. . . . .	25
The Function of Similarity . . . . .	25
Similarity and Egoistic Comparisons. . . . .	23
The Function of Instrumentality. . . . .	29
Within Group Comparisons (Similar) versus Between Group (Instrumental) Comparisons. . . . .	31
Summary - Reference Group Theory . . . . .	33
Equity Theory . . . . .	35
Introduction . . . . .	35
General Theoretical Foundation . . . . .	36
General Research Evidence. . . . .	37
Limitations of Pay Equity Research . . . . .	33

Par

Mu

Ge

CHAPTER

PERCE

RELA

Int

A M

Con

Lit

Per

Joo

Bro

Bro

Mu

Sur

Chapter

Int

Me

Categories of Referents: Factors	
Influencing Their Importance. . . . .	41
The Goodman Process Model. . . . .	41
Empirical Research Evidence:	
Pay Referents . . . . .	44
Functions of Similarity and	
Instrumentality . . . . .	49
Parallels and Contrasts of Equity and	
Relative Deprivation Theories. . . . .	51
Pay Referent Categories. . . . .	51
Level of Measurement . . . . .	52
Similarity and Instrumentality . . . . .	52
Multiple Reference Groups . . . . .	53
General Summary . . . . .	56
CHAPTER III. A MODEL OF FACTORS INFLUENCING THE	
PERCEIVED IMPORTANCE OF PAY REFERENCE GROUPS,	
RELATED RESEARCH AND HYPOTHESES . . . . .	59
Introduction. . . . .	59
A Model of Factors Influencing the Perceived	
Importance of Pay Reference Groups, Related	
Research and Hypotheses. . . . .	59
Considerations for the Reader . . . . .	60
Literature Review and Hypotheses: Introduction. . . . .	62
Personal Characteristics. . . . .	62
Age. . . . .	65
Seniority. . . . .	65
Educational Attainment . . . . .	67
Intent to Quit . . . . .	68
Job Characteristics . . . . .	71
Skill Level. . . . .	71
Wage Level . . . . .	75
Wage Comparisons Within Similar Groups	
and Between Dissimilar Groups. . . . .	77
Within Group Comparisons. . . . .	78
Between Group Comparisons . . . . .	78
Group Identification - Membership . . . . .	79
Identification . . . . .	79
Cosmopolitan - Locals . . . . .	80
Organizational and Union Commitment . . . . .	83
Organizational Commitment and Pay	
Referents: Empirical Literature . . . . .	85
Union Commitment and Pay Referents:	
Empirical Literature. . . . .	87
Group Membership. . . . .	89
Multiple Reference Groups . . . . .	90
Summary . . . . .	92
CHAPTER IV. FIELD STUDY: METHODOLOGY AND RESULTS. . . . .	95
Introduction. . . . .	95
Method. . . . .	95

53  
00

12

Re

31

CHAPT

Pilot Study. . . . .	95
Purpose . . . . .	95
Identification and Pilot Testing of Wage Referent Categories . . . . .	96
Sample and Research Site. . . . .	96
Operationalization of Variables . . . . .	100
Part I - Factors Influencing the Perceived Importance of Pay Reference Groups. . . . .	101
Individual Characteristics. . . . .	101
Age. . . . .	101
Length of Service. . . . .	102
Educational Level. . . . .	102
Intent to Quit . . . . .	103
Job Characteristics . . . . .	103
Wage Level . . . . .	103
Skill Level. . . . .	103
Group Identification - Membership Variables. . . . .	105
Part II - Multiple Pay Referents: Perceptions of Pay Equity and Their Combination . . . . .	107
Perceived Pay Equity/Fairness . . . . .	107
The Dependent Variable: Pay Satisfaction. . . . .	109
Method of Analysis. . . . .	110
Part I - Factors Influencing the Perceived Importance of Pay Reference Groups. . . . .	112
Part II - Multiple Reference Groups. . . . .	114
Results . . . . .	114
Part I - Factors Influencing the Perceived Importance of Pay Reference Groups. . . . .	114
Correlational Analyses. . . . .	114
Regression Analyses . . . . .	119
Part II - Multiple Pay Referents: Correlational Analyses. . . . .	125
Part II - Multiple Pay Referents: Regression Analyses . . . . .	127
Summary . . . . .	129
CHAPTER V. DISCUSSION AND CONCLUSIONS . . . . .	131
Discussion: Factors Influencing the Perceived Importance of Pay Reference Groups . . . . .	131
Considerations . . . . .	131
Personal Characteristics . . . . .	133
Job Characteristics. . . . .	135
Group Identification and Membership. . . . .	139
Discussion: Multiple Pay Referents. . . . .	145
Conclusions . . . . .	143

Table

1.

2.

3.

4.

5.

6.

7.

3.

3.

## LIST OF TABLES

Table	Page
1. Factors Related to Perceived Importance of Reference Group and Hypothesized Direction of Influence. . . . .	91
2. Descriptive Statistics for the Total Sample and Individual Bargaining Units . . . . .	93
3. Coefficient Alpha Reliability Estimates. . . . .	111
4. Interitem Correlations for Variables Contained in the Model. . . . .	113
5. Zero-Order Correlations for Variables Contained in the Model. . . . .	116
6. Results of Stepwise Regression Analyses for Pay Reference Groups by Total Sample and Individual Bargaining Units . . . . .	120
7. Differences in Perceived Importance of Pay Reference Groups Between MNA and Steelworker Bargaining Units. . . . .	124
8. Zero-Order Correlations for Perceptions of Fairness/Equity Made in Relation to Five Reference Groups. . . . .	125
9. Results of Stepwise Regression Analyses for Perceptions of Pay Fairness/Equity on Pay Satisfaction by Total Sample and Individual Bargaining Units. . . . .	129



## LIST OF FIGURES

Figure	Page
1. A Model of Factors Influencing the Perceived Importance of Pay Reference Groups. . . . .	61

## CHAPTER I

### INTRODUCTION

#### General Introduction

In the 1950's and 1960's a growing economy assured an ever-improving standard of living for the work force in the United States. In the 1970's rising inflation and declining productivity eroded the real economic gains of the previous decades. The economy began to shift its emphasis from manufacturing to the traditionally lower paying service sector. Standards of living began to decline as a result. In the 1980's income levels have fallen short of many people's expectations.

The 1960's ushered in an era in which the accepted authority of many of society's institutions came under increasing scrutiny. Women entered the workplace in greater numbers. The demographics of the workforce changed. A surge of younger, better educated and career-oriented individuals entered the labor force anticipating to be compensated at levels which exceeded those of their parents. Inequalities within organizations between "blue", "white" and "pink" collar workers were highlighted. Employees have increasingly questioned the overall fairness of their relationships with the organizations in which they are employed. Dissatisfaction with compensation systems and methods of distributing organizational rewards is likely to continue.

7  
tices  
organism  
system  
organism  
level  
organism  
toward  
attract  
and be  
are the  
pined  
pages  
author  
are di  
now the  
1953, p  
At  
labor  
cesses  
is equi  
that fa  
provide  
A number  
the "j  
logical  
analyse  
and ext

The process of establishing fair and equitable pay practices is one of the more important activities carried out by organizations. Indeed it is arguable that the compensation system is the most potent source of rewards available to an organization and certainly one of the most controllable. The level of pay assigned to the various jobs is important to the organization because of its impact on employee attitudes toward the work environment, retention, and its ability to attract qualified employees (Belcher, 1974; Adams, 1963; Finn and Lee, 1972; Lawler and O'Gara, 1967). Equally important are the results of nonunilateral (i.e. collectively bargained) pay levels. Often extended and disruptive work stoppages result from perceived wage inequities leading one author to state that "All industrial disputes about payments are differential disputes. They arise over the question of how much one group is getting compared with others." (Jaques, 1958, p.313).

An examination of a basic issue within the field of labor relations is performed in the present study: What processes are involved in the determination of whether one's pay is equitable? More specifically, what standards are used and what factors influence their importance? This dissertation provides an attitudinal/perceptual focus on these questions. A number of other perspectives exist: political thought on the "just and fair" distribution of wealth in society; sociological writings on societal or cultural norms of fairness; analyses from the field of labor economics providing internal and external labor market analyses tracing the origins of

occup

insti

ing e

colla

propri

scope

proces

case.

S

most t

avilla

theory

and Wal

1992; 2

notion

remuner

others

cal fra

parlison

ers is

rewards

1995; 2

Martin,

tors wa

son geo

number

intern

A

occupational and interindustrial wage differentials and; institutional writings from the field of collective bargaining examining why employee groups seek comparability in their collective bargaining agreements across employers and geographic regions. Each of these perspectives is beyond the scope of the present study which relies upon the perceptual process of social comparisons as its fundamental theoretical base.

Social comparison processes are a central construct in most theories dealing with interpersonal justice and the evaluation of work outcomes such as pay, including equity theory (cf. Adams, 1965; Homans, 1961; Walster, Berscheid, and Walster, 1973) and reference group theory (cf. Crosby, 1982; Davis, 1959; Pettigrew, 1967; Runciman, 1966). The notion that the perceived fairness or equitability of one's remuneration is dependent upon a comparison with that which others receive is the fundamental premise of these theoretical frameworks. Indeed the hypothesized importance of comparisons made by an individual with various comparison others is shared by all theories pertaining to the evaluation of rewards flowing from the employment relationship (cf. Adams, 1965; Dyer and Theriault, 1976; Lawler, 1971; Goodman, 1977; Martin, 1981). Remarkably little research exists on the factors which influence the perceived importance of pay comparison groups. Even less research is available regarding the number of comparison groups or standards used in the equity determination process.

A variety of potential pay referents have been identified

with a

one's

potent

area (

work a

istics

associ

identit

erature

research

Accordi

orienta

Re

depriva

cess in

trial to

tificat

the sal

Singer,

Bo

and the

theory

which o

quite t

these i

En

recogni

olved

with each serving as a standard against which the equity of one's pay can be evaluated. Indeed, the large number of potential pay referents has complicated research within this area (Martin, 1932). Working within an equity theory framework a number of authors have identified personal characteristics and job attributes which appear to have a consistent association with the use of one or more of the referents identified. At the present time the greatest volume of literature on the determinants of pay referents has come from researchers working within an equity theory framework. Accordingly the literature reflects the individualistic orientation provided by this theory.

Reference group theory and its derivative form (relative deprivation theory) also address the social comparison process involved with the perceptual equity of ones' pay. Central to reference group theory are the notions of group identification and group membership which form the foundation for the selection of comparative groups (Kelley, 1952; Hyman and Singer, 1953).

Both the individualistic formulation of equity theory and the collectivistic or group focus of reference group theory offer insight into the social comparison process by which comparative pay referents are chosen. To date no adequate theoretical model has been set forth which incorporates these important theoretical traditions.

Equity theory and reference group theory formulations recognize the fundamental importance of two dynamics: 1) perceived similarity of the comparative pay referent to the



comparer and 2) the instrumentality of the referent in satisfying the comparison needs of the comparer. The present study provides an opportunity to evaluate the theoretical importance of these dynamics.

Several fundamental issues underly the present study.

These are:

- 1) individualistic versus group influences on the perceived importance of pay reference groups
- 2) the extent to which group identification and group membership form the basis for pay reference group importance
- 3) the direction of influence of a given individual or group variable on the particular referent under consideration
- 4) the saliency of the variable in influencing the importance of the particular referent under consideration

#### Research Objectives and Potential Contributions

The major objective of this study is the analysis of important correlates which may influence the perceived importance of pay reference groups in a unionized hospital setting. Only three studies have been located which attempted a systematic multivariate analysis of these factors (Goodman, 1974; Heneman, Schwab, Standal and Peterson, 1973; and Hills, 1930). In general, the results of these studies demonstrate the present inability to predict the perceived importance of pay reference groups to any significant degree. Only one of these studies (Goodman, 1974) has attempted to specify and test a model of the dynamics through which these factors may operate.

The present study employs a model based upon the work of Goodman (1977) to test the influential factors identified in a

number of previous bivariate correlational studies (Finn and Lee, 1972; Andrews and Henry, 1963; Patchen, 1961; Haire, Ghiselli and Porter, 1963) as well as those traditionally believed to influence the process of pay referent selection. The direction of influence and saliency of each variable will be evaluated while controlling for the effects of the remaining variables in the model. A major theoretical extension of Goodman's model will also be evaluated.

To date the selection of pay referents has been conceptualized as an individualistic process. Reference group theory postulates that group norms, values and goals provide standards against which individuals, who identify with or are members of these groups, refer when evaluating important work outcomes (Pettigrew, 1967; Runciman, 1966; Martin, 1931). A review of the literature supports these postulates indicating that group membership and identification provide potent influences on the perceived importance of potential pay reference standards. These variables are recognized in the present study by incorporating them into a model of the factors which influence the perceived importance of pay reference groups.

The present study investigates perceptions of equity in a unionized setting incorporating behaviorally defined labor relations variables which are indices of group influence. Such studies are very few, (cf. Martin and Peterson, 1935; Martin, Price, Bies, and Powers, 1979). Virtually all of the experimental and survey work investigating pay referents has suffered from the major limitation of employing student populations who work alone or in highly contrived group settings

as sup

and Di

struct

ing or

referen

highly

relevan

The

field s

and ex

employe

actual

develop

stable

as a r

The

referen

pay eq

variety

vidual

1974;

strict

Based

of pot

associ

to aid

estima

1982.

as subjects (Berscheid, Walster, and Berscheid, 1973; Carrell and Dittrich, 1973; Weick, 1966). Where groups have been structured they were of a temporary nature rather than existing or natural work groups. Therefore the social effect or reference point for the determination of equity is diffuse, highly subject to experimenter bias and having questionable relevance to the individuals under study (Weick, 1966).

The present study is unique in that it is a multivariate field study performed within an organization's social system and existing occupational hierarchy. The study utilizes employee groups who have a history of experience with an actual compensation system. Feelings of pay equity have developed within this context. Inequity is experienced as a stable and somewhat permanent affective response rather than as a result of experimenter manipulation.

The present study investigates the influence of multiple reference groups as sources of comparison for perceptions of pay equity. A number of researchers have suggested that a variety of reference sources are used concurrently when individuals are determining the fairness of their pay (Goodman, 1974; Finn and Lee, 1972; Hills, 1930). No adequate demonstration of this hypothesized phenomenon has been achieved. Based upon the results of a pilot test, the relevance of a set of potential pay referents was established. A test of the association of multiple perceptions of equity made in relation to each potential pay referent was performed allowing for estimates of their relative influence (Goodman, 1977; Martin, 1932).

A  
evalua  
each p  
techni  
while  
equity  
the st  
genera  
Outlin

I  
the ge  
descri  
the ex  
refered  
drawn.  
pay res

Cha  
ence tr  
review  
regardi  
hypotne  
tics, p  
as each  
of sing  
sources

In  
are des  
employe

A fractionated scale (Pincus and Reagan, 1932) used to evaluate a respondent's perceived pay equity in relation to each potential pay referent was developed. This measurement technique allowed for direct estimates of perceived pay equity while operationalizing critical features of Adam's (1965) equity theory. It represents a significant contribution to the study of pay equity and the field of labor relations in general.

### Outline of This Study

In this chapter the objective of the study and the general theoretical bases on which it relies have been described. Chapter II provides a literature review concerning the existing sources of literature regarding the choice of pay referents. Similarities and contrasts of this literature are drawn. The literature on the existence and use of multiple pay reference groups is reviewed.

Chapter III describes a model of the factors which influence the perceived importance of pay reference groups. A review of the literature (with emphasis on empirical analyses) regarding the independent variables is provided. Specific hypotheses are advanced with respect to personal characteristics, job characteristics and group identification variables as each of these categories may operate through the dynamics of similarity and instrumentality. Multiple pay referent sources which operate concurrently are also hypothesized.

In Chapter IV a pilot study, the research sample and site are described. The data collection procedure, the procedures employed to operationalize the independent and dependent

varia

given

the re

Re

regard

examin

provide

variab

cussed.

are dis

The

results

the lit

of the

pay ref

for fir

tion an

variable and analyze the data are described. Attention is given to the descriptive statistics regarding the sample and the reliability of the independent variables used.

Results of the data analyses are provided and discussed in regard to the total sample and its major subsamples. An examination and discussion of the intercorrelation matrix is provided. Zero-order correlations for each of the independent variables and each pay referent category are provided and discussed. Finally the results of stepwise regression analyses are discussed.

The final chapter of this study, Chapter V, discusses the results in terms of the hypotheses specified in Chapter II and the literature review upon which they are based. Implications of the findings regarding the dynamics of the process by which pay referents gain importance are also discussed. Directions for future research and limitations of the present investigation are provided.



Intro

reacti

or sta

part,

source

these

encos

select

from

the l

might

respo

tions

disir

the c

Q

the c

'and

theor

acco

adire

invo

## CHAPTER II

### LITERATURE REVIEW

#### I n t r o d u c t i o n

A major source of difficulty in understanding employee reactions to pay is identification of the reference source(s) or standards used to determine its fairness. For the most part, laboratory studies have held the choice of reference source as a constant in their experimental designs. Few of these studies have allowed for potential referents to vary, choosing instead to investigate potential pay referents selected a priori by the researchers. Drawing conclusions from the few field surveys available has been complicated by the large variety of potential referent sources individuals might use. Typically the specific pay referent used by a respondent is inferred based upon the respondents' perceptions of pay fairness. Both of these methods are less than desirable when attempting to identify the factors influencing the choice of pay referents.

Two principal sources of literature offer insight into the choice of pay comparisons; both reference group theory (and its derivative, relative deprivation theory) and equity theories are examples of mid-range formulations seeking to account for social comparison processes. Each theory addresses a limited range of social comparison phenomena involving perceptions and reactions to the equitable

historio

while o

perceiv

analys

marked

on int

extent

an equ

indiv

adit

equit

facto

as a

choic

exis

read

refe

prov

on t

The

pro

pro

pro

The

pro

distribution of rewards within society and its organizations. While both theories are concerned with how persons come to perceive a comparison as equitable (or not), the level of analysis of reference group and equity theory differ markedly. The hallmark of reference group theory is a focus on intergroup social comparison processes and, to a lesser extent, individual-group comparisons. Studies performed in an equity theory framework are characterized by an individual or individualistic approach to comparisons. In addition these studies have typically concentrated on equitable states and their outcomes per se rather than the factors which influence the choice of a particular referent. As a result much of the work from equity theory regarding the choice of pay referents is correlational in nature.

One objective of this chapter is to pull together the existing evidence from the two bodies of literature. The reader will note the similarities and contrasts of equity and reference group theories. A summary of these shall be provided.

The second section of the chapter reviews the literature on the existence and use of multiple pay reference groups. The role of identification with or allegiance to multiple groups is explored as it is related to the pay comparison process.

### Reference Group Theory and Relative Deprivation

Normative, Membership and Comparative Groups. Early theoretical work in the area of reference group theory provides important insights into the choice of pay referents.

reser

in t

theo

resu

and s

refe

actio

of wo

non-m

or ev

when a

of gr

indivi

outcom

such a

belitt

compar

indivi

entiti

compar

shoul

e.g.,

other

will

are at

incor

2

Research within a reference group framework reached its peak in the mid 1960's. The theory fell into disuse as equity theory emerged into prominence. It has enjoyed a more recent resurgence.

The notion of reference group is employed in sociology and social psychology to denote the source of a frame of reference which structures an individual's attitudes or actions (Merton, 1957). It can be applied to a collectivity of which the individual is or is not a member (membership or non-membership group) or, by extension, to another individual or even abstract idea (Hyman, 1942). The latter cases occur when an individual or idea come to represent or are symbolic of groups. Referential comparisons may occur whenever individuals attempt to determine the fairness of their outcomes derived from a relatively permanent relationship such as a job or any other stable role that they occupy. Zelditch, Anderson, Berger and Cohen (1970) describe the comparison in terms borrowed from equity theory: When individuals believe that their status is a relevant input, entitling them to some degree of benefit, referential comparisons are made. Under these circumstances, individuals should compare themselves with persons of similar status (e.g., other carpenters, or other college professors, or other nurses). Zelditch et al. predict that the participants will be satisfied with a relationship only if their outcomes are at least equal to the level of outcomes that currently accrue to the appropriate reference group.

There are three senses in which the term reference group

is used (Delafield, 1979). Not only can it mean the group with which individuals compare themselves; it can also mean either the group from which they derive their norms, or the group to which they feel they belong. These are known respectively as comparative, normative and membership reference groups.

The research on social comparisons and pay has typically dealt only with the comparative reference group for the purposes of examining felt fair pay (Hyman and Brough, 1975; Runciman, 1966). That is to say, the process by which a group comes to be used as a pay comparison has largely been side-stepped. Treated in such a manner a comparative reference group "is almost tautologically, that with which one compares oneself on some given dimension" (Kelley, 1952). As a result, little attention has been given to the conditions under which the comparative group is chosen as a standard. The interrelationship of normative, membership and comparative groups in work settings demonstrates the influence of group processes on the choice of pay comparisons. Normative reference groups, which dictate standards and attitudes, and membership reference groups, which may apply group pressures to conform, must be considered as influential determinants of the group with which one's pay is compared (Brown, 1979).

The use of a specific type of pay comparison may constitute one of the normative assumptions of a particular occupational group. Gruder (1977) offers the following

exampl

therefo

tion in

purpose

constit

work-re

pay co

would c

Brought

integr

strateg

indivi

31

research

of gro

choice

that as

develop

work p

standa



example.

In an engineering factory, it may be taken for granted among skilled grinders that they deserve the same pay as fitters and higher earnings than capstan operators; and any new recruit to their group will be subject to strong though no doubt diffuse pressure to apply the same frame of reference to his earnings. In such a context, for a grinder to suggest that fitting is more highly skilled or that capstan work is equally deserving would assail the moral values of his fellows (p. 430).

The notions of comparative and normative groups are therefore interrelated. Strong normative group identification leads to the usage of that group for comparative purposes. Where workers in the same place of employment constitute an individual's normative group (at least where work-related standards are concerned), and norms encapsulate pay comparisons, the worker's comparative reference group would be largely predetermined on that basis (Hyman and Brough, 1975). Moreover, the more firmly the individual is integrated or allied within the occupational group, the more straightforward the pay comparison will appear to the individual.

Group Identification and Membership. A modicum of research evidence is available to substantiate the influence of group membership and identification variables on the choice of pay referents. Pettigrew (1967) provides evidence that as work groups become progressively more cohesive, norms develop with regard to appropriate wage-effort bargains. As work groups come to be perceived as important sources of standards the more likely they are to be used for comparison

purposes. The work of Hyman and Brough (1975) and Morley and Stephenson (1977) further reinforces the notion that shared work-related attitudes, particularly where they relate to the benefits of group membership, form a fundamental basis for comparison.

Research evidence has begun to indicate that membership in and identification with work groups strongly effects the comparative pay referent chosen. Lipset and Trow (1957) provide early evidence demonstrating that trade union membership dictates a predictable pattern of wage comparisons for bargaining purposes. These researchers show that union members tend to compare their wages with those of other union members in their local. Delafield (1979) provides more recent evidence that as individuals become more committed to the unions to which they belong, i.e. establish a greater sense of shared values and purpose, they tend to use other union members as comparative pay referents. Individualistic perceptions of pay fairness take on a role of lesser importance.

In a unique field experiment James Martin (Martin and Peterson, 1985) provides evidence which is highly suggestive of the role group identification variables such as organizational and union commitment play in determining the importance of pay referents. Martin collected data from a unionized employer who had established a two-tier wage structure. Martin measured the organizational and union commitment expressed by each employee. Employees indicated their perceptions of pay fairness as well as whether these

perceptions were based on internal (employees within that specific retail facility) or external (employees at other facilities) referents. The results indicated that employees expressing high organizational and union commitment tended to use pay referents internal to the organization. Employees who had recently been transferred from older retail sites to newer ones expressed lower organizational commitment and tended to use external pay referents. Most importantly, perceived pay equity was significantly higher among low-tier employees in new facilities than among higher-paid employees at older facilities. Employees expressing lower organizational commitment tended to use pay referents external to their work place. It would be reasonable to conclude by extension that their membership groups (union and organizational) were also of lesser importance as pay referents.

Organizational Commitment and Professionalism. Organizational commitment and professionalism have been identified as factors which influence whether internal or external pay referents are used by professional and scientific employees. Finn and Lee (1972) examined the relationship of salary perceptions with their reference source for employees in the Federal Public Health Service. Maturity (length of service and number of years since highest degree), professional ability, professional activity and reputation as well as commitment to the organization were also recorded. These researchers established a positive relationship between organizational commitment and the use of internal pay referents (further reinforcing the findings of Martin, 1935).

partn

going

profes

indio

profes

alism

level

of the

In

to cor

Shisel

lower

research

themse

its g

group

top-1

tool

F

insid

refer

occup

skill

1963

in s

work

Pos

sign

Furthermore, the use of external sources (e.g. "knowledge of going rates") was significantly related to measures of professionalism. Mixed results were found for employees indicating high levels of organizational commitment and professionalism. These authors concluded that as professionalism and its correlates increase (educational level, skill level) so does the relevance of external referents while that of the internal referent diminishes.

In a study of managers, middle and lower managers tended to compare themselves with groups inside the company (Haire, Ghiselli and Porter, 1963). An in-between classification, lower middle, chose outside groups as pay referents. These researchers found a tendency for the middle managers to "sink themselves further and further into the company, accepting its goals, practices and traditions" (p. 7). The use of groups external to the organization was more prevalent for top-levels of the managerial hierarchy who saw themselves as mobile and less bound to the company.

Fellow members of the occupation outside as well as inside the organization may also constitute a normative reference group. This is particularly likely where an occupational group possesses, or is attempting to assert, skilled or professional status (Haire, Ghiselli and Porter, 1963; Hyman and Brough, 1975; Morely and Stephenson, 1977). In such circumstances, pay comparability with other skilled workers or professionals will represent a natural orientation (Ross and McMillen, 1973). This pattern has been noted for high level managers (Carroll and Tombari, 1980; Haire,

3015

1333

profes

local

"1033"

1033

affai

affai

1033

the of

1033

1033

ident

1033

follow

1033

specia

refere

the op

1033

that t

the in

1033

colleg

1033

1033

1033

1033

Ghiselli and Porter, 1963) and among teachers and nurses asserting semi-professional status (Alluto and Belasco,

Cosmopolitan-Localism. Closely allied with the notion of professionalism are the constructs of cosmopolitan and localism. Merton (1957) first used the terms "local" and "cosmopolitan" to characterize divergent orientations in a community setting. Locals were narrowly concerned with affairs of the community to the virtual exclusion of world affairs, and cosmopolitans were found to be more oriented toward the outside world. The locals' world revolved around the community; the cosmopolitans were involved with the community, but as a place to live, not as a way of life. Gouldner (1957, 1953) operationalized similar concepts to identify divergent organizational roles. According to Gouldner's formulation these role orientations are as follows: Cosmopolitans: those lower on loyalty to the employing organization, higher on commitment to their specialized role skills, and more likely to use an outer reference group orientation. Locals can be characterized by the opposite characteristics.

Within this early formulation the reader should discern that the continuum of cosmopolitan-localism closely parallels the internal versus external referent orientation individuals may hold relative to their employing organizations. On a college campus, for example, an extreme cosmopolitan will probably publish more, spend less time on college committees, devote less time to teaching and students, attend more professional meetings, and be more willing to leave the

col

mail

to t

comm

orie

stud

prof

comm

rela

fiel

hosp

61 tr

mixed

tion

orien

main

as no

that

group

expec

today

their

the n

conce

that

the q

that



college than the local. It is unclear, however, whether the maintenance of a high degree of identification by individuals to their employing organizations (i.e. high organizational commitment) must come at the expense of external cosmopolitan orientations. Bennis, Berkowitz, Affinito and Malone (1958) studied the reference group orientations of the nursing profession. All respondents were administered Gouldner's cosmopolitan-localism scale. Each nurse was asked to indicate relative loyalty to the six following groups: 1) the medical field; 2) nursing profession; 3) their hospital; 4) their hospital's nursing service; 5) the out-patient department and 6) their own particular work group. The researchers found mixed support for the hypothesis that the external orientation of cosmopolitans must come at the expense of their orientation to internal work groups. Cosmopolitans maintained high loyalty to their professional groups as well as high organizational commitment. It was clear, however, that cosmopolitan nurses did identify more closely with groups external to the organization than did locals. As expected, these externally oriented (i.e. professionally motivated) nurses tended to evaluate the rewards flowing from their employment relationship in terms relative to that of the nursing profession at large.

Relative Deprivation - Social Comparison Origins. The concept of comparative reference groups is closely related to that of relative deprivation; both have direct relevance to the question of pay comparisons (Hyman and Singer, 1963).

Relative deprivation can be regarded as a special concept in

refer

that

a sim

on to

asses

on pe

other

(dyna

T

to at

Devia

deca

Air C

oppor

prom

Whose

expl

level

stat

depr

and

T

Stou

bill

line

Info

By o

Howe

reference group theory. The main insight of this approach is that an individual's sense of deprivation (or welfare) is not a simple function of the objective situation but also depends on the frame of reference through which that situation is assessed; and, more specifically, that self-appraisals depend on people's comparison of their own situation with that of other people perceived as being comparable to themselves (Hyman and Brough, 1975).

The concept of relative deprivation was initially applied to attitudes of American servicemen (Stouffer, Suckman, Devinney, Star and Williams, 1949). The study raised concern because of its paradoxical findings. Despite the fact that Air Corps servicemen with high-school educations had better opportunities for promotion, they were more critical of their promotional opportunities than less-educated military police whose promotion rates were very low. Stouffer et al.'s explanation was that the better educated men had higher levels of aspiration, partly based on what would be realistic status expectation in civilian life, so they were relatively deprived and therefore dissatisfied. Military Policemens' and that led to less dissatisfaction.

The early invocation of relative deprivation theory by Stouffer et al. was an initial demonstration of the applicability of theory to account for perceived intergroup inequities in organizational settings (the military). Unfortunately, this theoretical perspective was seldom used by organizational researchers thereafter. More recently, however, relative deprivation research has been conducted

primarily by political scientists, sociologists, social historians, and political psychologists (e.g. Gurr, 1970; Pettigrew, 1967; Sears and McConhay, 1970; Runciman, 1966). As a result, the theory has most frequently been applied to political issues, such as the civil rights movement, riot participation, and voting behavior. The elements of relative deprivation theory and the dimensions by which comparisons are made are outlined below.

Elements of Relative Deprivation Theory. The basic proposition of relative deprivation theory is that the feeling of deprivation stems from a comparison between the rewards received by one's self or one's membership group and the rewards received by some other person or group, referred to as a comparative referent. Relative deprivation has been termed both a subjective feeling and a belief of differential treatment (Cook et al., 1979). The comparison process provides the key to understanding feelings of deprivation (Martin, 1981).

From the theoretical writings on relative deprivation, it is possible to extract a number of conditions that have been postulated to generate relative deprivation (see McPhail, 1971; Crosby, 1976; Cook et al., 1979; Gurney and Tierney, 1982). The major theorists disagree as to which of them are necessary and sufficient components of relative deprivation, though there is some overlap. Cook et al. (1979) summarize the literature by distilling five elements: 1) All theorists agree that an individual must lack X, or enough of X, in order to feel relatively deprived of it; 2) All theorists

also agree that an individual must want X, or more of X, in order to feel relatively deprived of it; 3) All theorists agree that some type of social or historical comparison is necessary to contribute to relative deprivation; 4) Many theorists agree that it is important for an individual to see that they do not have X and believe it possible to obtain X and; 5) Individuals must sense an entitlement to the desired commodity X.

Egoistic and Fraternal Deprivation: Similar versus Dissimilar Referent Choices. It is the social comparison features of relative deprivation theory which are of direct relevance to the study of factors influencing the importance a reference group may have. The initial concept is simple: persons may feel deprived of some desirable thing relative to their own past, another person, persons, group, ideal, or some other social category (Walker and Pettigrew, 1934). Runciman (1966) has contributed a great deal to the understanding of the comparison process by drawing a distinction between two types of deprivation. Egoistic deprivation occurs when a comparison to a similar referent causes a feeling of deprivation. One of the earliest analyses by Davis (1959) explicitly limited relative deprivation to situations involving social comparisons with other similar individuals who have possession of a desired outcome. He stipulated that social comparisons must be with individuals from one's "in-group" (usually membership), and that comparisons with dissimilar individuals are not relevant to relative deprivation.

Ad

be

ca

an

al

ti

ne

ccc

ca

a r

big

can

dep

Wac

ref

comp

slon

in

of o

depo

depr

fric

of o

In an extensive study of the British working class, Runciman found his respondents typically made comparisons between their friends and relatives within their own social category rather than broad social comparisons between groups and other groups. These respondents tended to make individualistic comparisons that produced egoistic relative deprivation.

Runciman termed the second type of relative deprivation he identified as fraternalistic. Fraternal deprivation occurs when an upward comparison to a dissimilar referent causes a feeling of deprivation. An upward comparison is to a referent who has more of a valued outcome, for example, a higher pay level. Both egoistic and fraternal comparisons can be made concurrently; and as a result both types of deprivation can be experienced. They are not, therefore, mutually exclusive.

The choice of a similar or dissimilar comparative referent reflects a difference in the concerns of the comparer (Martin, 1931). Egotistic deprivation is labeled as such because the comparer is concerned about his or her own individual welfare. Fraternal deprivation has a broader base of concern; if the cause of the deprivation were removed, all members of the disadvantaged group would benefit. Egotistic deprivation reflects a concern with one's own status, while fraternal deprivation stems from a concern about the status of one's membership group.

Evolution

development

stouffer

group test

individual

egoistic

a current

1932) for

terms and

comparisons

comparisons

individual

capabilities

condition

entitled;

tions of

conceptual

standard

that frat

reference

cases of

Gurr's in

referent

function

Frater

cal speci

define to

is essent



Evolution of the Relative Deprivation Concept. The development of the concept of relative deprivation from Stouffer to Runciman was towards a specification in inter-group terms of a social comparison process that can affect individual and group behavior. The distinction between egoistic and fraternal comparison processes, however, remains a current research issue. Gurr (1970) and Crosby (1976, 1982) formulate the comparison process in individualistic terms and emphasize that egoistic rather than fraternalistic comparisons tend to occur. Gurr (1970) conceives of the comparison process as a perceived discrepancy between an individual's subjective "value expectations and value capabilities." Value expectations denote the goods and conditions of life to which individuals believe they are entitled; value capabilities refer to the goods and conditions of life they think they are capable of attaining. Conceptualized in these terms the comparative referent or standard is very much internal to the comparer. Gurr argues that fraternalistic forms of relative deprivation involving reference group comparisons should be thought of as special cases of egoistic relative deprivation. Crosby (1982) shares Gurr's individualistic orientation towards the use of referent standards. An internalized standard developed as a function of past outcomes plays a primary referent role.

Fraternal comparisons have received additional theoretical specification largely as a result of efforts to further refine the egoistic-fraternal distinction. The distinction is essentially between an individualistic versus collective

perspect

the comp

referent

(unique

group me

the bene

Martin,

Pettigree

requiring

deprivati

deprivati

effects r

comparing

Vanneman

Empirical

The

relative

between t

compariso

that:

Some

indi

ceiv

to o

opta

nent

snap

Altho

there are

literatur

dissimila

perspective on the following dimensions: in who is performing the comparison (self versus self's membership group), the referent (another individual versus a group), inequity (unique to the comparer versus potentially shared with other group members), behavior (individual versus collective), and the beneficiary of change (self versus group) (Gartell, 1932; Martin, 1932; and Martin and Murray, 1933). Walker and Pettigrew (1934) criticize Martin and Murray (1933) for requiring the characteristics of the referent for egoistic deprivation to be similar to the comparer and for fraternal deprivation to be dissimilar and more prosperous. Fraternal effects have also been demonstrated among dominant groups comparing with aspiring, but subordinate groups (e.g. Vanneman and Pettigrew, 1972).

#### Empirical Literature-Pay Referents

The Function of Similarity. Researchers in the field of relative deprivation agree that similarity of characteristics between the comparer and the referent form the basis for the comparison to occur. For example, Merton (1957) observed that:

Some similarity in status attributes between the individual and the reference group must be perceived or imagined, in order for the comparison to occur at all. Once this minimal similarity is obtained, other similarities and differences pertinent to the situation will provide the context for shaping evaluations. (p. 242)

Although there is consensus that similarity is important, there are ambiguities in the similarity concept. The literature reviewed demonstrates that individuals make dissimilar comparisons as well as similar ones. In spite of

this, in  
utilized  
procedures  
highly s  
highly c

There

may be s  
only some  
basis of  
as senior  
Obviously  
uses.

Goet

sis propo  
with oth  
related  
(1934) i  
pay expe  
These au  
on compa  
perceive  
same job  
perceive  
pay expe  
comparis  
variance  
with fac  
the numo

this, investigators of social comparisons have mostly utilized only similar comparison groups in their research procedures. For example, the use of college students or highly similar co-workers as subjects for research has been highly criticized (Austin, 1977).

There are a number of dimensions on which two individuals may be similar or dissimilar; an individual may be aware of only some of them. Two workers may compare themselves on the basis of their similarity (or dissimilarity) of inputs such as seniority, productivity, education, skill, etc. Obviously, similarity may be defined by a number of attributes.

Goethals and Darley's (1977) related attributes hypothesis proposes that people prefer to compare their abilities with others who are similar on attributes perceived to be related to performance. McFarlin, Major, Frone and Konar (1984) investigated the role of similarity in determining the pay expectations of college students entering the work force. These authors reasoned that pay expectations are partly based on comparisons with others who are similar on attributes perceived to be directly related to pay (e.g., others in the same job; of the same rank). Career path factors and perceived job inputs were also assessed as determinants of pay expectations. It was found that reference group comparisons accounted for a larger proportion of unique variance in students' pay expectations than either career path factors or perceived job inputs. Moreover, the greater the number of perceived similarities, the greater the

influence

Any c

along man

indicates

when sale

Walster,

however,

other cha

feel depr

comparison

is based c

be based c

fraternal

Marti

similar on

comparison

some dimer

of referen

comparativ

comparison

than an in

were asked

would be l

asked what

overall le

most frequ

income, ag

workers, s

influence of the reference group.

Any comparative referent can differ from the comparer along many different dimensions. Social comparison research indicates that most people consider more than one dimension when selecting comparisons (Zanna et al., 1975; Berkowitz and Walster, 1976; Suls and Miller, 1977). It is likely, however, that a comparative referent is selected on the basis of other characteristics. For example, a female secretary may feel deprived in comparison to a female executive. The comparison might be the basis of egoistic deprivation if it is based on similar gender. Alternatively the comparison may be based on a dissimilar job and therefore constitutes fraternal deprivation.

Martin (1973b) labels comparisons that are known to be similar on some dimensions and dissimilar on others as mixed comparisons. If it is known that referents are similar on some dimensions and dissimilar on others, the actual choice of referent would indicate the salience of the dimension for comparative purposes. Martin (1957b) found that when making comparisons of income, people use an average of five, rather than an infinite number of dimensions. Survey respondents were asked to select comparative referents whose pay they would be likely to compare on their own. They were then asked what dimensions were relevant when they assessed the overall level of similarity of the comparative referent. The most frequently selected dimensions included: occupation, income, age, education, and for blue-collar and clerical workers, seniority and productivity. Respondents were also

asked to assess  
separately  
similarity  
intercorrel  
sion, it wa  
dimensions  
while pay  
similarity  
than one d

#### Similar

similarity  
chosen one  
compariso  
researche  
fraternal  
Stouffer  
were found  
same bo  
comparis

Run

that blu  
dissatis  
other b  
white-c  
to be f  
these t  
therefr  
either



asked to assess the similarity of the comparative referent separately on each of the dimensions selected. These similarity ratings were strongly positively related (i.e. intercorrelated). If a referent was similar on one dimension, it was likely to be perceived as similar on other dimensions as well. The results of the survey indicate that, while pay referents are selected on the basis of similarity, similarity is assessed most accurately if represented on more than one dimension.

Similarity and Egoistic Comparisons. Given that similarity is a fundamental basis on which referents are chosen one would expect that egoistic rather than fraternal comparisons occur with greatest frequency. Indeed researchers have found more evidence of egoistic rather than fraternal comparisons. In Davis' (1959) analysis of Stouffer's research, ten of the eleven examples of referents were found to be based on comparisons with others "in the same boat." Using Runciman's terminology, an egoistic comparison was made in nearly all of the cases.

Runciman found a similar pattern of results. He found that blue-collar British respondents (manual workers) were dissatisfied when they compared their earnings to those of other blue-collar workers. When they compared blue-collar to white-collar (non-manual) earnings they indicated their pay to be fair. Apparently they did not expect the earnings of these two occupational groups to be similar. They were, therefore, basing their comparisons on similar (egoistic) rather than dissimilar (fraternal) referents. These results

are consist

comparison

1977; Dutto

Hakniller,

frequently

similar co

The F

recent res

workers o

used when

compariso

blue-coll

workers

The firs

comparis

similar.

people e

compari

compari

differe

those o

Re

first

select

frequ

work

Festi

compa

are consistent with research findings of other early social comparison researchers (Festinger, 1954; Suls and Miller, 1977; Dutton, 1973; Stern and Keller, 1968; Gordon, 1966; Hakmiller, 1966). Egoistic deprivation may occur more frequently than fraternal because people prefer to make the similar comparisons upon which egoistic deprivation is based.

The Function of Instrumentality. A stream of more recent research has focused on perceptions by blue-collar workers of pay fairness. Typically, experimental designs are used where respondents are confronted with two types of comparisons: 1) comparisons by blue-collar workers to other blue-collar workers, and 2) comparisons by blue-collar workers to management or higher status job classifications. The first type of comparison will be referred to as a similar comparison because the blue-collar job classifications are similar. Such similar comparisons may be either upward, to people earning more, or downward. The second type of comparison will be referred to as an upward dissimilar comparison because the job classifications are clearly different and management pay scales are usually higher than those of blue-collar workers.

Researchers such as Homans (1961) and Patchen (1961) first developed evidence that blue-collar workers tended to select other blue-collar workers as pay comparisons more frequently than comparisons to management personnel. This work may be subject to an important qualification, however. Festinger has drawn a distinction between opinion and ability comparisons and postulates that the latter will cause upward

compariso

tional dr

more high

also have

are being

comparati

Robbins (

culture.

to be val

that move

better jo

groups.

anticipa

1963 for

Down.

social c

which di

for what

Hakmille

Arrowood

this are

earning c

particip

to pay c

establis

comparisons to high performers. He argues that the "undirectional drive upward" occurs because greater abilities are more highly valued in Western culture. Monetary outcomes also have inherently higher value. When monetary outcomes are being compared, upward comparisons even to dissimilar comparative referents may frequently be made (Gruder, 1977b). Robbins (1984) believes we live in a "performance oriented" culture. Attributes associated with higher performance are to be valued. We are a socially mobile group which believes that movement between classes is possible; our aspiration to better jobs causes us to focus on these more advantaged groups. Robbins seems to be positing a restatement of the anticipatory socialization process (see Hyman and Singer, 1968 for an early description).

Downward dissimilar comparisons should be rare. A few social comparison researchers have isolated situations under which dissimilar and sometimes upward comparisons are made for what has been interpreted as instrumental purposes (Hakmiller, 1966; Arrowood and Friend, 1969; Thornton and Arrowood, 1966). Unfortunately, well controlled studies in this area have tended to use college sophomore subjects earning extra spending money in exchange for laboratory participation credits. The generalizability of these results to pay comparisons of working adults has not been clearly established.

Within Group (Similar) Comparisons versus Between Group (Instrumental) Comparisons. The relative deprivation research of Joann Martin and her associates has provided important insights into the similarity versus instrumentality issue in the choice of pay referents. Martin, Price, Bies, and Powers (1979) performed an experimental simulation using female secretaries as potential job applicants. Subjects were given information about the job and told whether their superior would be male or female. The subjects were told that if hired as secretaries for the company they would receive the average pay for the job.

The subjects were told that they would be given further information about pay levels at the company. In preparation for receiving this information subjects were given a restricted comparison choice measure which asked them to assess the likelihood that the average paid secretary at the company would make each of the following five choices: to the highest, average, and lowest pay level executives and to the highest and lowest pay levels for secretaries. Experimental conditions were varied to allow for comparisons involving similar job classification and sex to that of the respondent. These comparisons served as the basis for egoistic comparisons. In the fraternal comparison condition executive comparisons were dissimilar in terms of job classification and sex. In mixed conditions, the executive job classification was dissimilar but, in some cases, the sex of the executive was similar to that of the respondent.

The results, indicated that the female secretarial

subje  
most  
was th  
execut  
choice  
upon w  
to dis  
probab  
"mixed"

In  
Martin  
subject  
technic  
level wa

The  
a simila  
subject)  
egoistic  
Martin fo  
tal) were

In tw  
investiga  
Martin (1  
advertise  
earnings t  
choice. S  
comparativ  
of the comp

subjects rated the highest pay level for secretaries as the most likely comparison. The second most likely comparison was the lowest pay rate for executives. The gender of the executive did not effect the likelihood of these comparison choices. Subjects were selecting upward, similar comparisons upon which egoistic deprivation is based. Upward comparisons to dissimilar job categories were also selected but with less probability. Evidence was found for downward fraternal and "mixed" comparisons but with less probability.

In a second study a similar experimental design was used. Martin (1978a) employed highly skilled blue-collar workers as subjects. Hypothetical pay referents were either other technicians or supervisors. For each potential referent pay level was also varied.

The results indicated the most likely referent choice was a similar (other technician), upward (earned more than the subject) comparison. Thus demonstrating a preference for egoistic comparisons. Replicating her earlier findings Martin found that upward, dissimilar comparisons (instrumental) were the second most likely choice.

In two separate survey analyses Martin (1973, 1982) investigated the unrestricted choice of pay referents. Martin (1978b) recruited blue-collar workers via newspaper advertisements. Subjects were asked to compare their actual earnings to those of two other individuals of their own choice. Subjects also assessed the similarity of the comparative referent and the direction (upward or downward) of the comparison depending upon whether the referent earned



more or less

replic

found evid

likely to

second mos

lar compar

Martin

tered to s

blue-coll

earlier e

were sele

compariso

results e

well as t

Summary-R

Summ

and other

selection

finding

fraterna

most fre

being th

similar

who earn

likely c

These re

compari

is perc

more or less than the respondent.

Replicating her experimental findings, Martin (1978b) found evidence that upward, similar comparison were most likely to be made. Upward, dissimilar comparisons were second most likely. Downward, similar and downward dissimilar comparisons were very unlikely.

Martin (1982) reports the results of a survey administered to a sample of middle managers and a sample of blue-collar workers from the same organization. Unlike earlier experimental findings upward dissimilar comparisons were selected almost as frequently as upward similar comparisons when unrestricted choices were allowed. These results emphasize the importance of the upward direction as well as the degree of similarity of pay comparisons choices.

#### Summary-Reference Group Theory

Summarizing the results of the studies of Martin et al., and other reference group theorists implications for the selection of pay referents may be drawn. In accord with the finding that egoistic deprivation occurs more frequently than fraternal we find that upward, similar comparisons to be the most frequent type of comparison drawn. The implication being that pay referents are typically chosen on the basis of similar job class or status. Within that class, referents who earn more are most likely to be chosen. The second most likely choice is that of an upward dissimilar comparison. These results support the contention that intergroup comparisons do occur, particularly when the comparative group is perceived as being more advantaged. Since downward

comparisons are relatively infrequent, the overriding motive is toward the upward comparison.

The findings from reference group and relative deprivation theories allow for several general conclusions to be made about the dynamics of intergroup comparisons for pay purposes:

- a) Group membership and/or identification with specific groups can be important factors in determining the importance of groups used for comparative pay purposes. Identification with and commitment to groups within business organizations is accompanied by selection of pay referents internal to the organization. Conversely as individuals identify more closely with their occupational role and move towards professional status, groups external to the organization take on added comparative importance.
- b) The importance of a reference group for comparative pay purposes is greatly effected by the perceived similarity of the group along performance related dimensions (such as education, skill, seniority, etc.).
- c) Within any comparative pay group individuals tend to choose those persons possessing the highest of performance related attributes.
- d) Intergroup comparisons do occur even where the groups in question differ according to job title or management level. For the most part, the selection of dissimilar groups as comparative pay referents is based upon instrumentality. Privileged or advantaged groups are

ch

di

in

equity

In

regardin

evaluati

equity t

processes

(Goodman

offer a

Berschei

Gen

variety

social c

1955; Ho

the most

evaluate

influent

The

describe

investme

exchange

services

work exp

social s

those th

context

chosen when dissimilar groups are used. The use of disadvantaged (or negative) comparisons is relatively infrequent.

### Equity Theory

Introduction. A second line of theoretical reasoning regarding the social evaluation processes involved in an evaluation of organizational rewards such as pay is that of equity theory. Equity theory incorporates the central processes of social comparison as does reference group theory (Goodman, 1977) yet is operationalized in such a manner to offer a large number of testable hypotheses (Walster, Berscheid and Walster, 1973).

General Theoretical Foundation. There have been a variety of theoretical formulations of equity incorporating social comparison process in evaluating outcomes (Adams, 1965; Homans, 1961; Jacques, 1967). Adams' theory is perhaps the most rigorously developed statement of how individuals evaluate social exchange relationships and has been the most influential.

The major components of the exchange relationship described by Adams' are inputs and outcomes. Inputs or investments are those things a person contributes to the exchange. In a situation where a person exchanges his or her services for pay, inputs many include education, previous work experience, training, skill, seniority, age, gender, social status and effort expended on the job. Outcomes are those things that result from the exchange. In an employment context the most likely outcome is pay. Other outcomes such

as frin  
perquis  
must be  
exchange  
Ada  
outcomes  
develop  
separate  
The rati  
inputs i  
another  
individu  
or with  
Other ar  
such as  
by Perso  
involve  
several  
that in  
employee  
dissonan  
relevant  
justifie  
educatio  
work, ri  
Ada  
what con  
outcomes

as fringe benefits, job status, intrinsic rewards and perquisites may also be considered. Both inputs and outcomes must be recognized by one or both of the parties to the exchange and must be considered of value.

Adams suggests that individuals weigh their inputs and outcomes by their importance to the individual. Individuals develop a summary evaluation of inputs and outcomes by separately summing the weighted input and weighted outcomes. The ratio of an individual's (called "Person's") outcomes to inputs is compared to the ratio of outcomes to inputs of another individual or group ("Other"). Other is any individual with whom Person is in an exchange relationship, or with whom Person compares him/herself when he or she and Other are in an exchange relationship with a third party, such as an employer or with third parties who are considered by Person as being comparable. Such comparisons rarely involve only a single aspect or attribute but rather concern several bases of appraisal. For example Patchen (1961) found that in making specific comparisons of wages, oil refinery employees explain fairness or inequity by the consonance or dissonance between pay differentials and "multiple attributes relevant to pay." Investments or qualifications which justified the discrepancies in pay level were combinations of education, skill, experience, responsibility, seniority, hard work, risk and hardship.

Adams noted that there are normative expectations of what constitute fair correlations between inputs and outcomes. The expectations are learned through socialization





at home, at school and work.

They are based by observation of the correlations obtaining for a reference person or group - a co-worker or a colleague, a relative or neighbor, a group of co-workers, a craft group, an industry-wide pattern. A bank clerk, for example, may determine whether her outcomes and inputs are fairly correlated, in balance so to speak, by comparing them with the ratio of the outcomes to the inputs of other female clerks in her section. The sole punch-press operator in a manufacturing plant may base his judgment on what he believes are the inputs and outputs of other operators in the community or region. For a particular professor the relevant reference group may be professors in the same discipline and of the same academic vintage (p. 279).

From this discussion it is clear Adams recognized the importance of the referent Other to his theoretical formulation. It is notable however, that Adams left the specification of the appropriate reference group or person to other theorists (Fesinger, 1954; Hyman, 1942; Merton and Kitt, 1950; Patchen, 1961 were cited as contributing theorists). And thus, in the original formulation the selection of the reference group or person was based upon comparability (or similarity) to the comparer on one or more attributes. The choice was assumed to be a co-worker in most situations.

Inequitable states lead to tension. The greater the tension, the greater the drive to reduce it. Tension reduction strategies may take a number of forms such as increasing outcomes, decreasing inputs, leaving the exchange relationship and changing the comparison or relevant other.

General Research Evidence. Considerable research interest has been generated in testing equity theory predictions of employee reactions to pay. Reviews of pay

equity research have demonstrated general support for the theory's postulates (Adams and Freedman, 1976; Pritchard, 1969; Steers and Porter, 1933). Generally most of these studies are laboratory investigations in which subjects (typically undergraduate college students) were "hired" to complete simplistic tasks. Perceived inequity is typically induced by either manipulating the subjects' perceived qualifications to be hired for the task or by actual differences in pay rates.

Predictions from equity theory about employee reactions to pay distinguish between two conditions of inequity (underpayment versus overpayment) and two methods of compensation (hourly versus piece rate). Extensive reviews of this literature can be found in Campbell and Pritchard (1976), Goodman and Friedman (1971) and Opsahl and Dunnette (1966).

Research support for the predictions of equity theory yield an impressive and consistent set of findings. A number of studies have provided support for the prediction that overpaid subjects will produce higher quantities of output than equitably paid subjects (Goodman and Friedman, 1963; Pritchard, Dunnette and Jorgenson, 1972). Research support for the theory appears strongest for predictions about underpayment inequity (Valenzi and Andrews, 1971; Campbell and Pritchard, 1976).

Limitations of Pay Equity Research. In their efforts to test the validity of equity theory most researchers have almost exclusively concentrated upon the input/outcome

relationship per se. As a result the equity literature concerning the work place has largely focused upon the effects of inequitable states on work quantity, quality, absenteeism and turnover (see Adams and Freedman, 1976; Carrell and Dittrich, 1973; Pritchard, 1969). There has been little empirical research on the nature and determinants of comparison standards against which individuals evaluate their inputs and outcomes. This is a situation which has not gone unrecognized.

Goodman and Friedman (1971) point out that the comparison other used by subjects is ambiguous in most studies. To the extent that subjects use different comparison others than intended by the experimenter, interpretation of the study results becomes problematic. The reported studies have generally been structured around experimental designs having the subjects work alone (e.g. performing simplistic proof reading tasks) and do not consider the interactive or social effects of one's peers (Hinton, 1972). The reference point or referent other for the determination of equity or inequity is thus diffuse and subject to experimenter error or bias, rather than being another person or persons about whom knowledge is available (Weick, 1965).

Where interactive or group settings have been used, generally, groups are structured for the purposes of the experiment rather than naturally existing groups being observed (Pritchard, 1969). In such circumstances there is little reason to believe that these "instant groups" adequately simulate the social effects of the work place

(Andrews  
inequity  
field.

Some  
exchange  
equity t  
and Cohe  
model as  
judgments  
stable fr  
made by a  
(Other) 1  
ascertain  
permanent  
necessary  
example o  
two skill  
\$9.50 pe  
expect th  
outcomes  
unjust.  
usually r  
a new lig  
Similarly  
rate, the  
at al. (1  
relations  
individua

(Andrews and Valenzi, 1970) or can produce perceptions of inequity of comparable strength as are often observed in the field.

Some researchers have adopted stringent criteria for the exchange and group relationships which are necessary for equity theory to be applicable. Zelditch, Anderson, Berger and Cohen (1970) have criticized the Person-Other equity model as being too narrow. These authors claim that all judgments of fairness must be made within the context of a stable frame of reference. They maintain that comparisons made by a participant (Person) to some other individual (Other) linked to an ongoing relationship are inadequate to ascertain accurate judgments of fairness. The relatively permanent relationships provided by reference groups are necessary for comparisons. The researchers provide an example of the impact of referential comparisons involving two skilled mechanics Smith and Jones. If Smith is paid \$9.50 per hour and Jones receives \$11.50, what should we expect their reactions to be? If Smith only compares his outcomes to Jones, then he should perceive the situation as unjust. However, if Smith knows that skilled mechanics usually receive only \$8.00 per hour, his predicament takes on a new light and may not be seen as inequitable at all. Similarly if Smith and Jones are both paid below the going rate, they both should experience dissatisfaction. Zelditch et al. (1970) have adopted a rather extreme position. Some relationships are clearly "once only" encounters with other individuals where status is unlikely to be a relevant

consideration. Some situations may require both Person-Other and reference group comparisons for accurate assessments of fairness (Walster and Piliavin, 1972).

Categories of Referents: Factors Influencing Their Importance. Within the last two decades, a handful of studies performed within an equity theory framework have been completed to determine the factors influencing the importance of pay referents. Fundamentally the dynamics of the selection process are parallel to those posited in reference group theory: similarity and instrumentality. These two themes are evident in the studies cited below.

The Goodman Process Model. One of the most influential efforts examining the referents used in the evaluation of pay has been conducted by Goodman (1974, 1977). Goodman sets forth a process model to account for individual variation in persons evaluating their input/outcome ratios as well as the pay referents that they select. Three classes of referents are postulated to be used in the evaluation of pay: others, system standards and self referents. The most common class of referents discussed in the literature is that of other individuals. These others may be persons with similar jobs in the organization, the input/pay ratios of others in different organizations as well as friends and neighbors.

System referents are structured aspects of the pay system and its administration. Goodman likens system referents to an implied (or actual) contract between the employer and employee (a comparison between the person's actual input/outcome ratio and the input/outcome ratio expected from

the employer).

Although initial formulations of equity theory (Adams, 1965) stressed the role of interpersonal comparisons in judgments of reward fairness, Goodman (1974) and other theorists (Austin, 1977; Pritchard, 1969; Major, McFarlin and Gagnon, 1984; Weick, 1966) point out that intrapersonal comparisons also play an important role in a person's evaluation of the fairness of his or her input/outcome ratios. In addition to comparisons with others, individuals are assumed to have internal standards against which they judge the fairness of compensation received for their work inputs. These internal standards are based on a person's past history of outcomes received for inputs. Goodman refers to these internal standards as self comparisons. In the absence of external referents for social comparison subjects will tend to use an internal referent (Major et al., 1984; Weick, 1966). Within each of the three classes of referents Goodman posits different categories of referents such as others-inside the organization, others-outside, self-past job history, self-family income requirements.

Goodman's (1977) model states that the availability of information about referent categories and the perceived relevance of these categories are the critical variables explaining the selection of other, system and self referents. Availability of information refers to the degree of knowledge an individual has about any one referent. Availability of information is effected by the work role the individual may occupy in an organization, socialization experiences

(e.g. membership in professional societies) as well as the individual's propensity to seek out pay referent information. The relevance of a referent is a function of its instrumentality in satisfying needs. Pay referents are selected on the basis of their instrumentality in satisfying these needs. Each individual has multiple needs which vary in strength. Goodman identifies the need for performance feedback, recognition, achievement, and self-esteem to be the primary forces.

The relevance of a referent is determined by weighing its instrumentality to satisfy a set of needs. In general, satisfying referents are selected whereas those that threaten feelings of self-esteem are avoided. It is important to note, however, that Goodman does acknowledge that individuals may use referents that provide negative information about themselves. One may select a comparison other who is "getting more than he deserves" because that other is the best comparison point for evaluating present pay. The need for accurate feedback may outweigh the need to avoid threats to self-esteem.

Comparison persons "who are getting more than they deserve" may be selected as pay referents. The point that comparison others may be instrumental in justifying future pay increases has been noted by reference group theorists as well as a bargaining point for demanding more pay (cf. Patchen, 1961; Martin, 1982; Lipset and Trow, 1975). Early equity theorists (Adams, 1963; Homans, 1961) assumed that a process of anticipatory socialization was occurring where



individuals were "laying claim" to the rewards associated with the positions to which they aspired.

While Goodman places primary emphasis on the instrumental relation between needs and referents, two other factors characteristic of the referents themselves effect instrumentality and relevance. The computational ease of comparing one's own input/outcome ratios also increases the instrumentality of referents. Other authors (e.g. Austin, 1977) refer to the closeness of relations or propinquity influencing the ability of an individual to make comparisons. Secondly, through the process of socialization certain referents are learned to be more appropriate than others. Goodman cites the process of socialization into professional standings as an illustration of how the pay of other individuals outside the organization or professionals from different occupations come to be perceived as relevant.

Empirical Research Evidence: Pay Referents. Goodman (1974) examined the referents used by professional managers in the evaluation of their pay. The conceptual framework of pay referent selection was evaluated against a pay satisfaction index. The results indicated that: 1) Managers were aware of multiple classes of referents and tended to use more than one in the evaluation of their pay; 2) Others as a referent class was most often reported as the referent of greatest importance; 3) Others are most often used in conjunction with system and self referents and; 4) Each of the referent classes is used in a fashion which indicates their relative independence from one another.

Goodman recorded demographic variables he theorized would be related to pay referent usage: age, tenure, salary level, as well as occupational group. He hypothesized that professionalism (operationalized as educational level and occupational group) should relate positively with the use of pay referents external to the organization. Interorganizational mobility should lead to the seeking out of information of external benchmarks. Goodman's (1974) confirmation of this relationship has received consistent support (Belcher, 1974; Goodman, 1977). Individuals in lower salary levels tend to employ other individuals inside their organizations as pay referents; presumably as a way to learn about the pay system but the use of this referent may threaten self-esteem as well.

Higher pay is related to the use of self referents. Goodman concluded that selecting self-pay history referents enhances self-esteem for those in the high pay group. While Goodman's contribution to the understanding of the pay referent selection process has been substantial, his work has been criticized on methodological grounds. By his own admission, the coding scheme used to determine pay referent importance is "exceedingly complicated." Austin (1977) faults Goodman's coding scheme for not allowing for the importance of comparisons to vary either within or between referent categories. Although Goodman (1974) uses as "Other" category, the coding scheme treats all social comparisons as equally important. Internal and external organizational comparisons, family and social referents are given equal

importance

Hills

identific

compariso

certain t

represent

unskilled

were used

of refere

upon prev

levels eq

These ite

markets (

gan, 1974

referents

Henry, 19

-similar

4) Histor

1974 and

-items ta

1974 and

-friends

al., 1973

Pay r

results i

compariso

evidence

four fact

importance within a single category.

Hills (1980) examined a number of possible pay referents identified in earlier work to determine if each of the comparisons were conceptually distinct or if the use of certain types of comparisons tend to covary. A sample representing a broad range of occupational groups from unskilled employment to professional/administrative employees were used. Respondents were asked to indicate the importance of referents which had been grouped into six categories based upon previous literature: 1) Internal equity referents - job levels equal to, above or below the respondent's job level. These items represented comparisons made in "internal" labor markets (Reynolds, 1975; Doeringer and Piore, 1971; Goodman, 1974; Heneman et al., 1973); 2) External equity referents -market rates for the respondents job (Andrews and Henry, 1963; Finn and Lee, 1972); 3) Expected pay referents -similar to Goodman's system referent or an implied contract; 4) Historical pay referents - pay history items (Goodman, 1974 and Heneman et al., 1978); 5) Personal worth referents -items tapping personal worth and economic need (Belcher, 1974 and Jacques, 1961; 1964) and; 6) Other comparisons -friends and family members (Goodman, 1974 and Heneman et al., 1978).

Pay referent importance scores were factor analyzed. The results indicated that individuals who make internal comparisons also tend to make external ones as well. Little evidence was found for the use of an internal self-standard. Four factors did emerge suggesting that individuals employ

one or more of at least four social referents: what others whom they work with or similar individuals in other organizations are paid; a comparison standard of what is needed to provide for their family; what others in the broader social network earn and; a historical pay referent. These findings run contrary to Goodman's conceptualization of "Others" as a single category indicating three distinct dimensions may more adequately characterize it.

Hills' (1980) results also indicate that, while individuals are able to distinguish between internal and external referents, they tend either to use both or neither.

An earlier study of professional employees reports findings which are comparable to those of Hills (1980). Finn and Lee (1972) found that individuals who perceive their pay as equitable tend to use internal referents; those perceiving inequity use external referents. These authors present evidence to indicate that while there are meaningful differences in reference sources, judgments about salary equity are a function of both internal and external referents with a general emphasis on internal comparisons.

A number of studies have attempted to identify individual and organizational variables which are related to the use of particular referents. Hills (1980) correlated perceptual, demographic and organizational variables with the use of four pay referents identified using factor analysis. He found that the following pay referents are associated with specific variables: Market comparisons - are used by individuals perceiving ease in finding comparable work, desire promotion

from within and are of short tenure; Economic need referents - tend to be used by individuals who are less educated, have lower pay, and are in lower occupational groupings; Social comparisons - are used by individuals having less ambition for promotion and are from lower educational levels and; Historical pay comparison - are used by younger individuals having lower pay, tenure and occupational class. Unfortunately, the statistical relationships found regarding organizational and individual variables and the four referents were so weak the author doubted their utility as predictors of an individual's preferred referent base. This conclusion is shared by Finn and Lee (1972) who were also unable to find any strong systematic relationship between personal and job related characteristics and the use of pay referents internal or external to the organization.

Heneman et al. (1973) sought to extend the research on pay referents by examining the nature and determinants of pay comparisons selected on an a priori basis (self, cost of living, historical, internal and external). Individual differences (e.g. age, education, tenure, salary level) and perceptual variables (e.g. probability of quitting) were used as predictors for each of the pay referent categories. Significant relationships did emerge. However, the variance explained in the stated importance of any pay referent never exceeded thirteen percent and typically ranged from six to nine percent.

Heneman et al. (1973) did attempt to interpret the relationships which were found to be significant. Education,

tenure and salary level emerged as the most consistent predictors of pay referent importance. Their predictive value did differ among the pay referents. Instrumentality was regarded as the primary basis by which pay comparisons were chosen. For example, it was found that as salary level increases the use of external comparisons gains importance. It was speculated that higher salary individuals have skills more identifiable as "professional" rather than "organizational" and therefore it was instrumental for them to engage in external comparisons.

Functions of Similarity and Instrumentality. Other studies have emphasized similarity in personal and job characteristics to be the basis of pay referent importance (Andrews and Henry, 1963; Carrol and Tombari, 1980; Oldham et al., 1982; Pelz, 1966). Characteristics which are perceived to be relevant inputs related to job performance are likely to be the basis of comparison and therefore predictive of referent categories perceived to share these characteristics.

The relative importance of similarity in personal attributes (inputs) may vary according to the particular comparative referents available (Oldham et al., 1982). The work of Heneman et al. (1973) on the differential predictability of various pay referents supports this notion. Instrumentality can become the primary basis of selection when the employee perceives that inputs relevant to job performance do not reflect the differences in pay i.e., the difference between the employee's salary and that received by the person with whom the employee uses for pay comparisons is

inappropriate given the differences between them (Andrews and Henry, 1963; Oldham et al., 1982).

Homans (1961) describes how individuals try to get others to agree upon comparisons that will highlight the meager outcomes they are receiving or the importance of the inputs they may possess. This strategy of defining the appropriate bases for comparison increases the probability of achieving a higher level of reward or maintaining the rewards one has already accumulated.

Goodman (1977) states that the instrumental value of equity comparisons is often reflected in "self-enhancing" comparisons. These can be advantageous comparisons (e.g., individuals with lower outcomes and lower inputs) or disadvantageous comparisons (e.g., to groups with equal outcomes and lower inputs), or higher outcomes and lower or equal inputs. These comparisons are utilized to maintain a desired level of outcomes. Disadvantageous comparisons are made to correct imbalances in input/outcome ratios or simply to achieve a higher level of outcome (pay). Goodman assigns an important role to the instrumentality of a particular comparison. He posits the general assumption that individuals always make those comparisons that fulfill their needs. Individuals select referents that support, not threaten, their self-esteem. However, Goodman also points out that the need for the enhancement of self-esteem or its protection, may be overridden by the need for accurate information. In such instances individuals will engage in threatening or self-deprecating comparisons in order to gain what is



perceived to be the most accurate information.

### Parallels and Contrasts of Equity and Relative Deprivation Theories

Pay Referent Categories. Both equity and relative deprivation theories are concerned with equitable outcomes and the social comparison processes involved in their perception. Generally, four types or categories of pay referents have been revealed by the small amount of empirical research that exists from both bodies of literature: 1) intraorganizational -including persons from similar and dissimilar job classifications; 2) interorganizational -similar and dissimilar job classifications; 3) self or personal history referents - personal wage history or personal worth and; 4) system referents. The research has revealed that input and outcome variables specified in equity theory formulations parallel many of the salient dimensions or characteristics postulated by reference group theory to effect the choice of reference groups. Results of efforts to find a highly reliable set of predictors of the importance of specific pay referents have proved unsuccessful. Individual variables such as age, tenure, education level and position related characteristics such as skill and salary level do appear to appear to have consistent, albeit limited, predictive value. Few data are available on group identification or group membership variables which (suggested by reference group theory) should have significant influence on the actual choices made.

Level of Measurement. On a theoretical basis the level of measurement of the theories differ. Reference group theory concentrates on collectivities and intergroup comparisons. Equity theory conceives of the comparer and comparative referent as individual entities; both varying on a theoretically unbound number of input and outcome dimensions.

Similarity and Instrumentality. Equity researchers have found evidence that comparisons based on similar inputs and/or outcomes are most often selected. Comparisons with dissimilar individuals are infrequent. The concept of egoistic comparisons from relative deprivation is the sociological parallel to equity theory.

While both equity and relative deprivation theories agree that similar comparisons are the most frequent choice, relative deprivation research has demonstrated the preference for similar comparisons to be modified by a preference for upward comparisons. The work of Joann Martin and her colleagues provides ample evidence for this. Working within an equity framework, Goodman has demonstrated that upward comparisons to referent others having similar inputs or outcomes do take place. Goodman proposes that the instrumental value of the comparison in obtaining higher outcomes or fulfilling comparisons needs is a major driving force.

Relative deprivation research has found evidence that individuals make comparisons with others who are more prosperous and in different job classifications (upward, dissimilar comparisons). No such evidence has come forth

from equity theory.

### Multiple Reference Groups

Little information is available on how perceptions of equity may combine i.e., whether some primary reference group dominates as a frame of reference, to the exclusion of all others, or if multiple reference groups are used simultaneously. In the original formulations of equity theory (Adams, 1961; Homans, 1961) it was assumed that individuals might compare themselves to a number of similar others. Goodman (1974) and Hills (1980) have demonstrated that employees are sensitive to more than one reference source in their perceptions of pay. The analysis of Finn and Lee (1972) indicates that individuals appear to refer either to internal and external referents or none at all. Andrews and Henry's (1963) data suggest that employees in higher levels of management and those with less education are less likely to compare their pay with individuals on the same level in their company. The frequency of out-of-company comparisons increased sharply with education. These frequency data suggest that internal and external comparisons are important.

Oldham et al. (1982) recorded the number of referent categories respondents reported using for job comparisons. They indicate that of the 99 employees who used job referents: 49 indicated using one referent, 27 indicated using two, 19 used three and 4 indicated using four referents. These researchers noted the use of a few primary referents rather than a multiplicity. The results of Oldham et al. are in contrast to those of Goodman (1974) who found that most

employees report using multiple referents when making pay evaluations and only a few respondents report using one.

While individuals may acknowledge the existence of various reference sources, the relative contribution (effect) of them to an overall reaction towards pay is unknown. Potential combinations of relevant referents will probably vary according to the characteristics of the comparer.

Joann Martin and her colleagues working within the framework of relative deprivation theory present evidence which indicates pay comparisons might be drawn between other individuals within the comparer's job class as well as between members of job classes higher up in the organization. Martin uses a dependent measure indicating the probability one might make a comparison. This measure has not lent itself to the examination of possible simultaneous comparisons.

Perceptions of pay equity made relative to highly attractive or relevant reference groups may conflict with those made in relation to other equally relevant reference sources. Many occupational groups, particularly those bordering on professional status, maintain numerous affiliations; with their employing organizations, professional societies, primary work groups, etc. (see for example Bennis et al., 1958; Gouldner, 1957). Within the nursing profession, for example, the advent of union representation has brought an additional group with which these individuals may identify. Although identification with numerous groups may place the individual in a form of role conflict, several

studies have demonstrated that simultaneous allegiance or commitment to employers, union, and professions does occur for some individuals (Dean, 1954; Purcell, 1960; Angle and Perry, 1986). With each of these groups available as a frame of reference for perceptions of equity of such work related outcomes such as pay, an individual may hold congruent, conflicting or mixed impressions depending upon the relevance of each reference group and the degree of equity (inequity) perceived in relation to it.

We know from equity theory that an imbalance between an individual's input/outcome ratio and that of a comparative pay referent will produce perceptions of inequity. Imbalance between the ratios may result in feelings of pay dissatisfaction (Goodman and Friedman, 1971; Goodman, 1974; Lawler, 1971).

Goodman and his colleagues state that input/outcome ratios perceived in relation to multiple classes of referents should relate independently to a pay satisfaction criterion variable. A test of the relationship of multiple perceptions of equity with an outcome variable such as pay satisfaction is required to untangle their combined influence (Goodman, 1974).

A model of pay satisfaction formulated by Dyer and Theriault (1976) provides a theoretical framework for the test. These authors drew upon the work of Lawler (1971) in formulating a model which does not equate perceived pay equity with pay satisfaction. Pay satisfaction is jointly determined by perceptions of the appropriateness of pay

system administration, pay criteria, and accuracy of performance assessment. Most importantly, the social comparison process is conceived as a separate explanatory variable of pay satisfaction. Perceptions of comparative job inputs, perceived comparative job demands, and perceived pay levels or referent others inside and outside the organization exert an influence on pay satisfaction as well. The model incorporates comparisons made in relation to Goodman's (1974) pay referent categories as determinants of pay equity. Perceptions of pay equity made in relation to each of the referent categories are proposed by Dyer and Theriault (1976) to be intervening states which lead to the perception of pay satisfaction.

#### General Summary

The purpose of this chapter has been to present two theoretical bodies of knowledge which offer complementary insights into the social comparison processes involved in pay referent selection. The fundamental importance of referential standards in determining the fairness of one's pay was developed and the basic theoretical foundations of reference group theory and equity theory were described.

The literature reviewed demonstrates the important role perceived similarity of performance-related attributes plays in the selection of pay referents. Both equity and reference group theory are in clear agreement on this point. Reference group theory further develops the role of similar or shared attitudes in the context of individuals identifying with their work groups. Shared values or group norms

regarding the appropriate wage-effort relationship are often byproducts of this identification. Where these norms exist, individuals who are members of these groups are especially likely to use them as standards by which to judge the equitability of their pay.

The two theories are less consistent with regard to the role of instrumentality. Referents are chosen on the basis of their ability to satisfy comparison needs; the protection of self esteem being the one most often cited. Both theories are in agreement on this point. However, since the function of group influences is not well articulated in equity theory, we must largely rely upon the evidence generated in the reference group framework. It is within this framework we find evidence of dissimilar pay referents being chosen, even across occupational lines, to lay claim to the greater benefits enjoyed by those positions.

Special attention was given to the small amount of empirical evidence regarding the importance of pay referents from studies performed within either of these theoretical frameworks. In general, three classes of referents are postulated to be used in the evaluation of pay: others whom we know or work with (both internal and external to the employing organization), system standards, and self or personal wage history referents.

Parallels and contrasts between equity and reference group theory were outlined regarding the role of similarity and instrumentality, collective versus individualistic orientation and predictions of the importance of referents

with varying demographic and attitudinal characteristics.

The latter part of the chapter outlined the theoretical and empirical evidence regarding multiple frames of reference leading to the importance of multiple pay referents. The evidence is suggestive that multiple sources are referred to in the pay equity determination process.

Chapter III will develop these concepts in terms of a model of factors which influence the perceived importance of pay referents. Hypotheses regarding the effects of these factors on pay referent selection shall be set forth.



## CHAPTER III

### A MODEL OF FACTORS INFLUENCING THE PERCEIVED IMPORTANCE OF PAY REFERENCE GROUPS, RELATED RESEARCH, AND HYPOTHESES Introduction

This chapter is composed of three related elements. The initial portion describes the model to be investigated and provides the structural basis for including the variables represented. Secondly, the relevant literature relating to each of the variables included is reviewed. Finally hypotheses are advanced for each of the ten variables selected for analysis based upon the literature associated with each variable. The hypotheses are framed within the context of the unionized hospital setting in which this study was conducted. Although worded as if they apply globally, further research will be needed to state them generally.

### A Model of Factors Influencing the Perceived Importance of Pay Reference Groups

The literature reviewed in Chapter II identifies the two dynamics of similarity and instrumentality to form the fundamental basis for the social comparison processes involved in the selection of comparative pay referents. Goodman's (1974, 1977) conceptualization of an

individualistic process affected largely by individual characteristics and structural or job characteristics of the comparer has been incorporated into the model used in the present dissertation. Some of the variables investigated below have been added to Goodman's model based upon the work of other researchers. Martin's (1931) collectivistic or group-based analysis of the comparison process has also been incorporated into the model presented in Figure 1. Group identification variables suggested by Martin and the available literature were included for analysis.

Considerations For the Reader. Two important considerations should be pointed out to the reader. First, the limited amount of empirical literature on the factors influencing the importance of pay reference groups is often clouded by inconsistent relationships. Accordingly, the variables selected to represent the categories depicted in Figure 1 were chosen on the basis of their relatively reliable associations with potential pay referents. Second, as indicated in Chapter II, field research on pay referents has been complicated by the vast array of potential pay referents a subject sample might use. The large number of potential pay referents was reduced to five by using a pilot test procedure (described in Chapter IV) in order to make tests of the hypothesized relationships possible. The hypotheses set forth in this chapter are stated in terms of these five identified comparative pay referents.

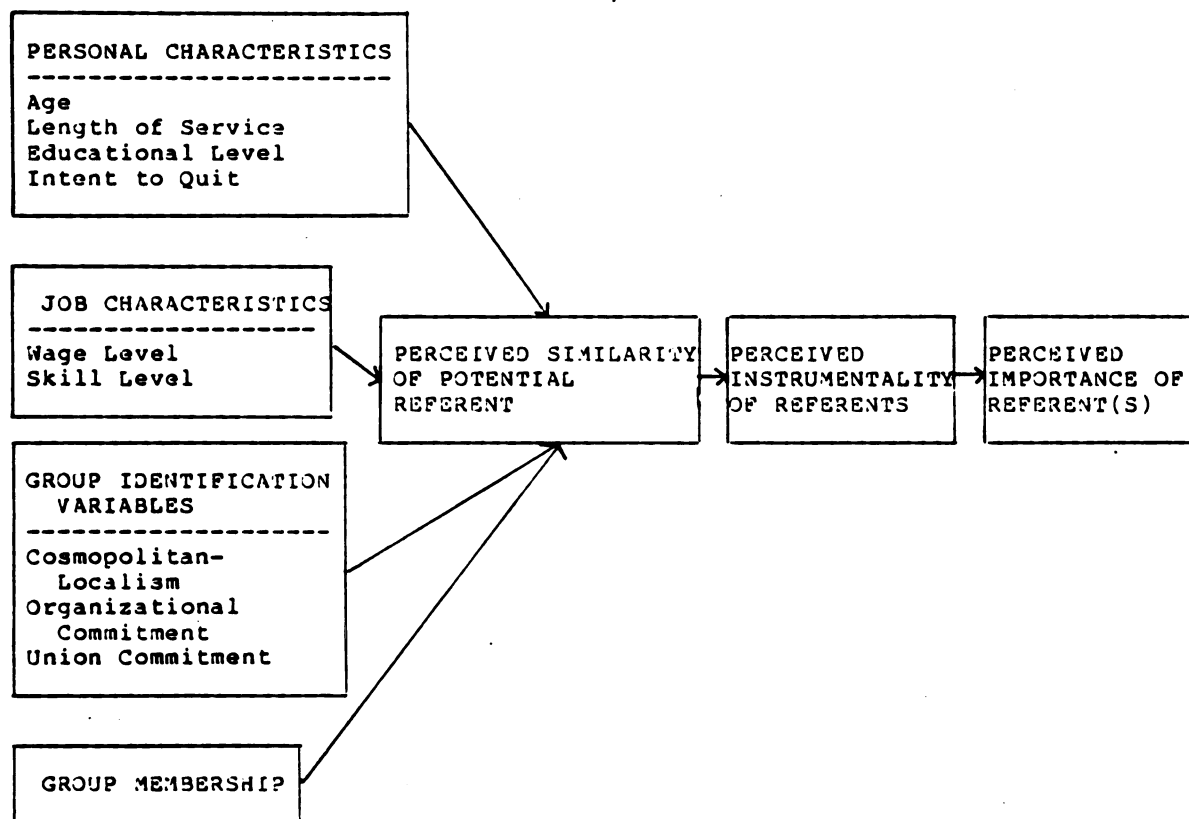


Figure 1.

A Model of Factors Influencing the Perceived  
Importance of Pay Reference Groups

### The Literature Review and Hypotheses: Introduction

The literature reviewed in Chapter II dealt with the principle sources of literature concerning the use of pay referents and factors which influence their relative importance. The following literature review specifically deals with the variables identified for analysis in Figure 1. Hypotheses associated with the influence of each variable on the importance of specified pay reference groups are proposed.

#### Personal Characteristics

An important issue raised in Chapter II is the degree to which employees select referents with inputs or personal characteristics similar or dissimilar to their own characteristics. Inputs refer to any factors that individuals bring to a job that they perceive to be relevant to the performance on the job (Adams, 1963; Pritchard, 1969). While the literature reviewed listed a number of possible inputs, age, education and seniority are among those which are most frequently mentioned (Adams, 1965; Cook and Purcel, 1977; Oldham et al., 1982).

Both equity and reference group theories suggest that employees select referents with similar personal characteristics. Adams (1963) argues that individuals select referents who are similar on one or more personal characteristics. Austin (1977) proposes that the referent typically is similar to the comparer in "most relevant aspects."

Research support for the influence of similar personal characteristics was reviewed in Chapter II (cf. Andrews and

Henry, 1963; Carrol and Tombari, 1930; Oldham et al., 1932; Goodman, 1974; Patchen, 1961; Zanna, Goethals, and Hill, 1975). Characteristics which are perceived to be relevant inputs related to job performance are likely to form the basis of comparison and therefore predictive of the importance of referent categories perceived to share these characteristics (Goethals and Darley, 1977). Other researchers have suggested that there may be a drive to maximize information gain, that is, to acquire information about both similar others and "standard setters" (those who have the highest ability) when comparing ones' abilities with others (Feldman and Ruble, 1981; Wheeler, Koestner, and Driver, 1932).

Individuals may share similarities on a great number of attributes. A limited set of performance related characteristics are perceived to be relevant to the comparison process (Merton, 1957; Patchen, 1961; Martin, 1973b; Goodman, 1977; Zanna, Goethals and Hill, 1975). The importance of the referent(s) used for pay comparison purposes becomes largely a function of the instrumentality of the referent for satisfying the comparison needs of the employee (Goodman, 1977; 1977; Austin, 1977).

According to Goodman needs affect the relevance of referents in three ways: 1) Needs vary in strength. Employees may or may not need to evaluate their pay or performance. Employees with a low need to learn about the outcomes such as pay will not find the use of referents about pay particularly relevant. 2) Individuals have multiple needs. Referents are selected in relation to their ability

to satisfy those needs. The general need to know about oneself in relation to outcomes such as pay is viewed as part of the self evaluation process. Other needs such as recognition, esteem, and affiliation may "be activated" during the social comparison process. 3) The relationship between a need and a referent may be positive, negative, or neutral. For example, individuals select referents that support, not threaten, their self esteem (a positive referent). Goodman does note, however, that the need for accurate information may override any urges for self-esteem enhancement or protection.

The instrumental value of equity comparisons which are "self-enhancing" were described in Chapter II in relation to the work of Martin and her colleagues, Patchen (1961) and Goodman (1977). These can be advantageous comparisons (e.g., to referents with lower pay and lower inputs) or disadvantageous comparisons (e.g., to referents with higher pay and lower or equal inputs). Advantageous comparisons are probably utilized to maintain a desired level of outcomes whereas disadvantageous comparisons are probably made to rectify a perceived injustice, or simply achieve a higher level of outcome (Austin, 1977).

Four personal characteristics are examined in this study: age, length of service, education level, and intent (perceived probability) to quit. It is recognized that intentions to quit an organization are attitudinal or behavioral predispositions rather than demographic characteristics. They are, however, subject to individual variation and as such are included in the

personal characteristics category.

Age. Experimental findings regarding the effects of age have been mixed. Andrews and Henry (1963) report a consistent tendency by the youngest managerial groups to select similar managers outside their place of employment as pay referents. These authors hypothesized that the level of self-investment within the organization was relatively low allowing for interorganizational movement to occur at less cost. Other researchers report a mixed relationship between age and the use of pay referents external to the organization (Finn and Lee, 1972; Hills, 1930). Finn and Lee (1972) indicate that within their sample, young professionals who expected to have difficulty in finding comparable positions on the outside market tended to use comparisons internal to the organization. Hills (1930) reports evidence which indicates younger employees will engage in market comparisons when they perceive ease in finding work at the same level. Age is also positively correlated with self/historical pay referents for young employees who see little chance for advancement within their present job but little difficulty in finding alternative employment. On the basis of these studies it is predicted that:

- H<sub>1</sub>: Younger employees will engage in external (market) comparisons while it is still opportunistic for them to do so.

Seniority. One would assume that since length of service within an organization is typically intercorrelated with age, seniority should exert a similar influence on the choice

of pay referents. The research evidence bears this out with subtle differences. Heneman et al. (1973) identified a positive correlation between the number of months with an employer and the importance of internal comparisons. These authors suggest that as people become more socialized into, and knowledgeable about, the organization, they turn more toward others within the organization for comparison purposes. Finn and Lee (1972) report evidence of a positive correlation between tenure and comparisons with employees internal to the organization. Hills' (1930) analysis of the relationship between tenure and pay comparisons indicates a negative relationship with extra organizational referents. In sum, a trend is evident. More senior employees tend to use coworkers within their organizations and avoid the use of workers external to their work place. One would hypothesize that:

H<sub>2a</sub>: As individuals gain seniority (investing more of their time, developing organization specific skills and relationships) it becomes more costly and less instrumental for them to look outside the organization for referents.

Seniority has also been found to be positively related to a personal wage history referent (self referent) (Heneman et al., 1973; Hills, 1930). Heneman et al. (1973) postulate that as individuals develop a personal wage history over time with an employer, past outcomes (e.g. pay) are evaluated in terms of an experienced wage-effort relationship. Hills (1930) also reports evidence which suggests that less senior employees tend not to use historical pay referents. Based



upon the literature reviewed it is predicted that:

- H<sub>2b</sub>: More senior employees will tend not to use external pay referents and tend to use internal and personal wage referents.

Educational Attainment. The level of educational attainment an individual has achieved has consistently been shown to be positively related to the use of pay referents outside the employing organization. The relationship has been supported using a variety of employee groups: supervisory personnel (Klein and Maher, 1966); professional-technical employees (Hills, 1980; Heneman et al., 1973); scientific research staff (Finn and Lee, 1972); managers (Andrews and Henry, 1963; Haire, Ghiselli and Porter, 1963; Goodman, 1974); and refinery workers (Patchen, 1961). Klein and Maher (1966) suggest that higher levels of education are accompanied by higher self-evaluations and expectations. These authors attributed a "grass is greener" perception to educated employees who perceive employment opportunities outside the organization to be enhanced. Other researchers (Haire, et al., 1963; Andrews and Henry, 1963; Finn and Lee, 1972) associate increased education with an increase in professionalism. Professionals in turn, seek comparisons with their peers (who are likely to exist in large numbers outside the organization). Regardless of an individual's level of professionalism, education facilitates interorganizational movement.

Goodman (1974, 1977) views education as an important personal input or contribution an employee brings to the employment setting. Employees who have attained higher

levels

both w

organ

equity

betwe

nisto

educ

more

Hill

thei

indi

inte

vari

(per

empl

ine

pos

dis

ind

rel

Fre

ind

in

levels of education seek out similarly educated employees both within (Andrews and Henry, 1963) and outside of the organization in order to make an accurate assessment of the equity of their pay. It is predicted therefore that:

- H<sub>3</sub>: Level of education is positively associated with the use of external pay referents and positively associated with referents internal to the organization who have a similar educational level.

Mixed results have been reported for the relationship between educational level and the use of a personal/wage history referent. Hills' (1930) data indicate that less educated individuals emphasize their economic needs whereas more educated individuals concentrate on their past earnings. Hills suggests that as a person's education increases so does their sense of "personal or self worth." More educated individuals should tend to evaluate their pay against this internal standard.

Intent to Quit. The final personal characteristic variable to be investigated in this dissertation is intent (perceived probability) to quit the organization. Where an employee perceives his or her input/outcome ratio to be inequitable relative to some comparative other, equity theory postulates that the individual is placed in a state of dissonance (Adams, 1965). One of the methods by which the individual can reduce the dissonance is to leave the exchange relationship (i.e. quit) (Adams, 1963; Adams, 1965; Telley, French, and Scott, 1971). It is expected that those individuals leaving organizations due to perceived inequities in pay engage in at least two pay comparisons: a) relative

to

on

in

co

to

in

31

3

to

e

3

e

a

3

M

c

1

i

s

c

s

s

5

c

1

s

s

1

to some initial referent by which the dissonance is generated and b) relative to pay referents external to the organization in order to determine the instrumentality of quitting. Of course, some employees leave organizations for reasons other than perceived inequity (e.g. spousal relocation). In such instances employees would probably directly engage in external pay comparisons with similar individuals in similar jobs out of necessity.

Finn and Lee (1972) divided health care employees into an equity subsample and inequity subsample based upon their perceived fairness of salary treatment. Employees in the equity subsample demonstrated less dissonance, more favorable attitudes toward their work and the organization, and a lower propensity to quit than employees in the equity subsample. Most importantly, the equity subsample preferred internal comparisons (e.g. comparisons with other employees based on length of service or educational level) more so than the inequity subsample. The inequity subsample demonstrated a stronger preference for external comparisons (e.g. knowledge of "going rates" for the profession) than the equity subsample. While the subsamples were significantly different in overall orientations, both subsamples indicated their perceptions of salary equity to be a function of mixed considerations with a general emphasis on comparisons internal to the organization.

Klein and Maher (1966) indicate correlational associations between both internal and external comparisons and a respondent's intention to leave the organization. Supervisory

personnel who were satisfied with their current opportunities had engaged in both internal and external comparisons and intended to remain with the organization.

Perceived Difficulty In Finding Work. A concept related to intention to quit an organization is that of the perceived difficulty in finding similar work in the external market place. The two should bear a strong negative relationship. Hills (1930) and Alutto and Belasco (1974) report that those individuals who perceive little difficulty in finding work at the same level do tend to use market comparisons. In each of these studies the correlations reported were low albeit significant. It would appear that mobile individuals tend to evaluate their present pay in terms of what would be available should they leave.

Both Hills (1930) and Heneman et al. (1973) report the interesting association between personal/historical pay comparisons and intention to leave. Heneman et al. (1973) reason that where dissonance is generated by what an individual feels they "should" receive compared to what they do receive leaving the organization becomes a way to reduce this dissonance. Hills (1930) reports that individuals who perceive little difficulty in finding similar employment perform comparisons against what they "ought" to be earning in light of their past wage history. Hills argues that individuals who perceive little difficulty in finding comparable work elsewhere do not find personal worth evaluations threatening to their self-esteem (a line of reasoning also suggested by Goodman, 1977). Given that they

view t  
should  
compar

I  
H

Job C

O

charac  
pay rea  
tics.

compari  
wage le  
research

to sele  
require  
within

instanc  
systema

Tw

the skill  
positio

Sk

a varie  
referen  
for emp  
managed

view themselves as mobile, inequitable self-comparisons should lead to intentions to quit and, consequently, market comparisons as well.

It is predicted that:

- H<sub>4</sub>: Individuals who intend to quit an organization tend to engage in a) self/historical pay comparisons, b) comparisons with similar employees within the organization and c) similar employees external to the organization.

### Job Characteristics

On the basis of the available research and theory, job characteristics are expected to influence the selection of pay referents in much the same way as personal characteristics. Of the potential characteristics available for comparison, job complexity, skill level, position level and wage level have received the greatest attention. The research cited below demonstrates the tendency of employees to select comparative others whose jobs are similar in skill requirements and wage level. It is important to note that within the job characteristics category one can also observe instances where dissimilar referents are chosen in a systematic fashion for instrumental purposes.

Two job characteristics are examined in this study: the skill level required by the job and the wage level of the position. Each of these characteristics is described below.

Skill Level. Skill level has been demonstrated to have a variety of effects on the choice of comparative pay referents. Hills (1930) analyzed pay referent preferences for employees in unskilled, professional/technical and managerial groupings (low to high skill levels). Employees



from

exter

facil

would

by 30

betwe

Lower

rela

been

(196

as a

and

insi

pay

mana

peer

pref

(195

resu

of t

succ

furt

prac

tend

char

rec

from the highest skill level demonstrated a preference for external comparisons. According to Hills, high skill levels facilitate job movement and therefore external comparisons would gain relevance. These findings are further reinforced by Goodman (1974) who also found a positive relationship between position level and the use of external pay referents. Lower level employees selected peers within the organization.

Similarity of Job Complexity. A somewhat more complex relationship between skill level and referent selection has been suggested by Andrews and Henry (1963) and Haire et al. (1963). Andrews and Henry (1963) operationalized skill level as a trichotomized hierarchy of managerial levels. Middle and lower managers tended to compare themselves with groups inside the company. Middle management tended to compare its pay with those on a lower level, while members of lower management were more concerned with "keeping up with their peers" at the same level. Lower-middle managers clearly preferred outside groups for comparison. Haire et al. (1963) performed a similar analysis yielding comparable results. These researchers interpret these findings in terms of the instrumentality of the referent used: "The path to success for many middle managers is to sink themselves further and further into the company, accepting its goals, practices and traditions. This may well be associated with a tendency to accept internal comparison groups" (p. 7).

The issue whether employees select referents with job characteristics similar or dissimilar to their own has received relatively little attention until recently. Oldham

et al. (1982) operationalized the skill level or complexity of a job using a modified version of the Job Diagnostic Survey. Machine operators, inspectors, laborers, clerks and supervisors were interviewed to identify the job referents they used and to compare the challenge and complexity of their job with the job of their referent(s). The results indicated that employees selected pay referents whose jobs were equal in skill requirements in 14 percent of the cases, less skilled in 21 percent of the cases and, more skilled in 64 percent of the cases. Employees were clearly placing themselves in what appears as a disadvantageous position of comparison. Specifically, it was found that individuals in relatively simple jobs were more likely to select referents more skilled than their own than were individuals with relatively skilled jobs. Skilled individuals selected referents whose jobs were either similar or less skilled than their own. The authors did acknowledge a "ceiling" effect might particularly explain these results. That is, identifying referents with jobs more complex than their own may be difficult for employees whose jobs are highly skilled.

Oldham et al. (1982) interpreted these results in terms of the instrumentality of the comparison. Employees might select referents who are employed in jobs requiring similar skill (i.e. equitable comparisons) to achieve a sense of "balance or harmony" (equally plausible would be that individuals select similar others for accurate self-evaluation). The selection of advantaged or disadvantaged comparisons serves to enhance the individual's self-image.

Placing oneself in a disadvantaged state enhances the self-image through a process of association. Self-concept is improved through self-association with a referent who possesses more of an important work attribute. Conversely, individuals may place themselves in an advantaged state to enhance their self-image by "increasing the probability that he or she feels superior to a referent on a given work attribute."

Martin (1931, 1979) like Oldham et al. (1932) and Goodman (1977) does place emphasis on the instrumentality of the comparative referent in preserving or enhancing the self-image. On the other hand, she also places importance on the less cognitive explanation that employees who place themselves in disadvantaged states are establishing the comparability of the jobs in order to "lay claim" on the added compensation which usually accompanies the more skilled job. Employee groups who engage in intergroup comparisons in order to diminish or eradicate the perceived discrepancy in outcomes which cannot be attributed to the proportion of the difference in skill level between the groups are engaging in the fraternal comparisons described in Chapter II. She also notes that the process of anticipatory socialization may be operating. Disadvantaged comparisons are drawn in anticipation of joining the ranks of the more skilled group.

The empirical evidence developed by Martin et al. (1979) and Martin 1978a with regard to the effects of skill level (operationalized as position level within a job classification hierarchy) is rather compelling. With either skilled

technicians and their supervisors or secretaries and executives, it has been demonstrated that comparisons with others from a similar (equivalent) job class are the most likely of all pay comparisons which might be drawn. While relatively less frequent, comparisons with others from dissimilar skill levels are chosen particularly when the referent is from a higher skill level.

On the basis of the theory and empirical evidence regarding skill level it is predicted that:

- H<sub>5a</sub>: Employees will tend, primarily to engage in comparisons with others who are of similar skill from within their current organization.
- H<sub>5b</sub>: To the extent that individuals employed in lower skill levels engage in pay comparisons with others from dissimilar skill levels they will tend to be with others in higher skill classifications.
- H<sub>5c</sub>: Employees from higher skills levels who engage in additional pay comparisons will be likely to draw them with others of similar skill levels external to the organization.

Wage Level. The wage level paid to a position incumbent is often highly intercorrelated with a cluster of personal characteristics that a person may possess (e.g. tenure, age, education). It is therefore problematic to interpret the main effects of wage level independently from its correlates. Additionally, wage level is an outcome variable (using equity theory terminology). The appropriateness of one's inputs to an exchange relationship are being judged in addition to the adequacy of the pay level in meeting one's financial needs.

Occupational wage level has been shown to be related to a variety of pay referent sources. Goodman (1974) analyzed

the

pay

sen

age

not

se

al

hi

30

in

s.

or

m

a

e

i

r

the relationship between salary level and the selection of pay referents inside of the organization with length of service as a moderator. Goodman's analysis of the percentages indicated that individuals in lower salary levels are more likely to select other inside referents. Length of service was not found to moderate the relationship. It was also determined that high-salary individuals select self-pay history referents more often than low-salaried individuals. Goodman interpreted these findings by noting that high salary individuals are those who have received frequent and substantial raises. Raises indicate one's value to the organization and are awarded on that basis. Since Goodman makes the basic assumption that we seek positive information about ourselves and that self-pay history referents may enhance or threaten feelings of self-esteem, low salary individuals would tend to avoid drawing these comparisons and high salary individuals would be likely to engage in them.

Hills' (1930) findings of the relationship of salary level and referent source first appear to contradict those of Goodman (1974). Historical pay comparisons were more likely to be made by employees receiving lower levels of pay than more highly paid employees. On closer examination of Hills' data it also becomes apparent that these lower salary employees also believed it relatively easy to find any job at the same pay level. Apparently these employees did not find historical pay references threatening to their sense of self worth in that other suitable employment was readily attainable.

Both Heneman et al. (1973) and Goodman (1974) have found that the higher an employee's salary, the greater the likelihood of external comparisons. Heneman et al. reason that higher salary individuals typically have skills more identifiable as "professional" rather than "organizational." A well defined labor market and an abundance of market wage information invite higher salary individuals to draw these comparisons.

On the basis of the aforementioned studies it is predicted that:

- H<sub>6a</sub>: Individuals from lower wage level jobs will tend to compare themselves with similar others within their employing organization.
- H<sub>6b</sub>: Wage level will be positively associated with the use of personal-historical referents as well as the use of similarly employed others external to the organization.

Wage Comparisons Within Similar Groups and Between Dissimilar Groups. The literature reviewed in Chapter II regarding egoistic versus fraternal comparisons is highly suggestive of the direction that pay comparisons will take within an organization, i.e., with similar individuals in one's own work group or with individuals earning more (or less) who are employed in different work groups. The early work of Stouffer et al. (1949) and Runciman (1966) illustrated a comparative preference for others within similar social groupings. The work of Homans (1961) and Patchen (1961) which further defined the preference as one for individuals from similar levels within an organizational job hierarchy (e.g. blue-collar workers with other



blue-collar workers; management personnel with other management personnel). The central and overriding finding has been that individuals tend to select comparison persons similar to themselves - employees tend to select pay referents from similar job classifications or organizational levels.

Within Group Comparisons. Within a specific level in the organizational position hierarchy employees will tend to select pay referents who earn greater amounts of pay (Martin, 1982, 1979, 1978a, 1978b; Patchen, 1961). Given that the level of pay is largely determined by the personal attributes and job characteristics previously discussed it is not surprising that a greater number of research studies have not observed this relationship. The majority of these studies are bivariate correlational analyses which are unable to control for the influence of additional variables.

Between Group Comparisons. Groups which receive higher levels of financial outcomes (e.g. pay) are often aspired to. Parallel to this idea is Festinger's argument that comparisons take a "unidirectional drive upward" where valued abilities or outcomes are the dimension of comparison. When financial outcomes are being compared, upward comparisons even to jobs which are dissimilar in the position hierarchy, have been demonstrated (Lawler, 1965; Patchen, 1961; Martin, 1979, 1973a). Relative deprivation research demonstrates the importance of such upward dissimilar pay comparisons (Pettigrew, 1967). Patchen (1961) showed that employees are likely to select referent others who make higher wages than

en

co

en

re

re

"v

e

t

g

o

o

e

o

h

o

themselves (placing themselves at a disadvantage in the comparison). Most importantly, Patchen demonstrated that employees with low pay are even more likely to select referents above them on this dimension than employees with relatively high pay. Once again, however, a possible "ceiling effect" may have been operating. The research effort of Joann Martin and her colleagues provides substantial evidence for upward pay comparisons to dissimilar groups.

Research evidence has not revealed frequent instances of downward dissimilar comparisons (comparisons with less paid employee groups). The few experimental instances documenting comparisons with positions lower in the occupational hierarchy (Andrews and Henry, 1963; Goodman, 1974; Martin, 1978b) suggest that the employees are focusing on the size of the pay differential. This may be particularly true where there exists a promotional path from those lower positions to the employee's current position or where the employee is the supervisor of the comparison employee. On the basis of the literature reviewed it is predicted that:

H<sub>7a</sub>: Where pay comparisons occur within occupational groups, employees who earn less will use employees who earn more.

H<sub>7b</sub>: Where pay comparisons occur between occupational groups, employee groups who earn less will use employee groups who earn more.

#### Group Identification - Membership

Identification. This category of variables deals with the extent to which an employee identifies with or is actually a member of specific work groups. The reference

group theory literature reviewed in Chapter II suggests that the development and importance of comparative pay referents are highly influenced by acceptance of the work standards and attitudes of others in the work place. This is particularly true when individuals identify with the work norms which these occupational groups develop. Where group norms encapsulate acceptable pay comparisons, employees who are highly integrated or allied within that occupational group will tend to engage in them as well. Formal membership within the group may bring with it pressure to conform and accept work related standards the group has developed. The group identification-membership category contains variables which represent both identification with and formal membership in occupational groups. The category consists of the following variables: group identification (cosmopolitan-localism, organizational commitment, and union commitment), and work group membership.

Cosmopolitan-Locals. In Gouldner's (1957, 1953) seminal attempt to validate the cosmopolitan-local construct scales for the variables of organizational loyalty, commitment to specialized skills (i.e. professional body of skills), and reference group orientation provided the theoretical ground work. In this original conceptualization organizational loyalty and professional commitment were believed to be inversely related. The third variable, reference group orientation, focused on the individual's identification with groups internal or external to the organization or locale.

The use of an external referent to define the

cosmopolitan-local construct is unique to Gouldner (Flango and Brumbaugh, 1975). A summary of cosmopolitan-local research reveals that the internal-external reference dichotomy may not be related to professional orientation in a simple fashion but depends upon organizational variables (Grimes and Berger, 1970).

The cosmopolitan-local construct does assume an inverse relationship between organizational commitment and professional commitment (Flango and Brumbaugh, 1975). Hierarchical authority may conflict with authority based on expertise. Other researchers employ conceptualizations in which there are more than the two polar types (cosmopolitans or locals) and have established evidence that "local-cosmopolitans" also exist - those professionals committed to both their professions and to their local organizations (Sheldon, 1972; Thornton, 1970; Glaser, 1963).

The empirical literature examining cosmopolitan-local orientations and pay references was reviewed in Chapter II. In the few studies available which have examined cosmopolitan-localism or its constituent dimensions (i.e., professionalism) a tendency for cosmopolitans to use extra organizational pay referents is apparent. Finn and Lee (1972) established a significant relationship between professional ability (measured as educational level, professional activity, professional reputation and the respondent's identification with the profession) and the use of external pay referents (knowledge of market "going rates"). Other researchers have operationalized professionalism as a

combination of educational level and position level within the organizational hierarchy (Haire et al., 1963; Carrol and Tombari, 1930; Pelz, 1965; Andrews and Henry, 1963; Goodman, 1974). Professionalism operationalized in this manner has been positively related with the use of referents external to the organization. Hyman and Brough (1975) citing several case studies performed in Great Britain also conclude that professionalism is indeed related to the use of outside referents. Two additional studies using academic professionals as respondents determined that cosmopolitans were committed to publication, participated in fewer campus activities and were more likely to leave the institution with which they were affiliated (Gouldner, 1953; Flango and Brumbaugh, 1975). Both of these studies found that cosmopolitans were more likely than locals to regard their salaries as too low. Unfortunately, however, no direct measures were taken to identify the pay reference groups that were being utilized.

Semiprofessionals - The Importance of Internal and External Referents. Cosmopolitanism is an orientation commonly thought to be shared by all professional occupations. This is, perhaps, an oversimplification. Consequently, the primary importance of reference groups external to the organization may be overstated. Grimes and Berger (1970) have suggested that the internal-external pay reference dichotomy may not be related to professional orientation in a simple fashion but depends upon organizational variables, particularly for occupations on the

border

propo

empla

liter

berke

(197-

leas

spec

degr

inte

(195

orie

cost

grou

comm

coex

pre

pro

fie

edu

is

ids

Th

borderline of professional status. Empirical support for the proposition that internal and external pay referents are employed by semiprofessional job classes is evident in the literature (cf. Alutto and Belasco, 1974; and Bennis, Berkowitz, Affinito and Malone, 1958). Alutto and Belasco (1974) employed teachers and nurses as respondents.

Measuring professionalism as the degree of commitment to specialized role skills, these researchers noted that a high degree of professionalism was associated with the use of internal as well as external pay referents. Bennis et al. (1958) arrived at a similar set of findings. Reference group orientations in the nursing profession indicated that cosmopolitans referred to others within their internal work groups to a considerable degree. High organizational commitment and high degrees of cosmopolitanism were found to coexist for these semiprofessionals. These authors interpreted these findings by noting that nurses seeking to gain professional recognition within the broader professional field must do so through advancing within administrative or educational areas in the local nursing function.

On the basis of the basis of the literature reviewed it is predicted that:

- H<sub>3</sub>: High degrees of cosmopolitanism will be: a) positively related to the use of external pay referents and b) positively related to the use of similar others within a specific work group.

Organizational and Union Commitment. Individuals may identify with a number of work groups during their careers. The probability of identification is particularly heightened



2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

for those work groups of which we are members. March and Simon (1953) propose four main targets with which this identification may occur: groups external to the organization; the organization itself; work groups within the organization; and the work activities in the job. They propose that the strength of the identification is a function of the congruence or similarity between the individual and group norms and goals. Within unionized settings the two constructs of organizational and union commitment have received a substantial amount of research attention particularly with regard to the extent that individuals may be simultaneously committed to each (cf. Angle and Perry, 1986; Dean, 1954; Gallagher, 1934). The research evidence has shown for the most part that the likelihood of simultaneous commitment to the two collectivities appears to grow where the relationship between them is cooperative in nature (Angle and Perry, 1986; Purcell, 1960).

Aside from the issue of how organizational and union commitment may interact, the independent influence of each of these group identification variables on the selection of pay referents is clear from a theoretical perspective. Porter and his colleagues (Mowday, Steers, and Porter, 1932; Porter et al., 1974) conceive of organizational commitment as a "psychological attachment" to the employing organization where the employee: 1) desires to remain a member of the organization; 2) internalizes the values and goals of the organization; and 3) is willing to exert effort on behalf of the organization. Clearly the organizationally committed

employee has internalized the values and norms of the organization and is focused internally within that organization. The perspective of Porter et al., is not inconsistent with the earlier conceptualization of organizational commitment as a "calculative involvement" (Becker, 1960; Ritzer and Trice, 1969). This instrumental orientation to commitment attributes the bond between the employee and organization to an exchange of extrinsic outcomes on the basis of costs and benefits (Angle and Perry, 1935, Becker, 1960). Committed employees perceive themselves to have made a considerable investment in the organization and would forfeit these investments should they leave.

Organizational Commitment and Pay Referents: Empirical Literature. The empirical literature regarding the influence of organizational commitment upon the use of pay referents is sparse. Few studies have attempted to record the referent used while allowing a measure of organizational commitment to vary. Martin and Peterson (1985) employed the organizational commitment scale developed by Mowday et al., 1979 in a unionized retail setting. Pay fairness was recorded with regard to "other people in my unit" (a pay referent internal to the organization) and "people doing the same kind of work for other employers" (external referent). Employees expressing lower organizational commitment tended to use referents external to the workplace. Conversely, employees high on the organizational commitment scale tended to use internal pay referents.

Finn and Lee (1972) measured the organizational

att

sca

exp

tic

sin

tas

co

ut

ti

(n

co

or

fo

pr

in

is

re

(1

ti

i.

t.

attachment of professional employees with a single Likert-scale item "Identification with Organization." Employees who expressed a high degree of identification with the organization demonstrated a tendency to use other employees of similar length of service and educational level from within the organization as pay reference sources.

Alutto and Belasco (1974) measured organizational commitment with an attitudinal index concerning the perceived utility of continued participation in the employing organization. Unionized employees from semiprofessional occupations (nurses and teachers) who expressed high organizational commitment tended to use similar others within their schools or hospitals as pay referents. This relationship was not found to hold for individuals who perceived little chance of professional advancement within their employing organization. The organizational commitment scale used by these researchers is plainly of the instrumental school in conceptualization. The more affective method of measurement used by Haire et al. (1963) (acceptance of organizational goals, practices, and traditions), however, yields a similar tendency to accept internal pay comparison groups.

On the basis of the literature reviewed it is predicted that:

- H<sub>3a</sub>: Organizational commitment is positively related to the use of internal pay referents and negatively related to the use of pay referents external to the organization.

Union Commitment and Pay Referents: Empirical Literature. Unions represent an important type of work organization to which approximately one-fifth of the work force belongs. The extent to which individuals identify with these groups can vary markedly depending upon a host of individual and work context variables. The progression of research involving union commitment has paralleled that of commitment to organizations in general. Indeed, during the seminal work to construct validate a scale of union commitment it was assumed that the union measure should possess a factor structure reflecting the components identified in a priori definitions of organizational commitment (Porter et al., 1974). Theoretical development efforts have identified several distinct dimensions: 1) factors interpretable in terms of an exchange relationship (i.e. a loyalty based upon an individual's ability to satisfy needs through the organization); 2) member characteristics; 3) socialization experiences; and 4) factors interpretable in terms of a member's willingness to participate in and remain a member of the labor organization (Steers, 1977; Porter et al., 1974).

Gordon, Philpot, Burt, Thompson, and Spiller (1930) identified four interpretable factors underlying union commitment construct. In general these factors reflect those discernable in the organization commitment literature; factors representing the instrumental nature of association with the group and factors representing shared values and goals. Gordon et al., (1930) identified the benefits which unions provide to their members as the most important basis

for union commitment. These authors argue that this finding is substantiated by the writings of Hoxie (1919) who emphasized the instrumental nature of member attachment to the union and later, Blau and Scott (1962) who classified unions as "mutual benefit associations ... in which the membership is expected to be the prime beneficiary." Other factors identified were: Felt responsibility to the union; willingness to work hard for the union and; belief in unionism.

Martin and Peterson (1985) employed the union commitment scale developed by Gordon et al. (1980). These authors noted a positive correlation between union commitment and the use of union members in their bargaining unit as pay referents (i.e. a comparison with a similar work group internal to the organization in which they were employed). Importantly, Martin and Peterson discovered a significant relationship between union commitment and the perceived value of the union in obtaining better wages, benefits, and terms and conditions of employment. Other researchers performing sociological case studies in Great Britain have also noted that as individuals become more committed to the unions to which they belong (i.e. establish a greater sense of shared values and purpose) they tend to use other union members employed at the same company as comparative pay referents (Brown, 1979; Delafield, 1979).

On the basis of the literature reviewed it is predicted that:

H<sub>3</sub>: Union commitment is positively related to the use

of pay referents internal to the organization and positively related to the use of members in the same bargaining unit in particular.

Group Membership. The literature surveyed in Chapter II analyzes the development of comparative pay referents based upon group membership. Employee affiliation through immediate membership and direct contact with reference groups is a basis for identification with the work group (Katz and Kahn, 1978). Additionally, the personal and job characteristics variables previously reviewed are often highly intercorrelated with work group membership. Clusters of these variables often serve as criteria to define eligibility for membership.

Perhaps one of the greatest influences of group membership is that proximity increases the probability that a group will be "spontaneously adopted" for purposes of comparison (Hyman and Brough, 1975). Goodman (1974) argues that wage information about individuals with which we come into contact is likely to be more accurate. He also argues that comparisons with members of our work groups are easier to compute and therefore we are more inclined to engage in them.

Lipset and Trow (1957) provide early evidence demonstrating that trade union membership dictates a predictable pattern of wage comparisons for bargaining purposes. Institutional influences specific to the sample used are dealt with in Chapter V. Union members tend to compare their wages with those of other union members in their local.



Other things being equal, those with whom an occupational group has the closest and most frequent relations are most likely to provide a frame of reference for judging the equity of the wage-effort bargain. "Equity among various tasks on a single job is of the most immediate and direct concern to the employees on the job" (Livernash, 1954, p. 341).

The work of Martin and her colleagues suggests that employee groups who draw comparisons across occupational divisions usually do so in an upwardly direction (to groups enjoying higher status, pay, and other rewards). Within a unionized setting more skilled employee groups may also tend to evaluate their pay by defending their differentials above other groups of workers (Hyman and Brough, 1975). Martin (1931, 1979) argues that these downward comparisons should occur with relative infrequency.

On the basis of the literature reviewed it is predicted that:

- H<sub>10a</sub>: Members of the same union will tend to use their fellow union members as comparative pay referents.
- H<sub>10b</sub>: Where interunion comparisons do occur it is predicted that they will be made in an upwardly direction to unions enjoying greater status and extrinsic rewards.

Table 1 summarizes the factors related to the perceived importance of five pay reference groups and the hypothesized direction of influence of each.

#### Multiple Reference Groups

The literature reviewed in Chapter II is highly suggestive of the simultaneous usage of multiple reference

Table 1  
Factors Related to Perceived Importance of Reference Group and  
Hypothesized Direction of Influence

INDEPENDENT VARIABLE	Self Referent	Members of Same Bargaining Unit	Members of Other Bargaining Unit	Workers in Local Area	Workers Around Country
X1 Age	U	U	U	-	-
X2 Length of Service	+	+	U	-	-
Education					
X3 Associate Degree/ Diploma Grad (yes=1, no=0)	+	+	U	+	+
X4 Graduate Course Work/Degree (yes=1, no=0)	+	+	U	+	+
Skill Level					
X5 LPN (yes=1, no=0)	U	+	+	U	U
X6 Medication LPN (yes=1, no=0)	U	+	+	U	U
X7 Staff Nurse (yes=1, no=0)	U	+	-	+	+
X8 Supervisory Nurse (yes=1, no=0)	U	+	-	+	+
X9 Wage	+	+	U	+	+
X10 Probability of quitting	+	+	U	+	+
X11 Cosmopolitan/ Local	U	+	U	+	+
X12 Organizational Commitment	U	+	+	-	-
X13 Union Commitment	-	+	+	U	U
X14 Union Affiliation (MNA=1, Steelworkers=0)	U	+	-	U	U
- - - - -					
+ = positive relationship					
- = negative relationship					
U = unknown/unspecified relationship					

3

p

a

f

o

r

a

c

a

23

Al

me

di

ra

ra

sh

va

of

wo

19

19

19

19

19

19

19

19

19

19

19

19

groups when individuals are determining the fairness of their pay. It is difficult, however, to determine the relative effect a referent may have upon perceptions of pay fairness from research literature which has employed indirect measures of referent influence. A variety of measures have been used: reported frequency of referent usage (Goodman, 1974; Andrews and Henry, 1963; Oldham et al., 1982); estimated importance of probability of usage (Martin, 1985; Hills, 1980; Martin et al., 1981, 1979, 1978a, 1978b) or inferred from respondent's perceived equity (Finn and Lee, 1972; Haire et al., 1963; Alutto and Belasco, 1974). None of these methods of measurement employs actual perceptions of equity made directly in relation to the pay referent.

Goodman and his colleagues argue that input/outcome ratios perceived in relation to multiple classes of referents should relate independently to a pay satisfaction criterion variable. A test of the relationship of multiple perceptions of equity made in relation to each potential pay referent would allow estimates of their relative influence (Goodman, 1974; Martin, 1982).

It is hypothesized that:

- $H_{11}$ : Perceptions of pay equity made in relation to multiple reference sources shall independently determine (predict) pay satisfaction.

### Summary

To review, the relevant literature regarding the personal characteristics, job characteristics and group identification-membership variables was reviewed. Emphasis was placed upon empirical literature where it was available.

A number of hypotheses were set forth regarding these influential factors. These hypotheses are listed below for the convenience of the reader.

- H<sub>1a</sub>: Younger employees will engage in external (market) comparisons.
- H<sub>2a</sub>: As individuals gain seniority it becomes less instrumental for them to look outside the organization for referents.
- H<sub>2b</sub>: More senior employees will tend not to use external pay referents and tend to use internal and personal wage referents.
- H<sub>3</sub>: Education is positively associated with the use of external referents and positively associated with referents internal to the organization who a similar level of education.
- H<sub>4</sub>: Individuals who intend to quit engage in self-historical pay comparisons, comparisons with similar employees within the organization, and similar employees external to the organization.
- H<sub>5a</sub>: Employees will primarily engage in comparisons with others who are of similar skill from within their current organization.
- H<sub>5b</sub>: To the extent that individuals employed in lower skill levels engage in pay comparisons with others from dissimilar skill levels they will tend to be with others in higher skill classifications.
- H<sub>5c</sub>: Employees from higher skills levels who engage in additional pay comparisons will be likely to draw them with others of similar skill levels external to the organization.
- H<sub>6a</sub>: Individuals from lower level jobs will tend to compare themselves with similar others within their employing organization.
- H<sub>6b</sub>: Wage level will be positively related to the use of personal-historical referents as well as the use of similarly employed others external to the organization.
- H<sub>7a</sub>: Where pay comparisons occur within occupational groups, employees who earn less will use employees who earn more.

- H<sub>7b</sub>: Where pay comparisons occur between occupational groups, employee groups who earn less will use employee groups who earn more.
- H<sub>8</sub>: High degrees of cosmopolitanism will be positively related with the use of external pay referents and positively related with the use of similar others within their specific work groups.
- H<sub>9</sub>: Organizational commitment is positively related to the use of internal pay referents and negatively related to the use of pay referents external to the organization.
- H<sub>10a</sub>: Members of the same union will tend to use their fellow union members as comparative pay referents.
- H<sub>10b</sub>: Where interunion comparisons do occur it is predicted that they will be made in an upwardly direction to unions enjoying greater status and extrinsic rewards.
- H<sub>11</sub>: Perceptions of pay equity made in relation to multiple reference sources shall independently determine (be predictive) of pay satisfaction.

The hypotheses are summarized in Table 1. The general theme which underlies each of them is straightforward: pay referents are initially selected on the basis of some perceived dimension(s) of similarity. From this set of potential pay referents primary referents are chosen based on the instrumentality of the referent in satisfying the needs of the comparer.

## CHAPTER IV

### FIELD STUDY: METHODOLOGY AND RESULTS

#### Introduction

In Chapter IV, the method and results of the field study are presented. The descriptions of the method and results are subdivided into two sections regarding factors influencing the importance of pay reference groups (Part I) and the use of multiple pay referents (Part II).

In the presentation of the methodology, a pilot study, the research sample and research site are described. The data collection procedure is reported. The variables discussed in Chapter III are operationalized and their reliabilities presented. The statistical method used to analyze the data collected is presented.

#### Method

##### Pilot Study

Purpose. A predecessor to the questionnaire used in the present investigation was distributed for pilot testing on a comparable group of hospital employees (N=30) working in Lansing, Michigan. The purpose of the pilot test was two-fold: 1) to ensure that the perceptual distinctions called for in the questionnaire were understandable and the format readable and 2) to identify reference groups which were of relevance to hospital employees for wage comparison purposes. Pilot study respondents indicated, through written

comments and debriefing, little difficulty in completing the questionnaire.

#### Identification and Pilot Testing of Wage Referent

Categories. Local union presidents, union business agents and hospital employees were interviewed at the pilot and actual research sites to identify wage referent categories. Full details of the procedure are available in Pincus and Reagan (1932). Respondents were asked to specify groups or individuals which were considered when determining the fairness of their wages. Responses were recorded and categorized by expert consensus (N=3). Five referent categories were identified: self referent or personal wage history; other workers in the employee's bargaining unit at the hospital; employees in other bargaining units at the hospital; workers performing nursing-related duties in the surrounding area; workers performing nursing-related duties around the country.

The five wage referent categories identified using the aforementioned procedure were then incorporated into the pilot questionnaire and ultimately, the final version of the questionnaire.

#### Sample and Research Site

The sample for this study consisted of 210 unionized employees, performing nursing related duties, for a county-owned hospital in Michigan. The hospital, a 163 bed facility, is located in mid-eastern Michigan supporting a full range of medical specialties. The comparatively rural location of the facility renders it the major health care



employer in the area. All respondents in the study maintained membership in one of two union/associations for collective bargaining purposes. The Registered Nurse (RN) unit is organized by the Michigan Nurses Association (MNA). The Licensed Practical Nurse (LPN), orderly, and nurses aide units are organized by the United Steelworkers of America (Steelworkers). The MNA has a total of 37 members while the Steelworkers has a total of 123 members. Respectable response rates were obtained with 73 percent of the MNA unit responding (n=68) and 81 percent of the Steelworkers unit responding (n=100).

Descriptive statistics for the total sample and individual bargaining units are provided in Table 2. The mean age for the total sample is 36 years. No mean difference in age is observed between the MNA and Steelworker bargaining units.

On average the length of service for the total sample is 3.3 years. The MNA and Steelworker bargaining units differ slightly with 7.4 years and 9.3 years, respectively. Additionally, little difference can be observed between the bargaining units with regard to gender; both are almost entirely female (MNA=97%; Steelworkers=95%).

Approximately three-quarters of the total sample is married. This percentage holds for each of the individual bargaining units as well (MNA = 74%; Steelworkers = 73%).

Variation in the total sample is observed with regard to educational level. The sample population indicated high (65%) medium (22%) and low (13%) levels of educational

Table 2

Descriptive Statistics for the Total Sample  
and Individual Bargaining Units

VARIABLE	TOTAL SAMPLE	MNA	STEELWORKERS
Number of Subjects	163	63	100
Age			
Mean	36.14	35.93	35.25
Standard Deviation	10.74	10.21	11.13
Length of Service (Months)			
Mean	105.33	89.19	117.05
Standard Deviation	92.63	79.43	99.47
Gender			
Male	7 (4%)	2 (3%)	5 (5%)
Female	161 (96%)	66 (97%)	95 (95%)
Marital Status			
Single	40 (24%)	13 (27%)	22 (22%)
Married	123 (76%)	50 (74%)	73 (73%)
Educational Level			
High	109 (65%)	66 (97%)	43 (43%)
Medium	53 (22%)	2 (3%)	36 (36%)
Low	21 (13%)	0 (0%)	21 (21%)
Skill Level			
Supervisory Nurse	31 (13%)	31 (47%)	0 (0%)
Staff Nurse	39 (23%)	36 (53%)	3 (3%)
Medication LPN	45 (27%)	0 (0%)	45 (45%)
LPN	24 (15%)	0 (0%)	24 (24%)
Less Skilled	23 (17%)	0 (0%)	23 (23%)

attainment. The reader may refer to the discussion on operationalization of this variable for a listing of the education levels composing each category. Marked differences exist between the individual bargaining units. Virtually all (97%) of the MNA bargaining unit respondents are of high educational attainment. Only three percent reported having medium level education. None (0%) reported having a low level. Education level is distributed more evenly in the Steelworker bargaining unit. Steelworker respondents indicated having achieved educational levels of high (43%), medium (36%) and low (21%).

Educational differences within and between the bargaining units reflect the inconsistency in current certification requirements for health care employees. Registered nurses may meet certification requirements by completing a two-year junior college, a three-year hospital or a four-year university degree program. Registered nurses often complete graduate degrees upon graduation from four-year university based programs. Each of these programs signifies a high degree of educational attainment in this study.

Variation in certification standards for licensed Practical nurses is reflected in different levels of educational attainment in the Steelworker bargaining unit. Depending upon the educational institution and specialization sought, LPNs may be certified through a one or two-year junior college program or a one-year hospital program.

Employees within the Steelworker bargaining unit indicating a low level of educational attainment are from the

orderly, ward helper or clerical job classifications. It should be noted that while these classifications may only require a high school diploma or less, a few employees from the lower skill levels reported having completed college course work unrelated to health care.

Categories of skill are evenly distributed across the respondent population. The reader may refer to the discussion on operationalization of this variable for a listing of the skill levels composing each category. The supervisory and staff nurse levels contain all of the MNA members (47% and 53%, respectively). A small percentage (3%) of Steelworker bargaining unit members are also within the staff nurse level. Steelworkers compose the remaining three skill levels: medication LPN (45%), LPN (24%) and low skill (23%).

Overall the sample characteristics indicate little difference between the two bargaining units with regard to age, length of service, gender and marital status. Educational and skill levels are distributed within the total sample. Higher educational and skill levels tend to be concentrated within the MNA bargaining unit while lower levels are found within the Steelworker bargaining unit. These differences are to be expected and present no sample biasing difficulties for the hypotheses which are to be tested.

### Operationalization of Variables

The analyses performed in the present study proceed in two parts. Part I examines the relationship of the various individual, job, and group identification variables with the

perceived importance of five specified reference groups. Part II examines the relative importance of these reference groups as they may combine to produce an overall reaction of pay satisfaction. Accordingly, the variables associated with parts I and II are presented separately. The questionnaire used to gather the data is presented in Appendix A.

Part I - Factors Influencing the Perceived Importance of Pay Reference Groups. On the basis of the previously described pilot study, five pay reference groups had been identified: themselves, others in their bargaining unit, others in their counterpart bargaining unit, others performing nursing-related duties in the surrounding area, and others performing nursing related duties around the country. Perceptions of the importance of each of these referent categories served as the dependent variable.

Respondents were asked to make separate judgments, indicating how important each of these specified groups was as a comparison in determining the fairness/equitability of their pay. Forced choice judgments were made with the respondents distributing one-hundred points among the five reference groups to indicate relative importance.

### Independent Variables

The utility or explanatory usefulness of the model was tested by measuring individual characteristics, job characteristics, and group identification variables.

Individual Characteristics. Measures of individual characteristics included age, length of service, intention to quit, and educational level. Respondents were asked to

indicate their age in years. Length of service was recorded as the length of time (in months) the respondent had been employed at the hospital.

Educational level was originally categorized into eleven classifications. This initial classification scheme was required in order to capture the diversity of certification requirements and educational arrangements evident in health care. A subsequent reduction in the number of educational categories was achieved by recoding them into high, medium, and low levels. A high level of educational attainment is indicated by any of the following classifications: diploma grad (three-year nursing school program), undergraduate university (B.S.N. or other), graduate courses at university, and completed graduate degree (M.S.N. or other). Responses in indicating a medium level of education are: community college-associate degree, attended college - no degree completed, one year LPN degree - community college or hospital program, and community college degree unrelated to nursing. The low level of educational attainment is indicated by: grade eight or less, some high school, and completed high school.

Educational level, as operationalized in the present study, is measured as a nominal level variable. Consequently, dummy coding must be employed in order to perform the regression analysis required by the present study. The low level of educational attainment was selected as the base or reference category against which the effects of high and medium levels of educational attainment are to be inter-

preted. The use of this procedure creates two independent variables (high and medium educational attainment) rather than a variation within a continuously distributed dimension of educational attainment.

As a measure of intent to quit, respondents were asked to estimate the probability that they would quit their job for whatever reason with the organization within the next two years. Answers ranged from "100%; I am absolutely certain that I will be quitting" to "0%; I am absolutely certain that I will not be quitting." The format of this item closely parallels that used by Anderson and Milkovich (1930).

Job Characteristics. Job characteristics were measured using the two independent measures of wage rate and required skill level. Both of these measures are arguably individual characteristics as well; however, their levels are determined primarily by the job in question. Wage rates are determined for job classifications primarily through the collective bargaining process. Individual merit or performance considerations are not of relevance. Percentage increases are added to the base wage rates of employees on the basis of seniority.

Wage rates reported on the questionnaire were verified by inspection of employee personnel files. This procedure was followed for each employee allowing the researcher access to these confidential data. Very little difference was observed between reported and actual wage rates.

Skill level requirements for each job classification are determined by a combination of in-house training or certifi-

cation programs and years of experience in successive job titles. Educational level interrelates with skill level only to the extent that formal educational requirements effect entry into the MNA versus the Steelworkers bargaining units.

Skill level was originally characterized by sixteen job classifications. Three of the job classifications were dropped due to no incumbents occupying these titles. They are: infection surveillance coordinator, clinical specialist, and graduate nurse. The skill level required by each job classification is a nominal level of measurement making qualitative distinctions among the levels. Dummy coding was employed to convert these nominal level data into a form compatible with multiple regression analysis.

The remaining thirteen job classifications were recategorized into five skill levels representing supervisory, staff, medication licensed practical nurse, licensed practical nurse, and less skilled levels. Eighteen percent (13%) of the respondents were of a supervisory level of skill. This category consisted of the following classifications: charge nurse, unit supervisor, inservice instructor, quality assurance coordinator, and house supervisor. Twenty-three percent (23%) of the respondents were of the general or staff nurse level. Twenty-seven percent (27%) of the respondents were at the medication licensed practical nurse level. Fifteen percent (15%) of the respondents were at the licensed practical nurse level. Twenty-eight percent (23%) of the employees indicated they occupied jobs which required less skill. Positions which fell within this



category were: nurse aide, orderlies, ward clerk, house orderlies, and ward helpers.

Skill levels were then dummy coded for statistical analysis. The less skilled category was selected as the reference category which resulted in the construction of four dummy variables.

Group Identification-Membership Variables. The extent to which respondents identified with or oriented toward various groups was measured using three different instruments. Actual group membership in either the MNA or Steelworkers bargaining unit was also recorded.

Cosmopolitan or local reference group identification was measured using the three-item (short version) of Gouldner's (1953) cosmopolitan-local scale. This instrument measured the degree to which respondents maintained an outer reference group orientation, placing higher commitment to their specialized role skills and having less loyalty to the employing organization (the hospital). Respondents were asked to express the extent of agreement or disagreement with each item on a seven-point Likert-type scale, having anchor points ranging from "strongly disagree" to "strongly agree." Scale reliability (Cronbach's alpha) in the present study was .45.

Employee identification with the organization (the hospital) was measured by a scale of organizational commitment developed by Porter and his colleagues (Mowday, Steers, and Porter, 1979, 1982; Porter, Steers, Mowday, and Boulian, 1974). In this formulation a committed employee is one who: 1) has a strong desire to remain a member of the

organization; 2) internalizes the values and goals of that organization; and 3) is willing to work extra hard on behalf of the organization. Operationalized in such a fashion, the attachment is based upon an identification with the organization and its members (Angle and Perry, 1936). The questionnaire consists of a fifteen-item scale. Respondents were asked to express the extent of agreement or disagreement with each item on a seven-point Likert-type scale, having anchor points ranging from "strongly disagree" to "strongly agree." Scale reliability (Cronbach's alpha) in the present study was .90.

Union/association commitment was measured using an instrument developed by Gordon, Philpot, Burt, Thompson, and Spiller (1930). The scale consists of thirty-seven items assessing the extent of identification with collective bargaining structures on the following dimensions: loyalty, felt responsibility towards, and belief in their instrumentality. Respondents were asked to express the extent of agreement or disagreement with each item on a seven-point Likert-type scale, having anchor points ranging from "strongly disagree" to "strongly agree." Scale reliability (Cronbach's alpha) in the present study was .92.

All respondents in the present study were union/association members in either the MNA or Steelworkers. The union/association with which each respondents was affiliated was recorded. Dummy coding was employed to convert these categorized items into a form compatible with multiple regression analysis. Affiliation with the Steel-

workers bargaining unit was selected as the reference category against which the effects of membership in the MNA are to be interpreted.

Part II - Multiple Pay Referents: Perceptions of Pay Equity and Their Combination. Chapter II reviewed the available literature on the use of multiple pay reference sources. It was hypothesized in Chapter III that perceptions of pay equity/fairness made in relation to each of the five specified reference categories will independently relate to the pay satisfaction criterion.

Perceived Pay Equity/Fairness. Pay equity was evaluated using a magnitude estimation instrument developed by Pincus and Reagan (1932). This instrument incorporates critical features of the decision processes set forth in Adam's (1965) equity theory and Goodman's (1977, 1974) social comparison process model.

The method of fractionation (or magnitude estimation) is a direct scaling technique which has its roots in early psychometric methods. The method has been described by Torgerson (1953).

A subject is capable of directly perceiving and reporting the magnitude of a sense-ratio; i.e., the ratio between two subjective magnitudes... Fractionation methods are found in two general forms. In one form, the subject is presented with two stimuli and instructed to report the subjective ratio between them with respect to the designated attribute. For example, two tones of the same pitch might be presented to the subject with instructions to report the ratio of loudness of the first tone to the second. Methods that use this approach are referred to as direct-estimate methods.

Fractionation scales have been proposed as a superior

alter

their

chara

advan

fract

may e

scale

true

neas

scal

wage

the

about

item

the

fair

skill

skill

unit

bag

oppo

ness

and

plag

comp

cate

othe

ing

alternate to Likert-type measurement instruments because of their correspondence to the real number system. This characteristic is assumed to offer a number of psychometric advantages (Barnett, Hamlin, and Danowski, 1932). First, fractionation scales allow for the maximum variation which may exist in the measured attribute. Second, fractionation scales typically have no upper or lower bounds and possess a true or absolute zero point. As a result, ratio levels of measurement are achieved with minimum measurement error.

Within the context of the present study, fractionation scaling offers practical advantages when measuring perceived wage fairness. Respondents were asked to make judgments in the following fashion:

We would like you to tell us how fair you think the amounts you receive for each of the following wage items when compared to the amounts received by employees in the other bargaining units at AGH. When making these fairness judgments, think about your duties, knowledge, skills and abilities as compared to the duties, knowledge, skills and abilities of employees in the other bargaining unit of AGH. Here, 100 = what employees in the other bargaining unit at AGH receive.

The question posed in such a fashion offers the opportunity to obtain direct estimates of perceived fairness/equity avoiding lengthy listings of inputs and outcomes and the complex comparison of the resulting ratios which have plagued equity research.

Respondents were asked to make wage fairness/equity comparisons by focusing on the five predetermined referent categories: themselves, others in their bargaining unit, others in their counterpart bargaining unit, others performing nursing-related duties in the surrounding area, and

other

thes

fair

A cr

fr

mult

(300

fair

were

refe

of a

pay

in f

fair

inde

sati

a mo

fact

impo

Lawl

cont

pre

as s

rel

to

cri

others performing nursing related duties around the country. These scores represent unit-weighted perceptions of wage fairness/equity.

Weighted perceptions of fairness/equity were computed. A critical methodological issue is the specification of a framework to permit the identification and weighting of multiple referents used in evaluating the input/outcome ratio (Goodman, 1974; Goodman and Friedman, 1971). Perceptions of fairness/equity made in relation to each referent category were weighted by the respective importance score for that referent category (Refer to Part I). The arithmetic product of a reference group's importance score and the perception of pay fairness/equity made in reference to that group resulted in five weighted pay equity perceptions

The Dependent Variable: Pay Satisfaction. Pay fairness/equity may be differentiated as a causal but independent state which affects the perception of pay satisfaction. Empirical evidence has accumulated to support a model of pay satisfaction determined by a multiplicity of factors, of which, the perceived pay of referent others is an important component (Dyer and Theriault, 1976; Goodman, 1974; Lawler, 1971). Within such a framework, the relative contribution of multiple perceptions of equity to the prediction of pay satisfaction would indicate their existence as salient referents. Therefore, a multivariate test of the relationship between the perceptions of equity made relative to the five referent categories and the pay satisfaction criterion was performed.

Inde

and

subs

agre

scal

"und

subs

comp

summ

for

this

grou

ness

cond

Meth

to a

infl

and

III

was

for

ackr

to

app

imp

thi



Index (JDI) was selected because of its careful development and validation (Smith, Kendall and Hulin, 1969). The subscale consists of nine items. Respondents were asked to agree or disagree with descriptions of pay on a three-point scale, having the following labels: "agree," "disagree," "undecided." Internal consistency (Cronbach's alpha) of the subscale in the present study was .76. This estimate is comparable to that reported in earlier research (for a summary, see: Cook, Hepworth, Wall and Warr, 1981).

Table 3 presents coefficient alpha reliability estimates for the variables operationalized in the previous portion of this study. Test-retest reliability estimates for reference group importance scores and perceptions of pay fairness/equity were not available due to the single access conditions under which the survey was administered.

#### Method of Analysis

Two separate analytic procedures were performed in order to address the hypotheses set forth regarding the factors influencing the importance of pay reference groups (Part I) and the use of multiple reference groups (Part II) of Chapter III. In each of these analyses, stepwise multiple regression was the primary procedure employed. This procedure was used for several reasons. First, as other researchers have acknowledged (Heneman et al., 1978; Hills, 1980), it is time to progress from bivariate analyses to multivariate approaches with respect to the relationship between the importance of pay reference groups and their predictors. In this way, variables of key importance can more readily be

TABLE 3

## Coefficient Alpha Reliability Estimates

Variable	Total Sample	Number of Items	Coefficient Alpha Estimate
Cosmopolitan- Local Orientation	163	3	.45
Organizational Commitment	163	15	.90
Union/Association Commitment	163	37	.92
Pay Satisfaction	163	9	.76

ide

ana

var

the

the

dep

cat

inc

dis

pre

inc

add

Fin

ind

the

con

cor

int

res

aga

Pa

Ref

per

was

equ

pre

ref

identified. An alternative procedure of discriminant analysis was considered but rejected. The dependent variables of interest (i.e. perceived importance of each of the five pay referents) lie in five categories. An important theoretical assumption of discriminant analysis is that the dependent variable may fall in only one of a given number of categories. The use of a single category of referents is inconsistent with the literature reviewed and therefore discriminant analysis was rejected. Secondly, the relative predictive value of each of the independent variables included in the study may be assessed. This feature addresses the exploratory character of the present study. Finally, the effects of each variable may be assessed independently. Variance shared between variables entering the equation and that remaining in the predictor set may be controlled.

An inspection of iteritem correlation and zero-order correlation matrices was also performed prior to the interpretation of regression results. Spurious inferences resulting from interitem correlations can thereby be gaurded against

Part I - Factors Influencing the Perceived Importance of Pay Reference Groups. Five forward stepwise regressions were performed. The importance score of each reference category was regressed against the 14 predictor variables. Separate equations were estimated in order to determine those predictors significantly related to each of the five reference categories.

Table 4  
Interim Correlations for Variables Contained in Model

Independent Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Age (1)	--													
Length of Service (2)	.72***	--												
Educational Level														
Medium Level vs. Low Level (3)	-.12	-.02	--											
High Level vs. Low Level (4)	-.11	-.16	-.76***	--										
Intent to Quit (5)	-.13*	-.18	.05	-.04	--									
Wage (6)	.13*	.03	-.32***	.51***	.02	--								
Skill Level														
LPM vs. Less Skilled (7)	.17*	.22	.31***	-.23***	-.02	-.30***	--							
Medication LPM vs. Less Skilled (8)	-.11	-.10	.32***	-.17***	-.01	-.37***	-.25***	--						
Staff Nurse vs. Less Skilled (9)	-.17*	-.22	-.26***	.35***	.18*	.31***	-.22**	-.33***	--					
Supervisory vs. Less Skilled (10)	.20**	.12	-.22**	.32***	0.07	.76***	-.19**	-.29***	-.26***	--				
Cosmopolitan-Local (11)	-.12	-.06	-.10*	.08	.16*	.05	-.18*	-.07	.06	.04	--			
Organizational Commitment (12)	.35***	.39***	-.07*	-.04	-.25***	-.06	.15*	-.09	-.08	-.02	-.12	--		
Union Commitment (13)	.12***	.13	.06*	-.19**	-.18**	-.16*	.17*	-.01	-.18	-.13	-.18**	.15**	--	
Union Affiliation														
NSA vs. Steelworker (14)	-.01	-.15*	-.39***	.56***	.12	.88***	-.34***	-.50***	.61***	.58***	.10	-.11	-.26***	--

N=168      \*p .05      \*\*p .01      \*\*\*p .001

The variables and related hypotheses proposed in Chapter III were analyzed by inspection of interitem correlation and zero-order correlation matrices.

Simple two-tailed t tests were performed between the reference group importance scores reported by the MNA and Steelworker bargaining units. Five t tests were performed to discover differences in reported importance for each of the five referent categories.

Part II - Multiple Reference Groups. The second analysis focuses on whether single or multiple perceptions of pay fairness/equity are determinate of pay satisfaction. Pay satisfaction scores were treated as the criterion (dependent) variable and regressed against the five perceptions of pay fairness/equity using the full sample. Separate equations for the MNA and Steelworker subsamples were compared to identify differences in pay reference group usage.

## Results

Part I - Factors Influencing the Perceived Importance of Pay Reference Groups: Correlational Analyses. Table 4 presents interitem correlations for the independent variables contained in the model depicted in Figure 1. An examination of the personal characteristics category reveals significant correlations between age and length of service ( $r = .72, p < .001$ ) and age and intent to quit ( $r = -.13, p < .05$ ). These associations are not unexpected: more senior employees tend to be older and less likely to quit the organization. Educational levels were dummy coded and such dummy variable levels should be related.

skill

sign

tion

leve

skill

comm

-.13

sugg

for

affi

nega

MNA

lice

unic

Busi

cond

of A

need

stru

are

pote

rise

inco

leve

(co

Within the job characteristics category wage level and skill level (a dummy coded set of four variables) are significantly related at the  $p < .001$  level. This association reflects the standard organizational practice of setting levels commensurate with skill. The dummy coded levels of skill are intercorrelated (as expected).

Within the group identification variables category union commitment is negatively correlated with cosmopolitanism ( $r = -.13$ ,  $p < .01$ ). The latter association confirms the suggestion from the dual allegiance literature that the two forms of identification are not mutually exclusive. Union affiliation (a dummy coded variable) and union commitment are negatively associated. Registered nurses (members of the MNA) are not as committed to their association as are licensed practical nurses, orderlies, and aides are to their union (Steelworkers). The correlation is not unexpected. Business unionism (emphasis on wages, hours and working conditions) is a traditional focus of the United Steelworkers of America. This focus is congruent with the instrumental or need satisfaction dimension of the union commitment construct.

Interitem correlations between categories of variables are also evident. As these correlations strengthen, the potential difficulties with statistical multicollinearity rise. Interpretation of multiple regression analysis incorporating these variables can become problematic. Wage level and levels of education covary as to be expected (correlations range from  $r = -.32$  to  $r = .51$ ,  $p < .001$ ).



Table 5

Zero-Order Correlations for Variables Contained in the Model

Independent Variable	Self Referent	Members of Same Bargaining Unit	Members of Other Bargaining Unit	Workers in Local Area	Workers Around Country
Age	.07	.09	-.12	0.09	-.20**
Length of Service	.11	.10	-.04	-.17**	-.24***
Educational Level					
Medium Level vs. Low Level	-.02	-.03	-.04	.09	.02
High Level vs. Low Level	-.02	-.18**	.09	-.11	-.01
Intent to Quit	-.13*	-.07	.14	.05	.20**
Wage	.07	-.18**	.09	-.08	-.01
Skill Level					
LPN vs. Less Skilled	-.09	.19**	.09	-.01	-.08
Medication LPN vs. Less Skilled	-.01	.04	-.05	-.08	.08
Staff Nurse vs. Less Skilled	-.06	-.04	-.01	-.08	.08
Supervisory vs. Less Skilled	.04	-.20**	-.09	-.01	-.04
Cosmopolitan-Local	.03	-.01	-.05	-.01	.07
Organizational Commitment	.10	.12	-.13	-.15**	-.21**
Union Commitment	-.05	.18**	.01	-.13*	-.08
Union Affiliation MNA vs. Steelworker	.07	-.18**	.02	-.07	.05

N=168 \*p .05 \*\*p .01 \*\*\*p .001

Wag

.00

as

(co

the

the

var

wit

uni

.00

ski

cor

ver

lev

var

ide

In

dir

mag

car

rec

the

mo

pe

le

Wage level and union affiliation also covary ( $r = .88$ ,  $p < .001$ ). This association reflects the fact that MNA members as a group are paid more than Steelworkers.

Skill level is intercorrelated with level of education (correlations range from  $r = -.22$  to  $r = .35$ ,  $p < .001$  among the two sets of dummy variables). This association reflects the level of education which is required for entry into the various position levels. Skill level is also intercorrelated with membership in either the MNA or Steelworkers bargaining units (correlations range from  $r = -.50$  to  $r = .58$ ,  $p < .001$ ). This intercorrelation reflects the fact that higher skill levels are employed within the ranks of the MNA. These correlations are congruent with Table 2 which indicates that very few ( $n = 3$ ) Steelworkers function at the staff nurse level.

Table 5 displays the zero-order correlations for the variables in the model with each of the five referents identified to be of relevance for wage comparison purposes. In general, the reported correlations are in the predicted direction with regard to the five referent categories. The magnitude of the relationships and their level of significance do differ across the five referent categories. With regard to the number of significant correlations observed and the number predicted, the results in Table 5 demonstrate a modest relationship for the variables in the model and the perceived importance of the five pay referents.

Within the personal characteristics category, age and length of service were found to be negatively correlated with

the perceived importance of pay referents external to the organization. Specifically, age was negatively associated with the importance of workers around the country ( $r = -.20$ ,  $p < .01$ ). Length of service was negatively associated with the importance of workers in the local area ( $r = -.20$ ,  $p < .001$ ) or around the country ( $r = -.24$ ,  $p < .001$ ). Neither of these variables were significantly related ( $p < .05$ ) to the perceived importance of the remaining pay referents: self or internal (members of same or other bargaining unit) pay referents. A high level of education was significantly more related ( $r = .18$ ,  $p < .01$ ) with the importance of employees in the same bargaining unit than for low educational levels. The intention to quit the organization was significantly correlated with the use of external (works around the country) pay referents ( $r = .20$ ,  $p < .01$ ).

Within the job characteristics category the lowest and highest levels of the four skill level variables were found to be significantly related to the use of pay referents internal to the organization. Moreover, both of these variables related to the importance of similar others (members of the same bargaining unit). Employees in the low skill level (LPN's) tend to use members of the same bargaining unit more than nurses aides and orderlies ( $r = .19$ ,  $p < .01$ ). High skill levels (supervisory nurses) tend to use members of their bargaining unit significantly less than nurses aides and orderlies ( $r = -.20$ ,  $p < .01$ ).

Wage level was found to be negatively correlated with the use of perceived importance of members of the same

bargaining unit as pay referents ( $r = -.18, p < .01$ ). Wage level was not found to be significantly correlated with any of the remaining four pay referents.

All but one of the four group identification variables exhibited a degree of association with one or more of the pay referents. Cosmopolitan-localism was not found to be significantly correlated with any of the available pay referents. In terms of magnitude, organizational commitment had the strongest relationship with a tendency to not use external pay referents. This was true for both workers in the local area ( $r = -.15, p < .01$ ) and workers around the country ( $r = -.21, p < .01$ ). Organizational commitment was not associated with the use of personal or either of the internal pay referents.

Union commitment was positively correlated with the perceived importance of members from the same bargaining unit as pay referents ( $r = .18, p < .01$ ). Union commitment was not related to any of the remaining four pay referents.

Union affiliation (MNA versus Steelworker) was negatively associated with the importance of members of the same bargaining unit. Members of the MNA used their fellow association members as pay referents significantly less ( $r = -.13, p < .01$ ) than Steelworkers did. Membership in the MNA was not correlated with the perceived importance of any of the four remaining pay referents.

Part I - Factors Influencing the Perceived Importance of Pay Reference Groups: Regression Analyses. Table 6 presents the results of stepwise regression analyses for the five pay

Table 6  
Results of Stepwise Regression Analyses for Pay Reference Groups,  
By Total Sample and Individual Bargaining Units

INDEPENDENT VARIABLE	Total Sample					MNA					Steelworker							
	Beta Weight	Self	Same	Other	Local	Country	Beta Weight	Self	Same	Other	Local	Country	Beta Weight	Self	Same	Other	Local	Country
Age		.10			.07	-.06		.01		-.25	.16			.01	.14		.02	-.28
Length of Service		.11			-.17*	-.21**		.21**		-.03	.01			.21**	.09		-.24**	-.08
Educational Level																		
Medium Level vs. Low Level		.01			.08	.01		.03		-.03	-.01			.03	.04		.07	-.01
High Level vs. Low Level		.19**			-.14	.04		-.08		.03	.01			-.08	.22**		0.14	-.03
Intent to Quit		.10			.01	.16*		.21*		-.07	-.16			.21*	.18		.10	.25**
Wage		-.14			.08	-.01		.02		.26**	.01			.02	-.08		-.02	.01
Skill Level																		
LPN vs. Less Skilled		.18*			.04	-.03		-.14		--	--			-.14	.19		.02	-.03
Medication LPN vs. Less Skilled		.07			.02	.02		.14		--	--			.14	-.10		-.06	.03
Staff Nurse vs. Less Skilled		-.15			-.12	.01		.01		-.09	-.07			.01	-.13		.03	-.02
Supervisory vs. Less Skilled		-.21**			.01	.01		--		.09	.07			--	--		--	--
Cosmopolitan-Local		.05			-.01	.03		.01		-.17	-.03			.01	.06		.01	-.04
Organizational Commitment		.08			-.19	-.11		.07		-.16	.07			.07	.05		-.17	-.15
Union Commitment		.16*			-.07	-.02		-.14		.06	-.29*			-.14	.11		-.02	.04
Union Affiliation		-.14			-.10	.01		--		--	--			--	--		--	--
MNA vs. Steelworker		.11			.03	.08		.10		.07	.09			.10	.05		.06	.15
R <sup>2</sup> Adjusted		5.21***			5.00*	7.25***		5.34**		4.67**	6.18**			5.34**	4.86**		6.21**	8.28**
F - Value																		

N = 168  
a Beta weights not reported - no variables entered equation at .05 level  
\*\*p < .01  
\*\*\*p < .001  
p < .05

N = 168

\*p < .01

\*\*p < .001

a Beta weights not reported - no variables entered equation at .05 level

\* p < .05

referents. These results are provided for the total sample as well as the two major subsamples of each bargaining unit (MNA and Steelworkers). For each pay referent standardized partial regression coefficients are shown only where at least one of the predictor variables entered the stepwise regression equation at a statistically significant level ( $p < .05$ ).

In general, it can be observed that relatively few of the variables entered the regression equations. For those variables which did enter the equations, none of the partial regression coefficients exceeded .29. Moreover, the maximum amount of variance accounted for ( $R^2$ ) in the perceived importance of any pay referent did not exceed fifteen percent.

With respect to the personal characteristics category length of service within the organization emerged as a significant predictor of external pay referents. More senior individuals indicated that workers in the local area ( $p < .05$ ) and around the country ( $p < .01$ ) were of significantly less importance. Additionally, in the Steelworker subsample, employees with greater amounts of service perceived self referents to be significantly important ( $p < .01$ ). This predictive relationship did not hold in the MNA subsample.

Employees having high (versus low) levels of education perceived their fellow bargaining unit members to be of greater importance than those having low levels of education ( $p < .01$ ). The predictive value of a high educational level held in the Steelworkers subsample where employees perceived employees in their bargaining unit to be of greater impor-

tance than those having lower educational levels.

Intention to quit the organization was a significant predictor of external referents (other health care employees around the country,  $p < .05$ ). The predictive value of intention to quit did not hold for the MNA subsample. On the other hand, Steelworkers who intended to quit perceived these external referents to be of importance ( $p < .01$ ) as well as self referents ( $p < .05$ ).

Within the job characteristics category wage level was not predictive of the importance of any of the five pay referents for the sample as a whole. A significant relationship did emerge in the MNA subsample where it was found that those nurses whose jobs paid higher wages perceived the Steelworkers to be important pay referents ( $p < .01$ ).

Skill level was predictive of the perceived importance of employees in the same bargaining unit for the sample as a whole. Levels of skill were dummy coded and therefore must be interpreted in relation to the base group (least skilled). LPN's perceived other Steelworkers to be of greater importance ( $p < .05$ ) than employees from the lowest skill classifications (nurses aides and orderlies). Supervisory personnel perceived employees within their bargaining unit to be of less importance than did employees from the lowest skill classifications.

Within the group identification category union commitment was the sole variable found to be predictive of pay referent importance. With regard to the total sample union commitment was a significant predictor of the importance of



fellow bargaining unit members as pay referents ( $p < .05$ ). As the commitment of MNA members to their Association increased, health care workers in the local area decreased in importance as pay referents ( $p < .05$ ).

It can be readily observed in Table 6 that there exists a differential predictability of pay referents depending upon whether the total sample or individual subsamples are being viewed. This is true of self referents, employees in the same bargaining unit and employees in the other bargaining unit in particular. With this in mind it is surprising that union affiliation did not emerge as a significant predictor of the importance of these pay referents. An analysis of the importance of pay referents between the two bargaining units was performed. Table 7 presents the results.

Perhaps the most salient finding of this analysis is that both the MNA and Steelworkers place similar importance on each of the five pay referents. The notable exception is the importance each group places upon its own members as pay referents. Members of the MNA perceive fellow MNA members to be of significantly less importance as pay referents than Steelworkers regard their fellow bargaining unit members ( $t = -2.33, p < .05$ ).

Overall, Table 7 indicates that the following rank ordering of the importance (most to least) of pay referents is common to both the MNA and Steelworkers: self referent, members of same bargaining unit, members of other bargaining unit, workers around country, workers in local area. The lack of significant relationships between the predictor set

Table 7

Differences in Perceived Importance of Pay Reference Groups  
Between MNA and Steelworker Bargaining Units

---



---

Reference Group	MNA (N=63)	Steelworker (N=100)	t-statistic
Self Referent	36.31 (19.53) <sup>a</sup>	33.5 (19.33)	.91
Members of Same Bargaining Unit	19.76 (11.90)	24.59 (13.93)	-2.33*
Members of Other Bargaining Unit	18.73 (12.33)	13.43 (10.96)	.19
Workers in Local Area	11.50 (3.91)	12.95 (11.23)	-.89
Workers Around Country	14.82 (10.84)	13.43 (13.76)	.68

---

<sup>a</sup> Standard deviations reported in parentheses

Two-tailed test of significance

\*p < .05

an

re

re

de

se

or

sut

res

and

acc

his

dir

the

sta

inf

Dir

ate

the

in

sat

equ

and

pres

poss

mod

and the five pay referents makes the interpretation of this result problematic.

Self referents appear to be the primary referent for the respondents both in terms of perceived importance and as a determinant of their overall pay satisfaction. Length of service is a significant predictor of the importance of self or personal wage history referents for the Steelworker subsample. When indicating the importance of self referents respondents were asked to consider their skills, knowledge and abilities. These performance-related attributes are acquired over time. As individuals develop a personal wage history they come to rely upon what is arguably the most directly experienced, and most relevant referent available to them; themselves. Certainly, self referents are standards about which any given individual has the most information.

#### Part II- Multiple Pay Referents: Correlational Analyses.

Direct estimates of pay equity were taken using a fractionated scale. Measures of pay equity made relative to each of the pay referents were obtained using the procedure described in Chapter III and were then correlated with the pay satisfaction criterion variable.

Table 8 displays the zero-order correlations of the pay equity perceptions made in relation to the five pay referents and pay satisfaction. Interitem correlations are also presented. With regard to interitem associations the primary observation is that all of the equity measures have a moderate relation with each other. Interitem correlations



range from  $r = .27$  to  $r = .46$ ,  $p < .001$ . Fundamentally these results would indicate a generalized or inconsistent perception of equity across all referent sources.

Zero-order correlations of each equity measure with the pay satisfaction criterion indicate that five measures are significantly related to pay satisfaction. Moreover, the strength of the association across these five measures is subject only to modest variation ( $r = .27$  to  $r = .48$ ,  $p < .001$ ). Each pay equity measure bears a significant relationship with the dependent variable of approximately the same magnitude.

#### Part II - Multiple Pay Referents: Regression Analyses.

Table 9 presents the results of stepwise regression analyses using each of the five pay equity perceptions as a predictor of pay satisfaction. These results are shown for the total sample as well as for each of the two subsamples. With regard to the total sample pay equity perceptions made relative to a self pay referent are the best predictors of pay satisfaction ( $p < .01$ ). Equity perceptions made relative to employees in the other bargaining unit bear the second strongest predictive relationship ( $p < .01$ ). This is not unexpected. An examination of the zero-order correlation matrix in Table 8 shows these perceptions having the second strongest relationship with the criterion measure ( $r = .35$ ,  $p < .001$ ). The moderate level of multicollinearity between the predictor variables suggests that perceptions made relative to workers around the country could have easily allowed this variable to enter the equation. The shared variance between

Table 9

Results of Stepwise Regression Analyses For  
Perceptions of Pay Fairness/Equity on Pay Satisfaction by  
Total Sample and Individual Bargaining Units

---



---

Independent Variable	Total Sample Beta Weight	MNA Beta Weight	Steelworker Beta Weight
Self Referent	.41**	.18	.55**
Members of Same Bargaining Unit	.11	.03	.13
Members of Other Bargaining Unit	.19**	.23**	.13**
Workers in Local Area	.03	.04	.13
Workers Around Country	.11	.35**	.09
R <sup>2</sup> adjusted	.27	.25	.29
F - Value	29.82***	11.27***	39.40***

---

N = 168      \*p < .05      \*\*p < .01      \*\*\*p < .001

perceptions of the same bargaining unit and workers around the country probably excluded the latter referent from entering the equation.

An examination of the regression analyses by subsample sheds additional light on the results. Two pay equity referents effect the perception of pay satisfaction for both the MNA and Steelworker subsamples. The pay satisfaction measure bears a significant relationship to equity perceptions made relative to workers around the country and members of the other (Steelworker) bargaining unit for MNA members ( $p < .01$ ). For Steelworkers, self referents and members of the other bargaining unit (MNA members) are pay equity referents bearing the strongest predictive relationship with pay satisfaction ( $p < .01$ ).

### Summary

Personal characteristics, job characteristics and group identification variables do influence the perceived importance of pay reference groups. The predictive value of variables within each category varied depending upon the particular referent under consideration. The amount of variance which could be accounted for in the perceived importance of any of the five referents was modest (coefficients of determination ranged from three to fifteen percent). Indeed when the total sample is viewed (see Table 6), significant amounts of variance could be accounted for in only three of the five potential referents. Self referents were judged to be the most important standard by which the equitability of one's pay is determined.



Low to moderate levels of intercorrelation between the predictor variables did not substantially violate the statistical assumptions of the regression analyses performed in order to determine the independent effects of each predictor variable. In general, the results of these analyses indicate that few of these variables are potent forces in influencing the perceived importance of pay referents. Several theoretical and methodological issues require inspection: inadequacies in the proposed model for describing the referent selection process, and possible methodological and statistical considerations. Each of these issues is dealt with in the next chapter.

Convincing evidence is seen to exist for the usage of multiple pay referents. Moderate to substantial intercorrelations between the five independently recorded perceptions of pay equity indicate a global, and to some extent, undifferentiated perception of equity tends to exist regardless of the specific reference sources which generated it. More importantly, however, perceptions of pay equity made in relation to at least two referents independently accounted for significant amounts of variance in the pay satisfaction criterion variable.

The results obtained from the field study are discussed in Chapter V in terms of the important issues identified in the introductory remarks of Chapter I and the specific hypotheses set forth in Chapter III.

## CHAPTER V

## DISCUSSION AND CONCLUSIONS

Discussion: Factors Influencing the Perceived Importance of  
Pay Reference Groups

This study attempted to develop and substantiate a model of the factors which influence the perceived importance of pay referents. The model drew upon the work of Goodman (1977) who identified personal and job characteristics as important determinants. Group identification and membership considerations were integrated into this framework to provide a more complete conceptualization of the process.

A number of conclusions can be drawn from the results of the present study. Variables from within each of the three categories of influential factors (personal, job and group identification) were predictive of the importance of one or more pay referent groups. The predictive value of these variables was found, in general, to hold for both the sample as a whole and for each of the individual subsamples. Despite the fact that certain variables were consistently predictive of pay referent importance, several considerations must be noted. These considerations are statistical or methodological in nature and are noted prior to the discussion of each influential category.

Considerations. Many of the variables that the theories employed or the empirical literature suggested to be signifi-

cant predictors of a specific pay referent's importance were not for the sample population used. On an initial basis, one might suspect that problems of multicollinearity among the predictor variables could account for this. Indeed, several of the variables were intercorrelated with variables within their respective category and with variables from other categories as well. An examination of the zero-order correlation matrix of these variables with the five pay referents (Table 5) reveals that concerns over high multicollinearity are not well founded. It can be seen that few of the zero-order correlation coefficients are significant ( $p < .05$ ). One can conclude that the low number of significant partial regression coefficients observed in Table 6 reflects a true lack of predictive ability for much of the predictor set rather than statistical artifacts.

A second consideration is the lack of overall predictive power of the regression equations for each of the five pay referents. The coefficients of determination ("variance explained") are relatively low ( $R^2 = .03$  to  $.15$ ). The low coefficients of determination cast some doubt on the utility of these variables as predictors of pay referent importance. Indeed, when viewing the total sample, none of the independent variables were significant predictors of importance for two of the pay referents: self and other bargaining unit employees. With regard to personal and job characteristics, the lack of predictive power is consistent with the results obtained by other researchers (Heneman et al., 1973; Hills, 1980; Goodman, 1974).

Sample size considerations are also relevant. In the present study total sample size was 163 respondents. The relatively large number of independent variables used is partially due to the necessity of dummy coding several categorical variables. In such instances the statistical power (ability to guard against Type I error) can be diminished. An associated difficulty is the diminishing reliability of the partial regression coefficients in each of the regression equations. Estimates of the reliability of the coefficients are not possible due to an inability to obtain additional samples from the respondent population. The reader should also note that since the regression analyses performed on the two subsamples utilized even smaller numbers of respondents (MNA = 63, Steelworkers = 100) these partial regression coefficients must be interpreted with caution. With these cautionary provisions in mind we now turn to the interpretation and discussion of the survey results.

Personal Characteristics. Within the personal characteristics category more senior employees expressed that other health care employees in the local area and around the country (both organizationally external) were not of significant importance to them as pay referents. This finding supports the notion that the instrumentality of external referents is low for individuals having invested lengthy amounts of time establishing organizationally specific skills and role relationships (Andrews and Henry, 1963; Sheldon, 1971; Hrebiniak and Alutto, 1972). In unionized settings length of seniority is a recognized personal attribute or input which is deemed

compensable. Employees who either leave their current employer and join another unionized hospital or obtain employment in a nonunionized setting forfeit these seniority rights. While it was expected that more senior employees would tend to use internal pay referents, this relationship was not supported.

The strong intercorrelation between age and seniority ( $r = .72$ ,  $p < .001$ ) coupled with age's significant zero-order correlation with external pay referents accounts for the lack of predictive power for this variable. The stronger association of seniority and external referents accounted for most of the shared variance which age could offer to the multiple regression equation.

More senior employees in the Steelworker subsample perceived self pay referents to be of importance. It can be inferred that as employees develop a salary history, they tend to refer to it as a precise standard to evaluate the adequacy of their pay in relation to their longevity. This interpretation is consistent with that of Hills (1980) and Heneman et al. (1973). Since pay level increases with seniority the self referent should also enhance feelings of self worth and esteem (Goodman, 1977). The current findings provide support for the instrumentality of self referents in providing accurate and self-enhancing standards of reference for more senior employees.

Educational level was operationalized as two dummy variables. The results indicate that employees having higher educational levels tend to use employees from the same bar-

gaining unit as comparative pay referents. These findings provide limited support for the notion that individuals select similar others as pay referents particularly where performance related attributes are the dimension of comparison (Geothals and Darley, 1973). Virtually all (97%) of the MNA bargaining unit and about half (43%) of the Steelworkers obtained a high level of education. Comparing the highest and lowest levels of educational attainment we find, in actuality, only four years of education separating these two groups. The level of educational attainment varies to a much greater extent in the work force population as a whole. With this in mind, the present method of operationalizing educational attainment does not provide for a sufficient test of the effects of this variable. The present study's inability to replicate the association of higher educational levels with external pay referents reinforces this interpretation.

Predispositions to leave the organization were associated with the use of external pay referents as predicted. References to health care employees around the country gained importance with an increasing probability of quitting the organization. Within the Steelworkers' bargaining unit, it can be seen that not only are external pay referents used but self referents gain importance, as well. A possible interpretation of these results is that the perceived inequity which results from a comparison of what an employee receives in relation to what they feel they ought to receive (relative to some internalized referent) leads to a search of the external labor market. Intentions to quit the organization

were not associated with the importance of internal pay referents for the total sample as predicted. Interpretations requiring the specification of causal sequences can only be made on a tentative basis. However, the intention to leave an organization is regarded as an outcome state which results from inequitable exchange relationships (Adams, 1965; Homans, 1961; Telley, French and Scott, 1971). It is consistent with equity theory formulations that external referents are sought out subsequent to the initial perception of pay inequity relative to an internalized standard. Within this framework, external referents achieve their importance on the basis of their instrumentality in providing information regarding alternative employment (Finn and Lee, 1972; Goodman, 1977). Self referents, rather than similarly employed individuals internal to the organization, appear to be the catalyst on the basis of the present findings.

Job Characteristics. Job characteristics were a second category of factors hypothesized to influence the importance of pay referents. Levels of skill provided valuable insight into the functioning of similarity and instrumentality. The evidence, however, is not highly conclusive. Licensed Practical Nurses did demonstrate a significant preference for members of the same bargaining unit relative to Nurses Aides, Orderlies, Clerks and Ward Helpers (who compose 28% of the bargaining unit). The evidence for the importance of similar others is clear in this instance. Neither LPN's or Medication LPN's perceived the MNA unit to be significantly important for pay comparison purposes. The expression of impor-

tance of this group would have indicated the instrumental placement of one's condition at a financial disadvantage. Accordingly, no support can be stated for Martin's (1979, 1981) or Oldham's et al. (1982) contention that instrumental comparisons are operating to enhance self-concepts or lay claim to a higher wage level.

Nurses employed in supervisory skill levels perceived their union (the MNA) to be significantly less important than the lowest skill level perceived theirs to be (Steelworkers). This result was unexpected. A possible interpretation of this result is that of a "ceiling affect". Supervisory nurses occupy the highest skill level within the MNA bargaining unit (low skilled staff nurses occupy over half of the remaining positions). Consequently, comparisons in which supervisory nurses view the pay of their own union members are likely to result in the use of less skilled and lower pay referents, i.e., non-instrumental referents. This interpretation is consistent with the results of Table 7 which indicate that the MNA bargaining unit, as a whole, did perceive their fellow members to be as important a pay referents as Steelworker members considered their fellow unionists to be. Neither of the MNA skill levels perceived the Steelworker classifications to be of significant importance as pay referents. Since negative pay references do not appear to have been engaged in, conclusive statements regarding the instrumentality of such comparisons cannot be made.

Stronger or more definitive statements with respect to the functioning of similarity and instrumentality are not



possible due to the lack of significant partial regression coefficients in the "same" and "other" bargaining unit referent categories. The researcher is without a "critical test" or key contrasts by which a clear pattern of similarity versus instrumentality may be discovered.

Evidence that downward pay comparisons are occurring comes forth from the wage level variable. We find that as the wage levels of MNA members increase (through some combination of seniority and position level) they tend to use Steelworkers as pay referents. This trend was not evident in the sample as a whole nor the Steelworker subsample. This would indicate that downward comparisons are occurring where the average pay level is higher to begin with. This finding is contrary to what had been hypothesized based on a preponderance of the literature.

The less frequent finding of downward pay comparisons has been documented where the size of pay differentials between employee classes is an indication of relative organizational worth or individual advancement through the organizational hierarchy (Andrews and Henry, 1963; Goodman, 1974; Martin 1978). With the current sample, these downward comparisons would indicate the MNA members are focusing on Steelworker wage levels as an indication of their relative success in the collective bargaining process. Historically, the maintenance of "adequate" wage differentials between registered nurses and LPN's has been a fundamental bargaining objective for the more highly paid RN group (Handren, 1933; Miller, 1930). The differential itself is symbolic recogni-

tion (and financial, of course) of the greater skill and professionalism RN's are acknowledged to possess to their LPN counterparts.

Group Identification and Membership. Issues of multicollinearity become more germane with regard to the group identification/membership category of predictors. Moderate levels of intercorrelation between these variable can be seen. More importantly, these variables are also intercorrelated with variables from the personal and job characteristics category. As such they "compete" for entry into the regression equation with their intercorrelated counterparts. Interpretation of these partial regression coefficients can, therefore, become problematic. We, therefore turn to an initial interpretation of the zero-order correlation coefficients in Table 5.

The complete lack of association between the cosmopolitan-local construct and any of the five potential pay referents brings into question the theoretical basis by which this variable would influence pay referent importance. The construct, as operationalized, captures Gouldner's (1957, 1958) dimensions of commitment to specialized skills and organizational loyalty. The construct defined in this manner excludes provisions for utilitarian dimensions. The financial or economic benefits of identifying with professional groups external to the organization (or internal, for that matter) are not integral aspects of the construct. Two interpretations of the present results are possible.

The experimental evidence supporting the use of external

pay referents by professionals has typically employed such measures as educational level, position level, judged professional ability or membership in professional societies to indicate professionalism. (Finn and Lee, 1972; Haire et al., 1963; Carol and Tombari, 1980). The method of operationalization employed in the current study focuses on commitment to specialized skills. While commitment to such skills is conceived to be an important aspect of professionalism, it is a highly indirect measure or inadequate proxy for the construct of professionalism itself. A related issue is the extent to which the respondent population would exhibit cosmopolitan or professional characteristics to begin with. The respondents in the present study were hospital employees (supervisory nurses being the most skilled) in a remote region in Northern Michigan. Legitimate questions about the validity of the concept of cosmopolitanism for employees who may be regarded as "semi-professionals" at best (Katz, 1969) can be raised.

Questions regarding the professional status of the nursing staff in the present study are further raised by the lack of significant correlations of key predictor variables with outside pay referents. Cosmopolitanism, high skill levels, and high educational levels failed to relate with the perceived importance of pay referents external to the organization. This three dimensional cluster of attributes is often regarded as a hallmark of professional standing (Etzioni, 1969). Bennis et al. (1953) and more recently Grims and Berger (1970) have argued that the concept of pro-

professionalism may require some rethinking at least in regard to the nursing profession. Professional advancement and recognition within the broader professional group comes from advancement within administrative or educational areas in the local nursing situation. Bennis et al. (1958) contend (and the present author agrees) that unless nursing and other "professional" groups can develop an organizational hierarchy which will create reward systems for pursuing those functions for which one is trained, a dysfunctional cycle of gaining job specialization, low commitment to the local structure, and high mobility and turnover will result.

A second interpretation is that commitment to specialized role skills or adherence to professional norms of conduct are not the operative dynamics which influence a pay referents importance, but rather the association with individuals or actual membership in groups for economic ends. The idea that cosmopolitans are members of the larger "professional community" affords them "membership" in a highly abstract group. Membership in business organizations or in unions requires continuing face-to-face interpersonal relations with other members which occur, in these instances, for specific financial goals. Membership in these organizations is, at least initially, predicated on some economic basis of association where the benefits of membership are continually evaluated. Of course, the benefits of membership in groups may be nonfinancial. Individuals do identify with groups on the basis of commonly held values and goals. Many of the respondents in the present study indicated in their comments

that they were nurses because they "wanted to help people". It would appear that the distinctive feature of group norms or values which do influence pay referent importance is that they incorporate some dimension of acceptable distribution or adequacy of the level of remuneration. The commitment to organizations and unions (as operationalized in the present study) better reflects this instrumental dimension as a basis of group identification.

Organizational commitment evidenced a significant and negative zero-order correlation with the importance of external referents (local and around the country) as predicted. This group identification variable was not found to be a significant predictor in the regression equations for these two referents, however. Two possible sets of conditions can account for this (and probably a combination of both is the most adequate explanation).

First, organizational commitment was found to share significant amounts of variance with length of service and intentions to quit the organization. These latter two variables were found to enter the regression equations for external referents. As a result, little variance was left "to be explained" by the commitment variable.

Secondly, the conceptualization and operationalization of the organizational commitment construct may have been deficient for the purposes of the present study. The organizational commitment scale developed by Lyman Porter and his colleagues was used (Mowday, Steers, and Porter, 1979; 1932; Porter et al., 1974). This measure conceives of commitment

as a desire to remain with the organization, internalizing values and goals of the organization, and a willingness to exert effort on its behalf. Defined in this manner, commitment focuses on the moral involvement an individual may develop i.e., an internalization of values. It is an affective response to the social system (Angle and Perry, 1985). Alternative conceptualizations of organizational commitment stress that attachment to organizations derives from an economic exchange where members bond to the organization through parsimonious extrinsic outcomes on the basis of costs and benefits (Ritzer and Trice, 1969; Becker, 1960). The distinction between these two forms of commitment has been characterized as moral versus calculative involvement (Angle and Perry, 1985; Etzioni, 1975). On the basis of the present findings, it is argued that a perceived commonality of values or shared sense of purpose are inadequate conceptualizations of the identification mechanism serving to influence an individual's choice of referents. It is, rather, the nature of the exchange relationship between the individual and the group which determines the extent of identification and, in turn, the use of the group as a referential standard. In this sense, organizational identification might be termed the desire to maintain membership. Individuals who perceive the organization to be an important and continuing source of rewards which can be obtained through equitable exchange would tend to identify with it.

Union commitment was found to be predictive of the importance of similar others (members of the same bargaining

unit) as pay referents as predicted. The underlying basis of union commitment (as operationalized using the scale developed by Gordon et al., 1930) is a recognition of the union's ability to provide important benefits to its members. Individuals who express high amounts of loyalty to the union perceive an ability on the part of the labor organization to advance the work-related interests of the membership. Identification with the union based upon a shared ideology that unions safeguard the interests of workers clearly represents the instrumental nature of the attachment. Employee affiliation with other similarly employed union members through direct contact and the development of shared beliefs (norms) about acceptable work-related outcomes are important aspects of this loyalty (Gordon et al., 1930; Kidron, 1973). (Generally, these are largely the mechanisms by which reference groups come to function as pay referents (Martin, 1931)). The current findings reinforce these notions. Union members committed to their labor organization tended to use fellow members as a standard to evaluate the fairness of their pay.

The zero-order correlation results indicate members of the MNA referred to their fellow association members as pay standards significantly less than Steelworkers referred to theirs. These results are consistent with the effects found for employment in higher skill levels (supervisory positions). This, of course, is a relative index of importance. Significant correlations between the union affiliation variable and "members of the other bargaining unit" are also required in order to draw definitive conclusions with regard

to the impact of similarity and instrumentality. Unfortunately, no such correlations were obtained.

Table 5 displays six variables having significant zero-order correlation coefficients with members of the same bargaining unit. Union affiliation, the sixth variable, can be seen to be significantly intercorrelated with the other five. Four of the other five variables display significant partial regression coefficients with members of the same bargaining unit. Due to the high multicollinearity of these predictor variables with membership in the MNA, it is not surprising that a significant effect is not demonstrated for union affiliation.

To summarize, the results of the present study provide mixed evidence in support of the model depicting factors influencing the perceived importance of pay referents. While there is evidence to support the notion of similarity between the comparer and referent as a fundamental dynamic upon which perceived importance is based, instrumentality appears to be the primary mechanism through which the factors operate. The predictive value of the model is limited with regard to pay referents employed in the current study. Even so, personal and job characteristics provide systematic and significant influences on the referent standard an individual perceives to be important in the evaluation of their pay.

Group identification and membership do influence the importance a pay referent may be perceived to have. This is particularly true for groups which are viewed as sources of economic reward or are instrumental in obtaining them.



Discussion: Multiple Pay Referents

This study also investigated the possibility of concurrent usage of multiple pay referents. The extent to which perceptions of pay equity (made in relation to a variety of potential referents) independently account for significant amounts of variance in an overall reaction of pay satisfaction (the criterion) is argued to be evidence for this phenomenon's existence. (Goodman, 1974; Martin, 1932).

The intercorrelations between the pay equity measures are seen in Table 3 in moderate to substantial levels. One interpretation of this finding is that common method variance is operating to "inflate" the true relationship between these perceptions. When using one method of measurement or scales to collect data on a series of items, the tendency of respondents to give similar or patterned responses is well documented. While a common method may be serving to inflate the true relationship between the five equity perceptions, it is reasonable to believe that the effect is negligible. The number of perceptions asked for in the fractionated format was small and should not have served to engender a patterned response. In essence, the results do indicate a generalized perception of pay equity does exist for the current sample.

The results of the regression analyses must be interpreted with the following qualification in mind. The equity measures indicate the degree of perceived pay equity/inequity that the individual perceives, rather than the importance of the referent to which it was made. The distinction being made here is that these measures indicate degree rather than

importance. With this in mind, we can see in Table 9 that the pay satisfaction experienced by the total sample is most determined by perceptions made relative to self referents (primarily) and with members of the other bargaining unit. In the case of self referents, the strength of the perception coincides with the importance attributed to the referent.

Members of the MNA largely base this perception of pay satisfaction on what other RN's are perceived to be earning around the country. Whether these nurses have accurate information about labor market pay rates for RN's is a separate issue. The amount of pay equity perceived in relation to the Steelworker bargaining unit is the second greatest influence on RN pay satisfaction. The traditional collective bargaining objective of RN units to maintain an appropriate wage differential with LPN's is evidenced by this referent's influence. In the latter instance, once again we find evidence of downward pay comparisons. For the Steelworker bargaining unit, pay satisfaction is largely based upon perceptions of equity made relative to a self referent (relative to what they "ought" to be earning given their skills, knowledge and abilities). Approximately one-third of the employees within this union are from the lower skill levels: orderlies, clerks, nurses aides, and ward helpers. The remainder of the bargaining unit is composed of equal parts of LPN's and medication LPN's. On the basis of the present results, these individuals rely upon this internal standard as a primary pay referent. The pay satisfaction of Steelworkers is also significantly effected by the perceived input/outcome ratios of

RN's. The present results using direct estimates of pay equality in relation to multiple reference standards substantiate earlier research suggestive of multiple referent usage (Goodman, 1974; Finn and Lee, 1972; Hills, 1930). Respondents in the current study did not appear to use a boundless variety of reference sources, however. With regard to the total sample and each subsample, two sources were employed. This finding is supportive of Oldham et al. (1932) who found that most individuals use two or fewer referents when judging the complexity of their jobs. Goodman's (1974) contention that most individuals use multiple referents also receives support. However, while an individual may be aware of a large number of potential pay referents (five or more) little support is demonstrated for Goodman's contention that each has a recognizable impact.

### Conclusions

The research findings of this field study have significant implications for both practitioners and researchers. These applications are discussed in the final section.

The model of factors which influence perceived importance of pay referents received limited support both in regard to the predictive value of the independent variables employed and for the dynamics through which they are theorized to gain importance. Personal characteristics, job characteristics and group identification variables do effect the perceived importance of potential pay referents. The amount of variation which can be accounted for in referent importance is low but comparable with other research attempts.

The extent to which similarity between the comparer and the referent is an influential factor in referent selection may be understated in the present study. This may be due to unavoidable methodological considerations. The number of potential pay referents was reduced to a limited set of "relevant" referents on the basis of pilot testing. As described in Chapter IV, this reduction was completed in order to systematically study factors which may influence their importance. This pre-selection of "relevant" referents may have restricted the extent to which the similarity of relevant others was left to vary. Additional research is required which directly assesses the perceived similarity of the comparer and referent on variables within the person, job and group categories.

Similarity and instrumentality may not be interrelated in a simple fashion as depicted in the model. A fundamental theoretical premise upon which most of the literature reviewed was based is an unidirectional flow of causality: Given that an individual has a number of similar referents from which to select pay standards, he or she does so on the basis of the instrumentality of each referent in satisfying a host of needs. It is conceivable and arguable that the process also occurs in the reverse: Groups or individuals which earn greater amounts of pay may be perceived (or at least publicly argued) to be similar. The data developed by Joann Martin and her colleagues can be reinterpreted as support for this latter process. Further research is required to determine the causal interrelationship of the two dynamics.

The implications of the current research findings speak directly to human resource managers and to compensation administrators specifically. Typically, the internal wage relativities between jobs are established using some method of job evaluation focusing on such factors as the education required, experience, responsibility and other compensable factors. Competitive pay rates i.e., those which are equitable with the "going rate" in the external labor market are established through wage surveys. Integration of these two processes results (in theory) in a wage structure which is equitable and competitive facilitating the organizations efforts to attract and maintain employees. The current findings demonstrate that, depending upon personal and job characteristics, the internal versus external equity of the position's pay rate may command relatively greater amounts of the employee's attention. We also find evidence to indicate that employees occupying positions from different occupational levels use each other as pay referents. Supervisors and managerial levels may perceive the wage levels of their subordinates to be perceptually indistinguishable (downward comparisons indicating wage compression). Small increments in pay levels which accompany what are perceived to be large increases in the effort required to perform a job will result in little or no motivation on the part of the employees to rise within the organization. These considerations are equally true for collectively bargained wage rates. Negotiators must maintain an awareness of traditional relativities between wage rates which employees come to rely upon as bell-

weathers of bargaining success. As a rule, however, wage information is highly available in unionized environments: Collective bargaining agreements are publicly available; Union newsletters describe settlement provisions, and pay rates are openly discussed among union members. Inequities are easily identified and usually affect entire groups of employees - conditions which lead to perceptions of relative deprivation and group action. In the public sector, pay rates are a matter of public record. The secretive pay policies of the private sector are unavailable to public sector administrators who are experiencing decreasing acceptance of arbitrarily set levels of pay.

Self pay referents were found to be the premier standard by which equity is judged. This was true for both the perceived importance of this referent and its relative impact upon the determination of pay satisfaction. The inability of the present study to determine the factors which may influence the development of this referent's importance leaves a significant gap in knowledge. Further refinements in the conceptualization of the self referent will be required to specify the selective processes involved.

It has been suggested that self referents are actually multidimensional referents composed of: historical or actual wage histories, perceptions of personal worth, perceptions of the cost-of-living, beliefs about adequate levels of pay and promises of future pay increases made by the organization (Heneman et al., 1973; Hills, 1980; Goodman, 1974). Clearly, more research is required to explore this referent which

individuals experience most directly.

A final implication of this study derives from the number of pay referents which actually have an impact on an individual's satisfaction with their pay. The present findings indicate that multiple (albeit few) referents actually receive perceptual recognition. It is the task of the compensative professional to determine those primary referents for individuals and to ensure that as the individual progresses through his or her career equitability with these dynamic referents is maintained.

## APPENDIX



## APPENDIX A

Dear MNA and USW Local - 206A Member:

The study in which you are about to participate is designed to determine your attitudes toward your Union/Association and your job. The leadership of the MNA, USW - Local 206A and the Hospital support this study. They feel that the study will help them understand your attitudes toward your job and the services which your Union/Association provides.

Because part of the project involves certain statistical analyses, it is necessary for us to request your name and a signed waiver releasing your personnel file. No one at the Hospital, the Union, or the Association will see any of the completed questionnaires or the personnel materials. Only members of the MSU research team will see the questionnaires and personnel materials and they will immediately convert names to numbers. The leadership of MNA, USW - Local 206A, and the Hospital have agreed to this arrangement. The M.S.U. research team guarantees that these pledges will be honored.

A survey of this kind can only be as good as the cooperation given by the participants. Each question should be answered completely. We urge you to give each question your most thoughtful, careful consideration and accurate response.

If you participate in this study and would allow the M.S.U. research team confidential access to your personnel file, please print your name, position, and date.

_____	_____	_____
Name	Position	Date

Thank you very much for your cooperation and assistance.

We would like to ask you some specific questions about your and your job at the Hospital. Please circle or fill in the appropriate responses.

1. What union/association are you a member of?
  1. Michigan Nurses Association
  2. United Steelworkers of America
2. How long have you worked at the Hospital? \_\_\_\_\_ years
3. How old are you? \_\_\_\_\_ years
4. What is your sex?
  1. Male
  2. Female
5. What is your ethnic background?
  1. Black
  2. Caucasian
  3. Hispanic
  4. American Indian
  5. Asian
  6. Other \_\_\_\_\_
6. What is your marital status:
  1. Single
  2. Married
7. What is your level of education?
  1. Grade eight or less
  2. Some high school
  3. Completed high school
  4. 1 year LPN community college or hospital LPN program
  5. Community college - Associate degree
  6. Community college degree unrelated to nursing
  7. Diploma grad (three-year nursing school program)
  8. Attended college - no degree completed
  9. Undergraduate university (B.S.N. or other)
  10. Graduate courses at university
  11. Completed graduate degree (M.S.N.) or other)
8. Which of the following labels best describes your present job classification?
 

1. General Nurse (Staff Nurse)	7. Medication L.P.N.
2. Charge Nurse	8. L.P.N.
3. Unit Supervisor	9. Nurse Aid
4. Inservice Instructor	10. Orderlies
5. Quality Assur. Coordinator	11. Ward Clerk
6. House Supervisor	12. House Orderlies
	13. Ward Helpers
9. Below are several statements dealing with possible feelings that an individual might have about the union/association which he/she belongs to. We would like you to indicate the degree to which you Agree or Disagree with each statement by circling the appropriate number. Please be honest; your answer will be kept in the strictest of confidence.

	Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1. I feel a sense of pride being a part of this union/association	1	2	3	4	5	6	7
2. Based on what I know now and what I can expect in the future, I plan to be a member of the union/assoc. the rest of the time I work for the Hospital.	1	2	3	4	5	6	7
3. The record of this union/ assoc. is a good example of what dedicated people can get done.	1	2	3	4	5	6	7
4. The union/association's problems are my problems	1	2	3	4	5	6	7
5. Even though he/she may not like parts of it, the union/ assoc. member must "live up to" all terms of the Articles of Agreement	1	2	3	4	5	6	7
6. The only reason I belong to the union/assoc. is to make sure I get promotions or transfers of job assignment	1	2	3	4	5	6	7
7. My loyalty is to my work, not to the union/assoc.	1	2	3	4	5	6	7
8. It's every union/assoc. member's responsibility to see to it that management "lives up to" all terms of the Articles of Agreement	1	2	3	4	5	6	7
9. It is the duty of every worker "to keep his/her ears open" for information that might be useful to the union/association.	1	2	3	4	5	6	7



- |  | Strongly<br>Disagree | Disagree | Slightly<br>Disagree | Neither | Slightly<br>Agree | Agree | Strongly<br>Agree |
|--|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
|  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 10. Members of this local are not expected to have a strong personal commitment to the union/association.                                      | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 11. Moving ahead in the Hospital is more important than staying in the union/association.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 12. Members should pay attention to the union label.   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 13. A union/association member has more security than most members of management.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 14. I feel little loyalty toward this union/association.   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 15. As long as I'm doing the kind of work I enjoy, it does not matter if I belong to a union/association.                                      | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 16. It's every member's duty to support or help another worker use the grievance procedure.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 17. I believe that union membership and participation should be positive factors of merit and efficiency.                                      | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 13. I am willing to put in a great deal of effort beyond that normally expected of a member in order to make the union/association successful. | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 19. I could just as well work in a non-union hospital as long as the type of work was similar.   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |

- |  | Strongly<br>Disagree | Disagree | Slightly<br>Disagree | Neither | Slightly<br>Agree | Agree | Strongly<br>Agree |
|--|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
|  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 20. I have little confidence and trust in most members of my union/association.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 21. I talk up the union/assoc. to my friends as a great organization to be a member of.                                | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 22. There's a lot to be gained by joining a union/assoc.   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 23. The council newsletter is not worth reading.   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 24. I doubt that I would do special work to help the union/association.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 25. Deciding to join the union/association was a smart move on my part.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 26. My values and the union/association's values are not very similar.   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 27. It's every member's duty to know exactly what the Articles of Agreement entitle him/her to.                        | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 28. I rarely tell others that I am a member of the union/association.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 29. It's the stewards's job, not the member's duty to see that management is living by the contract.                   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 30. It's every union member's responsibility to see that other members "live up to" all the terms of the of Agreement. | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |

- |  | Strongly<br>Disagree | Disagree | Slightly<br>Disagree | Neither | Slightly<br>Agree | Agree | Strongly<br>Agree |
|--|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
|  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 31. If asked, I would serve on a committee for the union/association.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 32. The union/association newsletter does not contain any useful information.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 33. If asked, I would run for an elected office in the union/association.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 34. It's easy "to be yourself" and still be a member of the union/association.   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 35. Very little that the membership wants has any real importance to the union/association.                            | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 36. The member does not get enough benefits for the money taken by the union/association for initiation fees and dues. | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 37. Every member must be prepared to take the time and risk of filing a grievance.                                     | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |

10. What is the probability that you will QUIT YOUR JOB for whatever reason with the Hospital within the next TWO YEARS?

- ( ) 100% - I AM ABSOLUTELY CERTAIN THAT I WILL BE QUITTING
- ( ) 30%
- ( ) 60%
- ( ) 40%
- ( ) 20%
- ( ) 0% - I AM ABSOLUTELY CERTAIN THAT I WILL NOT BE QUITTING

11. Listed below are a series of statements that represent

possible FEELINGS that YOU might have about the Hospital. Please indicate how strongly you Agree or Disagree that each statement reflects YOUR ATTITUDES toward the Hospital by circling the appropriate number.

TO WHAT EXTENT DO YOU AGREE OR DISAGREE THAT .....

- |  | Strongly<br>Disagree<br>1 | Disagree<br>2 | Slightly<br>Disagree<br>3 | Neither<br>4 | Slightly<br>Agree<br>5 | Agree<br>6 | Strongly<br>Agree<br>7 |
|--|---------------------------|---------------|---------------------------|--------------|------------------------|------------|------------------------|
| 1. I am willing to put in a great deal of effort beyond that normally expected to help the Hospital be successful. |                           |               |                           |              |                        |            |                        |
| 2. I talk up the Hospital to my friends as a great organization to work for.                                       | 1                         | 2             | 3                         | 4            | 5                      | 6          | 7                      |
| 3. I feel very little loyalty to the Hospital.   | 1                         | 2             | 3                         | 4            | 5                      | 6          | 7                      |
| 4. I would accept almost any types of job assignments in order to keep working for the Hospital.                   | 1                         | 2             | 3                         | 4            | 5                      | 6          | 7                      |
| 5. I find that my values and the values of the Hospital are very similar.  | 1                         | 2             | 3                         | 4            | 5                      | 6          | 7                      |
| 6. I am proud to tell others that I am part of the Hospital.   | 1                         | 2             | 3                         | 4            | 5                      | 6          | 7                      |
| 7. I could just as well be working for a different hospital as long as the type of work was similar.               | 1                         | 2             | 3                         | 4            | 5                      | 6          | 7                      |
| 3. The Hospital inspires the very best of me in the way of job performance.  | 1                         | 2             | 3                         | 4            | 5                      | 6          | 7                      |
| 9. I would take very little change in my present circumstances to cause me to leave the Hospital.                  | 1                         | 2             | 3                         | 4            | 5                      | 6          | 7                      |



- |  | Strongly<br>Disagree | Disagree | Slightly<br>Disagree | Neither | Slightly<br>Agree | Agree | Strongly<br>Agree |
|--|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
|  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 10. I am extremely glad that I chose the Hospital to work for over others I was considering at the time I joined.    | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 11. There is not too much to be gained by sticking with the Hospital indefinitely.                                   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 12. Often, I find it difficult to agree with the Hospital's policies on important matters relating to its employees. | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 13. I really care about the fate of the Hospital.  | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 14. For me, the Hospital is the best of all possible organizations for which to work.                                | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 15. Deciding to work for the Hospital was a definite mistake on my part.   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |

12. Here are some questions reflecting how some people view themselves and those they work with. Please indicate how strongly you Agree or Disagree with each statement by circling the appropriate number.

- |   | Strongly<br>Disagree | Disagree | Slightly<br>Disagree | Neither | Slightly<br>Agree | Agree | Strongly<br>Agree |
|---|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
|   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 1. There are very few people Hospital with whom I can share professional interests. | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |

- |   | Strongly<br>Disagree | Disagree | Slightly<br>Disagree | Neither | Slightly<br>Agree | Agree | Strongly<br>Agree |
|---|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
|   | 1                    | 2        | 3                    | 4       | 5                 | 6     | 7                 |
| 2. I get most of my intellectual stimulation from my Hospital colleagues.                           |                      |          |                      |         |                   |       |                   |
| 3. I get most of my intellectual stimulation from my professional associates in other institutions. |                      |          |                      |         |                   |       |                   |

13. WOULD YOU DESCRIBE YOUR PAY AS ..... (Please circle)

- |  |          |                                |          |
|--|----------|--------------------------------|----------|
| 1. Income adequate for normal expenses | YES NO ? | 5. Satisfactory profit sharing | YES NO ? |
| 2. Less than I deserve                 | YES NO ? | 6. Barely enough to live on    | YES NO ? |
| 3. Insecure                            | YES NO ? | 7. Bad                         | YES NO ? |
| 4. Highly paid                         | YES NO ? | 8. Income provides luxuries    | YES NO ? |
|  |          | 9. Underpaid                   | YES NO ? |

\*\*\*STOP\*\*\*

Before you go on any further Raise  
Your Hand for A M.S.U. Research  
Member to assist you

For each of the following questions we would like you to write a number as an answer. We will give you a yardstick to use in responding. These questions will deal with the amount you receive for wages at the Hospital.

All answers will be compared to what we have defined as the average amount of fairness based on the typical duties, knowledge, skills and abilities required to do your job. the average amount of fairness is represented by 100. The total absence of fairness is represented by 0.

Here is an example:

<u>QUESTION</u>	<u>YARDSTICK</u>	<u>ANSWER</u>
How fair is the amount of time you receive for coffee breaks?	0 = totally unfair 100 = average	<u>      </u> <u>      </u>
<p>If you think the amount of time you receive for coffee breaks is <u>average</u> in terms of fairness, write <u>100</u>. If you think it is above average you would write <u>105</u>, <u>123</u>, <u>144</u> or <u>any other number</u>. If you think it is <u>twice</u> as fair as average, write <u>200</u>.</p> <p>If you think the amount of time you receive for coffee breaks is <u>less fair</u> than average, e.g., 1/2 as fair, write <u>50</u>. If you think that it is less than 1/2 as fair you would write <u>40</u>, <u>25</u>, <u>10</u>, <u>0</u> or <u>any other number</u>.</p> <p>&lt;Remember, you may write any number you wish and are not limited to the numbers provided in this example. "Average" is based on the typical duties, knowledge, skills, and abilities required to do your job. Please put your answers in the box(es) at the right.&gt;</p>		

<u>QUESTION</u>	<u>YARDSTICK</u>	<u>ANSWER</u>
14. How fair is the amount you receive for wages?	0 = totally unfair 100 = what <u>others in your bargaining unit at the Hospital</u> receive.	<u>      </u> <u>      </u>

<REMEMBER to make comparisons with the average. The greater the number above 100, the more fair, the lower the number below 100 the less fair.>

For the next set of questions we would like you to tell us how fair you think the amount you receive for wages when compared to the amount received by others in your bargaining unit at the Hospital. When making these fairness judgments, think about your duties, knowledge, skills, and abilities as compares to the duties, knowledge, skills and abilities of others in your bargaining unit at the Hospital. Here, 100 = what others in your bargaining unit at the Hospital receive in terms of wages.

<u>QUESTION</u>	<u>YARDSTICK</u>	<u>ANSWER</u>
15. How fair is the amount you receive for wages?	0 = totally unfair 100 = what <u>others in your bargaining unit at the Hospital</u> receive.	<u>      </u> <u>      </u>

<REMEMBER, if you think your wages are less fair than what others in your bargaining unit at the Hospital receive, write a number less than 100. If you think your wages are more fair than what others in your bargaining unit at the Hospital (either MNA or Steelworkers).

When making these fairness judgments, think about your duties, knowledge, skills and abilities as compared to the duties, knowledge, skills and abilities of employees in the other bargaining unit at the Hospital. Here, 100 = what employees in the other bargaining unit at the Hospital receive.

<u>QUESTION</u>	<u>YARDSTICK</u>	<u>ANSWER</u>
16. How fair is the amount you receive for wages?	0 = totally unfair 100 = what <u>employees in the other bargaining unit at the Hospital</u> receive.	<u>      </u> <u>      </u>

<REMEMBER, if you think that the amount you receive for wages is less fair than what employees in the other bargaining unit at the Hospital receive, write a number less than 100. If you think the amount you receive for wages is more fair than what employees in the other bargaining unit at the Hospital receive, write a number greater than 100. Write any number you wish.>

For the next set of questions we would like you to tell us how fair you think the amount you receive for wages is when compared to the amounts received by workers performing nursing related duties (RNs, LPNs, orderlies, aides) employed in the surrounding area. When making these fairness judgments, think about your duties, knowledge, skills and abilities of workers performing nursing related duties in the surrounding area. Here, 100 = what workers performing nursing related duties employed in the surrounding area receive.

<u>QUESTION</u>	<u>YARDSTICK</u>	<u>ANSWER</u>
17. How fair is the amount you receive for wages?	0 = totally unfair 100 = what <u>workers performing related duties employed in the surrounding area</u> receive.	<u>      </u> <u>      </u>

For the next set of question we would like you to tell us how fair you think the amount you receive for wages is when compared to the amount received by workers performing nursing related duties (RNs, LPNs, orderlies, aides around the country. When making these fairness judgements, think about your duties, knowledge, skills and abilities of workers

performing nursing related duties around the country. Here, 100 = what workers performing nursing duties around the country receive.

<u>QUESTION</u>	<u>YARDSTICK</u>	<u>ANSWER</u>
13. How fair is the amount you receive for wages?	0 = totally fair 100 = what <u>workers performing nursing related duties around the country receive.</u>	<u>      </u> <u>      </u>

Now we would like you to indicate how important these other groups are in determining how fair you see your wages. Using the list presented below, distribute 100 points among the groups to indicate how important they are. Thus, the most important group would have the highest number of points.

19. DISTRIBUTE 100 POINTS AMONG THE GROUPS TO INDICATE THEIR IMPORTANCE IN YOUR FEELINGS OF FAIRNESS.

	POINTS
a) Myself, in terms of the duties, knowledge and abilities I provide . . . . .	<u>      </u>
b) Others in your bargaining unit at the Hospital . . . . .	<u>      </u>
c) Employees in the other bargaining unit at the Hospital . . . . .	<u>      </u>
d) Workers performing nursing-related duties in the surrounding area . . . . .	<u>      </u>
e) Workers performing nursing-related duties around the country . . . . .	<u>      </u>
TOTAL	<u>      </u>
	100

## LIST OF REFERENCES

## REFERENCES

- Adams, J.S. Inequity in social exchange. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology. Vol. 2, New York: Academic Press, 1965.
- Adams, J.S. Toward an understanding of inequity. Journal of Abnormal and Social Psychology, 1963, 57, 422-436.
- Adams, J.S. and Freedman, S. Equity theory revisited: Comments and annotated bibliography. In L. Berkowitz and E. Walster (Eds.), Equity Theory: Toward a General Theory of Social Interaction. Advances in Experimental Social Psychology (Vol. 9). New York: Academic Press, 1976.
- Alutto, J.A. and Belasco, J.A. Determinants of attitudinal militancy among nurses and teachers. Industrial and Labor Relations Review, 1974, 3, 215-227.
- Anderson, J.C., and Milkovich, G.T. Propensity to leave: A preliminary examination of March and Simon's model. Relations Industrielles, 1980, 35, 279-292.
- Andrews, I.R. and Henry, M.M. Management attitudes toward pay. Industrial Relations, 1963, 2(1), 23-39.
- Andrews, I.R. and Valenzi, E. Overpay inequity or self-image as a worker: A critical examination of an experimental induction procedure. Organizational Behavior and Human Performance, 1970, 53, 22-27.
- Angle, H.L. and Perry, J.L. Dual commitment and labor-management relationship climates. Academy of Management Journal, 1986, 29, 31-50.
- Arrowood, J.A. and Friend, R. Other factors determining the choice of a comparison other. Journal of Experimental Social Psychology, 1969, 5, 233-239.
- Austin, W. Equity Theory and Social Comparison Processes. In J. Suls and R. Miller (Eds.), Social Comparison Theory: Theoretical and Empirical Perspectives, Washington, D.C.: Hemisphere, 1977.

- Barnett, G.A., Hamlin, D.M., and Danowski, J.A. The use of fractionation scales for communication audits. In B. Rubin (Ed.), Communication Yearbook 5. New Brunswick, N.J.: Transaction Books - ICA, 1982.
- Becker, H.S. Notes on the concept of commitment. American Journal of Sociology, 1960, 65, 32-40.
- Belcher, D.W. Compensation Administration. Englewood Cliffs, New Jersey: Prentice-Hall, 1964.
- Bennis, W.G., Berkowitz, N., Affinito, M. and Malone, M. Reference groups and loyalties in the out-patient department. Administrative Science Quarterly, 1953, 481-500.
- Berkowitz, L. and Walster, E. Advances in Experimental Social Psychology. Vol. 9. New York: Academic Press, 1976.
- Blau, P.M., and Scott, W.R. Formal Organizations: A Comparative Approach. San Francisco, Calif.: Chandler, 1962.
- Brown, W. Social determinants of pay. In G.M. Stephenson and C.J. Brotherton (Eds.), Industrial Relations: A Social Psychological Approach, Chichester: John Wiley and Sons, 1979.
- Campbell, J., and Pritchard, R.O. Motivation theory in industrial and organizational psychology. In M. Dunnette (Ed.), Handbook of Industrial and Organizational Psychology. Chicago: Rand McNally, 1975.
- Carrell, M.R., and Dittrich, J.E. Equity theory: The recent literature, methodological considerations, and new directions. Academy of Management Review, 1978, 3, 202-210.
- Carroll, S.J., Jr. and Tombari, H.A. Factors related to pay satisfaction in three occupational groups. Unpublished working paper, 1980.
- Chamberlain, and Kuhn. Collective Bargaining. New York: McGraw-Hill, 1934.
- Cohen, J. and Cohen, P. Applied Multiple Regression/Correlation Analysis For the Behavioral Sciences. New York: John Wiley and Sons, 1975.
- Cook, J.D., Crosby, F. and Hennigan, K.I. The construct validity of relative deprivation. In J.M. Suls and R.I. Miller (Eds.), Social Comparison Processes. Washington, D.C.: Hemisphere, 1979.



- Cook, J.D., Hepworth, S.J., Wall, T.D., and Wan, P.B. The Experience of Work: A Compendium and Review of 249 Measures and Their Use. London: Academic Press, 1981.
- Cook, K.S. and Puarcel, T.L. Equity theory: Directions for future research. Sociological Inquiry, 1977, 47, 75-88.
- Crosby, F. A model of egoistical relative Psychological Review, 1976, 83, 85-113.
- Crosby, F. Relative Deprivation and Working Women. New York: Oxford University Press, 1982.
- Davis, J.A. A formal interpretation of the theory of relative deprivation. Sociometry, 1959, 22, 230-296.
- Dean, L.R. Union activity and dual loyalty. Industrial and Labor Relations Review, 1954, 7, 526-536.
- Delafield, G.L. Social Comparisons and Pay. In G.M. Stephenson and C.J. Brotherton (Eds.), Industrial Relations: A Social Psychological Approach, Chichester: John Wiley and Sons, 1979.
- Doeringer, P., and Piore, M.I. Internal Labor Markets and Manpower Analysis. Lexington, MA: Heath, 1971.
- Dutton, D. Attribution of cause for opinion change and liking for audience members. Journal of Personality and Social Psychology, 1973, 25, 203-216.
- Dyer, L. and Theriault, R. The determinants of pay satisfaction. Journal of Applied Psychology, 1976, 61, 596-604.
- Etzioni, A. A Comparative Analysis of Complex Organizations. New York: Free Press, 1975.
- Etzioni, A. The Semi-Professions and Their Organization. New York: Free Press, 1969.
- Feldman, N.S. and Ruble, D.N. Social comparison strategies: Dimensions offered and options taken. Personality and Social Psychology Bulletin, 1981, 7, 11-16.
- Festinger, L.A. A theory of social comparison processes. Human Relations, 1954, 7, 117-140.
- Finn, R.H. and Lee, S.M. Salary equity: Its determination, analysis and correlates, Journal of Applied Psychology, 1972, 55, 233-292.

- Flango, V.E. and Brumbaugh, R.E. The dimensionality of the cosmopolitan-local construct. Administrative Science Quarterly, 1975, 20, 193-210.
- Gallagher, D.G. The relationship between organizational and union commitment among federal government employees. Proceedings of the Academy of Management, 1984, 319-323.
- Gartrell, C.D. On the visibility of wage referents. Canadian Journal of Sociology, 1982, 7, 117-143.
- Glaser, B.G. The local-cosmopolitan scientist. American Journal of Sociology, 1963, 69 249-259.
- Goethals, G.R. and Darley, J. Social comparison theory: An attributional approach. In J.M. Suls and R.L. Miller (Eds.), Social Comparison Process: Theoretical and Empirical Perspectives. Washington, D.C.: Hemisphere, 1977.
- Goodman, P.S. An examination of referents used in the evaluation of pay. Organizational Behavior and Human Performance, 1974, 12, 170-195.
- Goodman, P.S. Social comparison processes in organizations. In B.M. Staw and G.R. Salancik (Eds.), New Directions in Organizational Behavior. Chicago: St. Clair Press, 1977.
- Goodman, P.S. and Friedman, A. An examination of the effect of wage inequity in the hourly condition. Organizational Behavior and Human Performance, 1963, 3, 340-352.
- Goodman, P.S. and Friedman, A. An examination of Adam's theory of inequity. Administrative Science Quarterly, 1971, 16, 271-233.
- Gordon, B. Influence and social comparison as motives for affiliation. Journal of Experimental Social Psychology, 1966, 2 (Supplement 1): 55-65.
- Gordon, M.E., Philpot, J.W., Burt, R.R., Thompson, C.A., Spiller, W.E. Commitment to union: Development of a measure and an examination of its correlates. Journal of Applied Psychology, 1980, 65, 479-499.
- Gouldner, A. Cosmopolitans and locals: Toward an analysis of latent social roles. Administrative Science Quarterly, 1957, 2, 231-306.
- Grimes, A.J., and Berger, P.K. Cosmopolitan-local: Evaluation of the construct. Administrative Science Quarterly, 1970, 15, 407-416.

- Gruder, C.L. Choice of comparison persons in evaluating oneself. In J.M. Suls and R.L. Miller (Eds.), Social Comparison Processes: Theoretical and Empirical Perspectives. Washington, D.C.: Hemisphere, 1977b.
- Gruder, C.L. Determinants of social comparison choices. Journal of Experimental Social Psychology, 1977, 7, 473-499.
- Gurney, J.N. and Tierney, K.J. Relative deprivation and social movements: A critical look at twenty years of theory and research. The Sociological Quarterly, 1982, 23, 33-49.
- Gurr, T.R. Why Men Rebel. Princeton, NJ: Princeton University Press, 1970.
- Hakmiller, K. Need for self-evaluation, perceived similarity, and comparison choice. Journal of Experimental Social Psychology, 1966, 2, (Supplement 1): 49-54.
- Haire, M., Ghiselli, E.E., and Porter, L. Psychological research on pay: An Overview. Industrial Relations, 1963, 3, 3-3.
- Handren, K.L. Collective bargaining in the Michigan nursing profession. Unpublished Masters Thesis, Michigan State University, 1983.
- Heneman, H.G. III; Schwab, D.P.; Standal, J.T. and Peterson, R.B. Pay comparisons, dimensionality and predictability. Proceedings of the 33th Annual Academy of Management Meetings, San Francisco, 1978, 211-215.
- Hills, F.S. The relevant other in pay comparisons. Industrial Relations, 1980, 19(3), 345-351.
- Hinton, B.L. The experimental extension of equity theory to interpersonal and group interaction situations. Organizational Behavior and Human Performance, 1972, 3, 434-449.
- Homans, G.C. Social Behavior: Its Elementary Forms. New York: Harcourt Brace & World, 1961.
- Hoxie, R.F. Trade Unionism in the United States. New York: Appleton, 1919.
- Hrebiniak, L.G., and Alutto, J.A. Personal and role-related factors in the development of organizational commitment. Administrative Science Quarterly, 1972, 17, 555-572.

- Hyman, H.H. The psychology of status. Archives of Psychology, 1942, 33, 1-99. Cited in H.H. Hyman and E. Singer, (Eds.), Readings in Reference Group Theory and Research, New York: Free Press, 1963.
- Hyman, R. and Brough, I. Social Values and Industrial Relations: A Study of Fairness and Equality. Oxford: Basil Blackwell, 1975.
- Jaques, E. Equitable Payment. London: Pelican, 1967.
- Jaques, E. Timespan Handbook. London: Hineman, 1964.
- Katz, D., and Kahn, R.L. The Social Psychology of Organizations (2nd ed.) New York: Wiley, 1973.
- Katz, F.E. Nurses. In A. Etzioni (Ed.), The Semi-Professions and Their Organization, New York: Free Press, 1969.
- Kelly, H.H. Two functions of reference groups. In G.E. Swanson, T.M. Newcomb and E.L. Hartley (Eds.), Readings in Social Psychology, New York: Holt, 1952.
- Kidron, A. Work values and organizational commitment. Academy of Management Journal, 1978, 21, 239-247.
- Lawler, E.E. Manager's perceptions of their subordinates' pay and of their superiors' pay. Personnel Psychology, 1965, 13, 413-422.
- Lawler, E.E. Pay and Organizational Effectiveness. New York: McGraw-Hill, 1971.
- Lawler, E.E., and O'Gara, P.W. The effects of inequity produced by underpayment on work output, work quality and attitudes toward the work. Journal of Applied Psychology, 1967, 51, 403-410.
- Lipset, S.M. and Trow, M. Reference group theory and trade union wage policy. In M. Komarovsky (Ed.), Common Frontiers of the Social Sciences, Glencoe: Free Press, 1957.
- Livernash, E.R. Wage administration and production standards. In A. Kornhauser, R. Dubin and A.M. Ross (Eds.), Industrial Conflict, New York: McGraw-Hill, 1954.
- Major, B., McFarlin, D.B., and Gagnon, D. Overworked and underpaid: On the nature of gender differences in personal entitlement. Journal of Personality and Social Psychology, 1984, 47, 50-64.
- March, J.G. and Simon, H.A. Organizations. New York: Wiley, 1953.

- Martin, J. Distributional determinants of the perception of injustice: The multidimensionality of unrestricted pay comparisons. Invited Address, 1978 Rains Wallace Dissertation Award American Psychological Association Toronto, Canada (August), 1978b.
- Martin, J. The fairness of earnings differentials: An experimental study of the perceptions of blue collar workers. The Journal of Human Resources, 1932, 22 280-296.
- Martin, J. Pay comparisons and the perception of injustice. Paper presented at the American Psychological Association, Toronto, Canada (August), 1973a.
- Martin, J. Relative deprivation: A theory of distributive injustice for an era of shrinking resources. In L.L. Cummings and B.M. Staw (Eds.), Research In Organizational Behavior, 1931, 3, 53-107.
- Martin, J. and Murray, A. Distributive injustice and unfair exchange. In K.S. Cook and D.M. Messick (Eds.), Theories of Equity: Psychological and Sociological Perspectives. New York: Praeger, 1933.
- Martin, J., Price, R., Bies, R., and Powers, M. Relative deprivation among secretaries: The effects of the token female executive. Paper presented at the American Psychological Association, New York (September), 1979.
- Martin, J.E. and Peterson, M.M. Two-tier wage structures: An equity theory approach. Paper presented at the Industrial Relations Research Association, 1935.
- McFarlin, D.B., Major B., Frone, M.R. and Konar, E. The relationship between reference group comparisons and career-entry pay expectations. Personality and Social Psychology Bulletin, 1934, 45, 1222-1229.
- McPhail, C. Civil disorder participation: A critical examination of recent research. American Sociological Review, 1971, 36, 1053-1073.
- Merton, R.K. Social Theory and Social Structure. New York: Free Press, 1957.
- Merton, R.K., and Kitt, A. Contributions to the theory of reference group behavior. In R.K. Merton and P.F. Lazarsfeld (Eds.), Continuities in Social Research: Studies in the Scope and Methods of "American Soldier". Glencoe, Ill.: Free Press, 1950.

- Miller, R.U. Hospitals. In G.G. Somers (Ed.), Collective Bargaining: Contemporary American Experience. Madison, Wisconsin: Industrial Relations Research Association, 1980.
- Morley, I., and Stephenson, G.M. The Social Psychology of Bargaining. London: Allen and Unwin, 1977.
- Mowday, R.T., Steers, R.M., and Porter, L.W. Employee-Organization Linkages: The Psychology of Commitment, Absenteeism, and Turnover. New York: Academic Press, 1982.
- Mowday, R.T., Steers, R.M., and Porter, L.W. The measurement of organizational commitment. Journal of Vocational Behavior, 1979, 14, 224-247.
- Oldham, G.R., Nottenburg, G., Kassner, M.W., Ferris, G., Fedor, D., and Masters, M. The selection and consequences of job comparisons. Organizational Behavior and Human Performance. 1982, 29, 84-111.
- Opsahl, R.L. and Dunnette, M. The role of financial compensation in industrial motivation. Psychological Bulletin, 1966, 66, 94-113.
- Patchen, M. The Choice of Wage Comparisons. Englewood Cliffs, New Jersey: Prentice-Hall, 1961.
- Patchen, M.A. A conceptual framework and some empirical data regarding comparisons of social rewards. Sociometry, 1961, 24, 136-155.
- Patten, T.H., Jr. Pay: Employee Compensation and Incentive Plans. New York: Free Press, 1977.
- Pelz, D.C. and Andrew, F.M. The Scientist in Organizations. New York: John Wiley and Sons, 1966.
- Pettigrew, T. Social evaluation theory: Convergence and applications. In D. Levine (Ed.), Nebraska Symposium on Motivation. Lincoln: University of Nebraska Press, 1967.
- Pincus, D.M. and Reagan, P.M. The Pincus-Reagan Equity Scale. Unpublished paper, Michigan State University, 1982.
- Porter, L.W., Steers, R.M., Mowday, R.T. and Boulian, P.V. Organizational commitment, job satisfaction, and turnover among psychiatric technicians. Journal of Applied Psychology, 1974 59, 603-609.

- Pritchard, R.D. Equity theory: A review and critique. Organizational Behavior and Human Performance, 1969, 4, 176-211.
- Pritchard, R.D., Dunnette, M.D. and Jorgenson, D.O. Effects of perceptions of equity and inequity on worker performance and satisfaction. Journal of Applied Psychology, 1972, 56, 75-94.
- Purcell, T.V. Blue Collar Man: Patterns of Dual Allegiance In Industry. Cambridge, Mass.: Harvard University Press, 1960.
- Reynolds, L.G. Labor Economics and Labor Relations. New York: Prentice Hall, 1975.
- Ritzer, G. and Trice, H.M. An empirical study of Howard Becker's side-bet theory. Social Forces, 1969, 47, 475-479.
- Ross, A.M. Trade Union Wage Policy. Berkely: University of California Press, 1949.
- Ross, M. and McMillen. External referents and past outcomes as determinants of social discontent. Journal of Experimental Social Psychology, 1973, 9, 437-449.
- Runciman, W.G. Relative Deprivation and Social Justice. London: Routledge, Kegan and Paul, 1966.
- Russell, T. Organizational involvement and commitment to organization and profession. Administrative Science Quarterly, 15, 417-426.
- Sears, D. and McConahay, J. Racial socialization, comparison levels, and the Watts riot. Journal of Social Issues, 1970, 26, 121-140.
- Sheldon, M.E. Investments and involvements as mechanisms producing commitment to the organization. Administrative Science Quarterly, 1972, 17 143-150.
- Smith, P.C., Kendall, L.M. and Hulin, C.L. The Measurement of Satisfaction in Work and Retirement. Chicago: Rand McNally, 1969.
- Steers, R.M. Antecedents and outcomes of organizational commitment. Administrative Science Quarterly, 1977, 22, 46-56.
- Steers, R.M. and Porter, L.W. Motivation and Work Behavior. New York: McGraw-Hill, 1983.

- Stern, E., and Keller, S. Spontaneous reference groups in France. In W. Hyman and E. Singer (Eds.), Readings in Reference Group Theory and Research. New York: Free Press, 1968.
- Stouffer, S.A., Suckman, E.A., Devinney, L.C., Star, S.A. and Williams, R.M. The American Soldier: Adjustment During Army Life. Vol. 1, Princeton: Princeton University Press, 1949.
- Suls, J., and Miller, R. Social Comparison Processes. Washington, D.C.: Hemisphere, 1977.
- Telley, C.S., French, W.L., and Scott, W.G. The relationship of inequity to turnover among hourly workers. Administrative Science Quarterly 1971, 16, 164-172.
- Thornton, D., and Arrowood, J.A. Self-evaluation, self-enhancement, and the locus of social comparison. Journal of Experimental Social Psychology, 1966, 2 (Supplement 1): 40-48.
- Valenzi, E.R., and Andrews, I.R. Effect of hourly overpay and underpay inequity when tested with a new induction procedure. Journal of Applied Psychology, 1971, 55, 22-27.
- Vanneman, R.D. and Pettigrew, T.F. Race and relative deprivation in the urban United States. Race, 1972, 13, 461-436.
- Walker, I. and Pettigrew, T.F. Relative deprivation theory: An overview and conceptual critique. British Journal of Social Psychology, 1934, 23, 301-310.
- Walster, E., Berscheid, E. and Walster, G.W. New directions in equity research. Journal of Personality and Social Psychology, 1973, 25, 151-176.
- Walster, E., and Piliavin, J.A. Equity and the innocent bystander. Journal of Social Issues, 1972, 23, 165-189.
- Weick, K.E. The concept of equity in the perception of pay. Administrative Science Quarterly, 1966, 2, 414-439.
- Wheeler, L., Koestner, R., and Driver, R.E. Related attributes in the choice of comparison others. Journal of Experimental Social Psychology.
- Zanna, M., Goethals, G., and Hill, J. Evaluating a sex-related ability: social comparison with similar others and standard setters. Journal of Experimental Social Psychology, 1975, 11, 35-93.



Zelditch, M., Jr., Anderson, J., and Cohen, B.P. Equitable comparisons, Pacific Sociological Review, 1970, 13, 19-26.

MICHIGAN STATE UNIV. LIBRARIES



31293009929658