In presenting the dissertation as a partial fulfillment of the requirements for an advanced degree from the Georgia Institute of Technology, I agree that the Library of the Institute shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to copy from, or to publish from, this dissertation may be granted by the professor under whose direction it was written, or, in his absence, by the Dean of the Graduate Division when such copying or publication is solely for scholarly purposes and does not involve potential financial gain. It is understood that any copying from, or publication of, this dissertation which involves potential financial gain will not be allowed without written permission.

7/25/68

THE DETERMINANTS OF PAY AND PAY SATISFACTION: A COMPARATIVE STUDY

A THESIS

Presented to The Faculty of the Graduate Division

by

Gerald Joseph Organt

In Partial Fulfillment of the Requirements for the Degree Master of Science in Psychology

Georgia Institute of Technology

June 1970

# THE DETERMINANTS OF PAY AND

PAY SATISFACTION: A COMPARATIVE STUDY

Approved: 11 Chairman / /

#### ACKNOWLEDGMENTS

Special thanks go to Dr. William W. Ronan, my thesis advisor, without whose encouragement, enthusiasm, generous contribution of time, and competent advice this thesis would not have been possible. Thanks are also due to the other members of my reading committee, Dr. Charles Riche and Philip Adler, who also gave unselfishly of their time and effort to this endeavor.

The author also wishes to acknowledge the very able assistance of Ollie B. Francis, whose aid with the computer programming involved in this thesis was invaluable.

Gratitude is also expressed to all members of the faculty of the Department of Psychology whose continuous financial, educational, and moral support enabled me to complete this degree.

This thesis is dedicated to the author's wife, Betty, without whose patience, aid, understanding, and encouragement this level of education could not have been attained.

ii

# TABLE OF CONTENTS

Pag	e
ACKNOWLEDGMENTS ii	
LIST OF TABLES	I
LIST OF ILLUSTRATIONS vii	
SUMMARY	
Chapter	
I. INTRODUCTION l	-
Pay as a Dimension of Job Satisfaction Wages and Productivity Wage Satisfaction Wage Satisfaction and Productivity Statement of Problem Implications	
II. PROCEDURE AND METHODOLOGY 20	ł
The Instrument Data Collection Analytic Design	
III. RESEARCH FINDINGS AND RELATED DISCUSSION 34	
Cross-Validation Group Similarity Intercorrelations Among Independent Variables Wages Wage Satisfaction Group Variability Wages versus Wage Satisfaction Sex Differences	
<pre>IV. RESEARCH LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS</pre>	
Conclusions and Recommendations Limitations of This Research	
APPENDIX A	

# LIST OF TABLES

Tabl	e F	age
1.	Questionnaires Mailed versus Returned	24
2.	Breakdown of Sample by Variable	25
3.	Sample Sizes of Both Original and Cross-Validation Samples	33
Ц.	Differences in R Between Cross-Validation Samples: Wage Criteria	35
5.	Differences in R Between Cross-Validation Samples: Wage Satisfaction Criteria	35
6.	Test for Hypothesis of Equality of Errors of Estimate	36
7.	Intercorrelation Among Demographic Variables Used to Predict Pay and Satisfaction with Pay by Employee Group	39
8.	Measures of Multiple Relationships Between Demographic Variables and Wages	41
9.	Relative Importance of Demographic Variables in Predicting Management Wages	42
10.	Relative Importance of Demographic Variables in Predicting Wages of Male Salaried Personnel	44
11.	Relative Importance of Demographic Variables in Predicting Wages of Male Hourly Employees	44
12.	Measures of Multiple Relationships Between Demographic Variables and Wage Satisfaction	46
13.	Relative Importance of Demographic Variables in Predicting Wage Satisfaction of Management Employees	48
14.	Relative Importance of Demographic Variables in Predicting Wage Satisfaction of Male Salaried Employees	50

Table	3	Page
	Relative Importance of Demographic Variables in Predicting Wage Satisfaction of Male Hourly Employees	. 51

-----

# LIST OF ILLUSTRATIONS

Figu	are	Page
1.	Partial Correlations of Independent Variables and Wages	. 56
2.	Partial Correlations of Independent Variables and Wage Satisfaction	. 57
	Partials with Wages versus Partials with SatisfactionManagement	60
4.	Partials with Wages versus Partials with SatisfactionSalaried	. 61
5.	Partials with Wages versus Partials with SatisfactionHourly	62
6.	Incorporated Model of Wages, Wage Satisfaction, and Their Relation to Job Performance	72

•

- - - -

,

#### SUMMARY

Recent studies have pointed out the importance and consistency of pay and related financial benefits as a dimension of job satisfaction. However, three questions present themselves:

1. What are the factors that determine the pay an employee receives?

2. What are the factors which determine an employee's satisfaction with his pay?

3. How do these factors differ in their relation to pay and pay satisfaction for different employee groups?

This study was designed to answer these questions. Eleven thousand, one-hundred fifty-six employees from three different work groups responded to a Porter-type questionnaire indicating their perceived level of present pay and how much they thought it should be. The difference between these scores was taken as a measure of pay satisfaction. Demographic characteristics of the respondents were also recorded. Multiple correlation and regression analysis revealed that, in general, variables such as age, tenure, job level and level of education were highly related to the determination of one's wages, but were <u>not</u> significantly related to one's satisfaction with his earnings. The only variable showing even a modest relationship with pay satisfaction was pay itself.

viii

Generally, within any work group, those paid highest were the most satisfied with their income. It was also shown that samples of hourly, salaried-nonsupervisory, and managerial employees may not be assumed to come from the same population. Important group differences between these samples exist. In addition, sex differences appear to have a moderating effect on pay satisfaction. A conceptual model concerning the relationship between pay, pay satisfaction and job performance was developed based on a "path-goal" hypothesis.

#### CHAPTER I

## INTRODUCTION

After reviewing the programmatic history of the organization research conducted by the University of Michigan Survey Research Center, Kahn (1960) states without qualification, "productivity and job satisfaction do not necessarily go together." The same conclusion was reached by Brayfield and Crockett (1955) in their well-known systematic review of the literature. Although Herzberg and his associates took a somewhat more optimistic view of the empirical evidence in their review of the same literature (Herzberg, Mausner, Peterson, and Capwell, 1957), one conclusion is obvious from all three of these reviews--there is not the strong, pervasive relationship between job satisfaction and productivity that many people have felt to be the case (Porter and Lawler, 1968). The latest review of the job satisfaction literature (Vroom, 1964) supports this conclusion.

With the above consideration in mind, Kahn goes on to report that the results of the Survey Research Center work suggest that the concept "job satisfaction" contains several independent dimensions; both with respect to its determinants and its consequences. Thus, Kahn calls for the development of theoretical models of morale and job satisfaction reflecting this dimensionality, and research into these basic dimensions in the work situation.

### Pay as a Dimension of Job Satisfaction

One of the most consistent dimensions found to emerge in the recent deluge of factor analytic studies of job satisfaction involves pay and closely related financial benefits (Ash, 1954; Dabas, 1958; Ewen, 1964; Gordon, 1955; Harrison, 1961; Hulin and Locke, 1963; King, 1960; Malinovsky and Barry, 1965; Rettig, 1960; Richardson and Blocker, 1963; Will and King, 1965; Wherry, 1958). The importance of this factor has been demonstrated in several investigations. Ronan (1967), for instance, found salary to be the major reason for leaving and organization among administrative, professional and clerical personnel. In a study of 1,000 bank and savings and loan association employees, Phelan (1969) systematically investigated differential need satisfaction in terms of a Maslow-type system. Among the eight need categories (security, social, esteem, autonomy, self-actualization, pay, information, and pressure needs), financial reward was regarded by both males and females as the least fulfilled need at all work levels (top, middle and low management, technician, and clerk). Georgopoulos, Mahoney and Jones (1957) had 722 workers from two plants rank ten job related items in order of their importance. Results showed that while "getting along well with work group" was given the highest mean rank in importance (4.5), two financially related items, "more money in the long run" and "promotion to a higher base rate" ranked

second with the same mean rank; 5.1. Another example of the importance of wages to job satisfaction is reported in a survey conducted by the National Industrial Conference Board (Raube, 1947). Seventy-one morale related items were presented to all non-supervisory personnel in 6 different plants located in 5 different states and manufacturing 5 different products. Plant size ranged from 190 to 2,300 non-supervisory employees. The results showed that among the 71 items listed, "compensation (base pay)" was considered the most important job aspect by 8.7% of all cooperating employees. Only "job security" showed a higher percentage of first place selection (30.6%). In addition, 27.9% of the employees ranked compensation within the top five most important items affecting morale. This was third behind "job security" (44.7%) and "opportunities for advancement" (30.7%). In this same report; Raube presents a list of 32 factors furnished the Conference Board by C. Stech of Stech Associates, New York, and representing the relative importance of each factor based on attitude surveys of "several thousand employees in 13 different organizations." "Fair pay for work done" was listed as the most important factor. In England, Wilkins (1949), while investigating the "incentives" of young workers, asked 300 males, aged 18-19 to rank eight items concerning jobs in order of their importance for them. Of the eight items (Prospects, Security, Variety, Efficient Organization, Workmates, Hours, Pay, and Leave), pay was ranked second only to "friendly

workmates." Studies in India, however, have shown income to be rated as the most important factor of job satisfaction (Ganguli, 1957a, 1957b).

After reviewing the factor analytic literature of the dimensions of job satisfaction, Ronan (1970) concludes that, although differences by occupational groups occur, these studies agree on work itself, advancement, pay and benefits, supervision, and co-workers as important in determining job satisfaction -- usually in that order. Goodwin (1969) found similar factors when he investigated the general goals Americans expect to fulfill through work and the factors that influence satisfaction and dissatisfaction on the job. Using a self-anchoring scale, each respondent was asked to describe in his own words the attributes of an ideal job and then, the worst possible job. The worker was also asked to rate his present job along a 10-point scale from the ideal to the worst job which he had described. The respondent then indicated why he did not make his rating of his job higher and why he did not make it lower. Content analysis of the responses revealed the following results:

l. Forty-three percent of the employees mentioned
"good financial reward" as an ideal attribute of a job
(N = 1136). This was second only to "enjoyment of work" at
72 per cent.

2. "Inadequate financial reward" was a topic of 27 per cent of the worst attributes of a job (N = 1135). This

was second only to "dislike one's work" (48%).

3. "Good financial reward" was listed by 33 per cent of the general work force as a positive aspect of their present job (N = 1000). This was once again second to "enjoyment of work" (37%).

4. The item most frequently mentioned as a negative aspect of present job was "bad financial reward in present job" having been mentioned by 32% of the sample (N = 1000).

Finally, in what this author considers one of the most thorough and complete investigations into employee attitudes, Evans and Laseau (1950) found wages, salary and benefits derived from them to be the most often mentioned theme in 174,854 letters written by employees of General Motors on the topic "My Job and Why I Like It." The theme "the income I get and the things it provides for me and my family" was mentioned in 52.2 per cent of the entries.

In short, there seems to be ample evidence to indicate that in certain circumstances, wages can be a significantly important empirical factor in determining job satisfaction.

## Wages and Productivity

The literature with respect to the effectiveness of wages as an incentive to work abounds with controversy and contradiction (Rothe, 1960). In addition, as pointed out in Porter and Lawler (1963), it is surprising that so little research on the incentiveness of wages has been done. Salaries are one of the largest expenses for any organization,

yet few organizations have attempted to systematically investigate how effectively they are spending their money. It is equally as curious that psychologists have not attempted to study the psychological aspects of compensation since the basic assumption--that pay motivates people to work--is a psychological one (Haire, Ghiselli & Porter, 1963).

Historically, it was a common assumption that man worked for pay alone. This was fostered by the conceptualization of "economic man" as a creature who uses his reason primarily to calculate the amount of satisfaction he may obtain from the smallest amount of effort expended; and "satisfaction" is derived <u>only</u> from money (Brown, 1954).

This concept of man's motivational referents led to an abundance of effort in designing and installing a great variety of incentive plans during the early part of this century. When these plans showed little in the way of results, disillusionment set in. When this disillusionment was capped by the Western Electric Studies at their Hawthorne Plant, "economic man" was dead.

The Hawthorne Studies clearly indicated that factors other than pay had a great influence on productivity. The major indication was that social relations had a decisive motivating force (Mayo, 1945). This ushered in the "human relations" movement. During this era the emphasis was on "social man" and his apparent need to associate with his fellow workers. Money as a motivator was almost totally

excluded.

Not long into the "human relations" movement a theory presented by Maslow (1943) began to enter motivational circles. Maslow has suggested that the needs which motivate man are arranged in a hierarchy. At the bottom of this hierarchy are maintenance needs such as food, water, safety and physical comfort. As these needs are met one moves up the hierarchy attempting to fulfill social needs, esteem needs, and finally to needs for autonomy and self-actualization. Maslow's basic tenet is that as the lower order needs become relatively satisfied, they cease to be important as motivators and an individual strives to satisfy the higher order needs. This has led to a picture of "self-actualizing" man that has enjoyed wide acceptance and application in theories of motivation during recent years. It obtains favor in its ability to account for the failure of pay as an incentive. If it is assumed that pay satisfies primarily lower order needs, as many theorists do, and that in our present society the vast majority of working individuals receive an income adequate to satisfy such needs, then pay is relatively unimportant. Pay can not be a motivator if it is not important (Porter and Lawler, 1968). But the key point on which this assumption is based is that pay satisfies primarily lower order needs. The validity of this assumption has come under serious question.

Analyzing explanations by respondents as to why events on the job caused favorable or unfavorable feelings, Myers

(1964) discovered that pay contributed to the higher order needs for achievement and recognition. Recent studies have also revealed that wages remain significantly important to highpaid managers despite their relatively greater potential for satisfying lower order needs. Porter (1961), in a study of 278 employees at the bottom and middle levels of management, showed that more importance was attached to the amount of pay received than to the amount of autonomy, esteem, or social need fulfillment. In a similar study, Phelan (1969), found that, even though mean need fulfillment deficiencies decreased as job level increased from clerk to top management, financial rewards were perceived as the least fulfilled needs at <u>all</u> work levels. That is, the need for financial renumeration was less well satisfied than Maslow's needs of security, social, esteem, autonomy or self-actualization.

Studies attempting to relate productivity directly to pay have provided contradictory and inconclusive evidence. However, many studies do suggest a positive relationship between these variables provided workers perceive productivity as instrumental in determining wages. For example, Lawler (1964) found that for 563 middle and lower management personnel, the more importance attributed to job performance as a determiner of pay by an individual, the higher his rating tended to be on all job performance measures. The strongest relationships were between rating of effort expended and the managers' attitudes about how pay is determined (r = .24 for superior's performance ranking, and r = .34

for self-rankings; p < .01 for both). Experiments by Atkinson and Reitman (1956) and Kaufmann (1963) have shown that subjects who were told that their earnings were contingent on the effectiveness of their performance maintained a higher level of performance than those who were not.

After reviewing and critically evaluating the literature related to the effects of financial compensation on employee motivation, Opsahl and Dunnette (1966) cite five theories or interpretations concerning the role of money. These five theories and Opsahl and Dunnette's conclusions about them are briefly stated below:

1. A widely held hypothesis is that money operates as a motivator because it is a generalized conditioned reinforcer. Generalized reinforcing effects come about through repeated pairings with primary reinforcers. However, solid evidence of the behavioral effectiveness of such reinforcers is unfortunately lacking, and what evidence there is has been based almost entirely on animal studies.

2. Money is seen by Dollard and Miller (1950) as a conditioned incentive. According to this hypothesis, repeated pairings of money with objects or external conditions perceived as capable of satisfying an aroused motive (primary incentives) establishes a learned drive for money. The distinction to be made between the conditioned incentive and the above conditioned reinforcer interpretation is the introduction of drive reduction in the incentive hypothesis. No

such drive need be hypothesized under empirical reinforcement principles.

- - - -

3. Brown (1961) suggested, in another drive-reduction hypothesis, that one learns early in childhood by means of higher-order conditioning to become anxious in the presence of a variety of cues signifying the absence of money. These cues are primarily presented by one's parents. The presence of money, then, acts to reduce or prevent anxiety. The concept of anxiety as a learned motivating agent to money-seeking behavior is congruent with and could be seen as operating jointly with the two previous hypotheses as an additional explanatory device. Brown presented no experimental evidence to support his theory.

4. In the Herzberg, Mausner, and Snyderman (1959) "two-factor" theory of worker motivation, money is seen as a "hygiene factor" serving as a potential dissatisfier if not adequate, but not as a potential satisfier or positive motivator. Its hygienic role is one of avoiding the pain of dissatisfaction, but not one of promoting heightened motivation. The interpretation of salary in this framework by Herzberg, <u>et al</u>. is mystifying in light of their own data. Fifteen per cent of employee descriptions of satisfying events involved the mention of salary and 17 per cent of their descriptions of unsatisfying events mentioned salary. Hardly a large enough difference to justify the conclusions. Herzberg et al. suggested, however, that salary may be viewed

as a "dissatisfier" because its impact on favorable job feelings was largely short-term while its impact on unfavorable feelings extended over a longer period of time. Close inspection of the data do not support this conclusion. In 22 per cent of the unusually good job feelings lasting several months, salary was reported as a causal factor; of the short term feelings, it was a factor 5 per cent of the time. In contrast, of the unusually bad job feelings lasting several months, salary was mentioned only 18% of the time. Thus, the data seem to be inconsistent with this interpretation and lend no support to the hypothesis of a differential role for money. Subsequent literature attempting to test this notion has been contradictory and inconclusive.

5. Vroom (1964) develops a cognitive model of motivation according to which money derives affective orientations (valence) as a result of its perceived instrumentality for obtaining desired outcomes. Although valence has no direct implication, the "force" compelling a person to action is postulated as a product of the valence of an outcome and the person's expectancy that a certain action will lead to attainment of the outcome. Thus, for example, if a person perceives money as instrumental for obtaining the outcome of status, and if status is desired, money acquires a positive valence. The probability of a money-seeking response will then be decided by the product of the amount of desire for status and the expectancy that certain actions on the job will lead to

attaining more money.

In summary, then, it seems clear that, although money may mean different things to different people and people may behave in many ways depending on momentary needs, pay can be in most cases an efficient motivator of behavior.

### Wage Satisfaction

In 1946, Centers and Cantril interviewed 1,239 persons representing a cross-section of the national population 18 years of age or older. Over half of this population expressed dissatisfaction with their present income. The implication to be drawn from the study is that satisfaction with wages depends upon its absolute value and as income increases one is more likely to be satisfied with it.

It has been suggested, however, that satisfaction resulting from the receipt of wages is based not on the absolute amount of these wages, but on the relationship between that amount and some standard of comparison used (Vroom, 1964). That standard may be wages received at a previous time or the perception of wages received by other workers. The most thorough investigation into such possibilities has been conducted by Patchen (1961) who formulated the problem of wage satisfaction with respect to a theory of social comparison. Patchen suggests that an individual compares his own earnings with those of others and evaluates differences in terms of his perception of disparity on factors believed to directly determine pay (skill, tenure, education, etc.). Thus, for

12

- - - - -

example, if one compares himself with someone earning more than he, but who is perceived as being similar in basic dimensions related to pay, a dissatisfying situation exists. Similarly, if an individual compares himself with someone earning the same wage, but seen as inferior on these dimensions, dissatisfaction may occur. On the other hand, if the comparison shows an individual as receiving less pay than someone superior, or the same pay as someone similar on pay related dimensions, satisfaction with wages would be expected. Patchen has received support for his basic conceptualization in a study of oil refinery workers and this conceptual framework is very convincing in its ability to account for such wide variances among satisfaction scores of individuals working the same job for the same wage.

#### Wage Satisfaction and Productivity

Very little information exists on the direct association between wage satisfaction and productivity, but what little evidence there is points to a low positive relationship (Porter and Lawler, 1968). Herzberg, <u>et al</u>. (1959) found in their study that when pay was perceived as unfairly low it acted as a dissatisfier and frequently Lawler (1964), showed that the more managers perceived their pay as a satisfier, the higher they were rated in relationship between managers' perception of pay as a satisfier and ratings of effort expended on the job (r = .17, p .01).

Evidence of the relationship between pay satisfaction

and wages may also be drawn from "equity theory." A feature of this theoretical approach is the assumption that compensation either above or below that which is perceived by the employee as "equitable" results in tension and dissatisfaction due to dissonant conditions (Opsahl and Dunnette, 1966). The tension motivates the employee to adjust his behaviors or cognitions in an attempt to restore consonance. The most recent and rigorous theory of equity has been advanced by Adams (1963), Adams states that inequity exists for an individual when he perceives the ratio of his outcomes (in this case--pay) to inputs (effort, skill, etc.) as unequal in relation to others. This theory predicts that the dissonance caused by the inequity may be reduced by lowering or raising inputs to bring them in line with outcomes. Although all evidence seems to support the postulates of this theory, the work has been primarily concerned with overpayment and little has been done to investigate the principles involved in underpayment. Overpayment does seem to cause an increase in productivity, but the evidence, slight as it is, suggests that predictions derived from equity theory in cases of underreward may require reformulation (Opsahl and Dunnette, 1966). After reviewing this literature, Weick (1965) concluded that the evidence indicates that underpaid employees, contrary to the predictions of equity theory, work harder and also like the task more than employees who are not underpaid. Weick (1965) accounts for these findings with the hypothesis that

- -

high effort for insufficient reward is an attempt by an employee to raise his objective outcomes rather than lowering inputs. Moreover, Weick states, "the increased satisfaction found among underpaid workers can be seen as a <u>cognitive</u> attempt to heighten outcomes to bring them in line with inputs." However, the principles underlying the choice of action taken to reduce dissonance in unequitable situations have not been specified, and therein lies the major weakness of equity theory.

### Statement of the Problem

In view of Kahn's plea for closer investigation into the separate dimensions of job satisfaction (see page 1), and after the establishment of pay and pay satisfaction as an important dynamic factor of job satisfaction and productivity, three questions immediately present themselves: (1) What are the factors that determine the pay an employee receives? (2) What are the factors which determine an employee's satisfaction with his pay? and (3) How do these factors differ in their relation to pay and satisfaction with pay for different employee groups?

The most significant effort to answer these questions up to now has concerned itself with the first two of the above stated questions. Lawler and Porter (1966), using a questionnaire designed to measure satisfaction with several aspects of the job, collected data from 1,916 managers throughout the country. Imbedded among the others were two items to

- - -- -- - --

assess manager's satisfaction with the absolute amount of their pay. A second part of the questionnaire asked the respondents to supply factural information concerning their age, position, time in position, time with company, level of education, organization size, level of management and salary.

The authors found managers' pay to be best predicted by management level ( $\overline{r}$  = .49), and further, age and seniority are other demographic variables which were fairly good predictors of actual pay ( $\overline{r}$  = .25 and .22 respectively). Less highly related variables were organization size ( $\overline{r}$  = .14) and time in position ( $\overline{r}$  = .08). Type of position (Line/Staff) was negatively related to actual pay ( $\overline{r}$  = -.12). All the above partial correlations were significant at the .01 level. Education was not significantly related to managers' pay ( $\overline{r}$  = .02). The multiple correlation between the seven demographic variables and actual pay in this study was .62 (p <.001).

Lawler and Porter defined dissatisfaction with pay as the differenence score between the managers rating on a seven point scale of the questions how much their pay "is now" and how much they felt it "should be". (The rationale behind such a measure of job dissatisfaction will be presented later in this paper). Thus, larger difference scores indicated greater dissatisfaction with pay. The multiple correlation coefficient for the relationship between the eight demographic variables and the managers' satisfaction with pay

was .28 (p<.01). However, only the variable of salary appeared as a good predictor of pay satisfaction ( $\overline{r} = .27$ ). Other things equal, higher pay was associated with higher satisfaction with pay.

It is interesting to note that contrary to other studies (Klein and Maher, 1966; Penzer, 1969) no significant relationship between education and pay satisfaction was found.

Lawler and Porter's (1966) study was a definite step toward answering some of the questions concerning the determinants of wages and wage-satisfaction. However, since this study was restricted to managerial personnel, it revealed nothing of the factors related to the renumeration of hourly and salaried personnel and their satisfaction with pay. Nor did the Lawler and Porter study add anything to the question of differences between factors among these groups (Question #3). The purpose of the present paper will be to investigate these problems as posed in the three questions stated previously for hourly and salaried personnel as well as managers.

Other studies have investigated the relationships of such demographic variable as, age, occupational level, sex, seniority, experience and level of education to pay and paysatisfaction with significant results (Lawler and Porter, 1963; Chandler, Foster and McCormack, 1963; Goodwin, 1969; Penzer, 1969; Klein and Maher, 1966; Andrews and Henry, 1963; Wilkens, 1949; Stockford and Kunze, 1950; Patton, 1957; Grigsby and

Burn, 1962). There are, however, several reasons why these studies do not clarify the issue. First, as noted by Lawler and Porter (1966), most have studied only one variable at a time, and thus, show no assessment of relative relationships to the pay factor. Secondly, many of these studies were based on small, restricted samples making generalization beyond that sample difficult. In addition, findings have been contradictory. Finally, no study has attempted to cross-validate its findings. The present thesis is designed to overcome these difficulties.

## Implications

There seem to be nearly as many different organizational policies for determining employees wages as there are organizations. The aim of these policies should be to provide equitable payment for work done. This implies a wage scale with which the employee can feel satisfied. Knowledge of how the demographic characteristics of an employee are related to the determination of wages should be invaluable in the endeavor. The ideal distribution of wages would seem to be one in which the same factors which best predict satisfaction with pay are utilized to determine an employees actual wage level.

It also seems important to determine the factors which are related to wages since it has become increasingly common to see salary used as a criterion of job success (Lawler and Porter, 1966). For example, Scollay (1956) selected salary as

• • • • • • • • • • • •

a criterion measure of success on the job since "people are usually rewarded by salary increases for good job performance. Those who perform the best service would be expected to receive the highest increases." Williams and Harrell (1964) have investigated the predictive value of test scores, professors' ratings, college grades and activities with regard to management success using salary as a criterion. Hilton and Dill (1962) have shown salary growth rate to be a stable measure of career progress independent of number of years for at least the first six years of employment. With the use of salary as a criterion measure of job success it seems paradoxical to find so little research information concerning those factors which may be significantly related to it.

----

#### CHAPTER II

### PROCEDURE AND METHODOLOGY

The method used in the present study will be, with some modifications, essentially an extension of that by Lawler and Porter (1966). The actual data used were collected in conjunction with a previous study designed to measure employee satisfaction of a local manufacturer's work force (Loveland, Ronan and York, 1968).

#### The Instrument

In order to determine the nature of the information desired in future data collection, interviews were conducted on a cross-sectional sample of 241 employees at all work levels in the organization. Interviews were also held with executive personnel concerning organizational objectives of the study.

From the information collected in these interviews, questionnaires were developed attempting to relate to motivational aspects of the employees' perceptions of their job and the company. Three questionnaires were developed--one each for the Managerial - Supervisory, Salaried Non-Supervisory, and Hourly employee groups (see Appendix A). These questionnaires differed only slightly in their original form and not at all in the portions used in the present study.

The data which were extracted for use in the present

study were taken from only one item on the questionnaire, namely "Pay for the work which you do," and demographic data collected as part of the questionnaire.

## Item Format

The format used for the questionnaire items was that of Porter (1962). Three questions were asked for each item: Pay for the work which you do:

- (a) How high is it? very low 1 2 3 4 5 6 7 very high
- (b) How high should it be? very low 1 2 3 4 5 6 7 very high
- (c) How important is this to you? not important 1 2 3 4 5 6 7 very important

Respondents were asked to circle the number which represented their feeling for each question on each item. Data from question (c) were not used in the present study. Question (a) represents the individual employee's perception of his actual level of pay. Question (b) represents an individuals perception of what he feels he should be paid. A measure of an individual's satisfaction with his pay was defined as the answer to question (a) subtracted from the answer to question (b); that is, the difference score between "how high it is now" and "how high should it be." This score may be conceived as an indirect index of individual level of perceived satisfaction with "Pay for work done" presumably based on individual "needs."

Rationale for this measure of satisfaction is given by Porter (1962):

The degree of perceived deficiency in fulfillment for each respondent on a questionnaire item was obtained by subtracting the answer to Part a of an item ('How much of the characteristic is now connected with your position?') from Part b of the item ('How much of the characteristic do you Think should be connected with your position?'). An a priori assumption was made that the larger the difference -- a subtracted from b--the larger the degree of dissatisfaction or the Smaller the degree of satisfaction. This method of measuring perceived need satisfaction thus is an indirect measure derived from two direct answers by the respondent for an item. This method has two presumed advantage: (a) The subject is not asked directly concerning his satisfaction. Therefore, any tendency for a simple 'response set' to determine his expression of satisfaction is probably reduced somewhat. It is more difficult, although by no means impossible, for the respondent to manipulate his satisfaction measure to conform with what he thinks he 'ought' to put down versus what he actually feels to be the real situation. (b) Secondly, this method of measuring need fulfillment is a more conservative measure than would be a single question concerning simple obtained satisfaction. It takes into account the fact that higher level positions should be expected to provide more rewards because it utilizes the difference between obtained and expected satisfaction. In effect, this method asks the respondent 'how satisfied are you in terms of what you expected from this particular (management) position?' Thus, it is designed to be a realistic and meaningful measure in comparing different (management) groups... (p. 378).

Ronan (In Press) gives support to this measure of satisfaction. The author states that an apparent weakness in previous studies of job satisfaction revolves around the use of separate and different ratings to infer the structure of job satisfaction. In some studies satisfaction is inferred from ratings of "what is <u>present</u> in the job,: in others satisfaction is inferred from ratings of "what is personally <u>important</u> in the job." Accordingly, Ronan sees such procedures as inadequate in that "job satisfaction most likely

. . . . . . . . . . . . . . .

-----

stems from the discrepancy between what the respondent perceives the <u>actual</u> job situation to be, and what he desires or feels it <u>should be</u>." Further, according to Ronan, "this discrepancy more nearly reflects the positive (or negative) feeling state of the respondent associated with his perceptions of his job setting."

The demographic data used in the present study were measures of the following variables:

Independent Variables

Dependent Variables

- 1. Sex 2. Age
- 3. Time with company
- 4. Job level
- 5. Level of education
- 6. Actual wages

- Actual wages
   Satisfaction with pay
  - (Difference Score)

In general then, data in the present study were descriptive of three work groups (Management, Salaried, Hourly), the individuals in these work groups, and their satisfaction with pay received. Of interest are the differences and interrelationships among these measures.

## Data Collection

Prior to distribution of questionnaires, every effort was made to encourage participation. The union was notified as to the Company's intentions. Announcement of the project was printed in the company newspaper and by memoranda from the company president.

Questionnaires were mailed to the homes of all employees of the Company accompanied by a letter from the company president encouraging participation. Returns were made via pre-stamped envelopes addressed directly to the project staff at Georgia Institute of Technology. Anonymity was stressed. A total of 25,980 questionnaires mailed and tabulation of participation is summarized in Table 1.

Table 1. Questionnaires Mailed versus Returned a.

Employee	Number	Number	Percent
Group	Mailed	Returned	Participation
Management <sup>b</sup> .	2,052	1,311	63.9
Salaried <sup>c.</sup>	5,590	3,653	65.3
Hourly	18,338	6,192	33.8
	25,980	11,156	42.9

a. Taken from Loveland, et al., 1968. b. Supervisory Employees and Above

C Non-supervisory

The low return rate for hourly employees was checked with respect to representativeness by demographic comparison to the same data for the entire organization. The only difference revealed was that slightly more women returned the questionnaire than would be representative of their number in the company. This difference, as far as could be determined, was not large enough to cause any serious distortion of the data considering the size of the sample.

Eliminating questionnaires omitting relevant data pertinent to the present study left 9,866 usable questionnaires. Table 2 gives a by-variable breakdown of this sample,

Variable	Manage	ement	Sal	laried		Hourly
Sex:			<u>م من من</u>			
Male		1196		3116		4506
Female		4		92		952
Age:				0.05		0.0 70
18-29		58		905		2072
30-39		413		1091		1415
40-49		533		911		1245
50 <b>-5</b> 9		176		265		620
_60 <b>+</b>		20		38		106
<u>Tenure:</u> (Yr. Hired)						
1967		2		181		339
1965-66		34		1007		1508
1963-64		74		291		881
1961-62		77		371		415
1959-60		34		159		49
1957-58		33		90		34
1955-56		175		303		441
1953-54		180		214		590
1951-52		509		1162		543
before '51		82		39		49
Education:	-	115		10		890
H.S. or less		45		13 171		2303
H.S. gradua	te	254		161		2303
Bus./Tech.	<u> </u>	95 210		762		1262
Some College		310 406		1738		85
Bach, Degree	e	408 90		363		12
Adv. Degree Job Level:		30		000		12
<u>oop bever</u> .	Lower:	761	Assoc.:	477	Factory:	2816
1	Middle:	380	Interm.:	635	Office:	
1	Top:	59	Senior:	1194	Prof:	506
	100.	55	Sp'list:	554	Other:	463
			Other:	378	000001.	100
Level of Pay	:		0 11101 1	0,0		
	135-less:	1	135-less:	15	96-less:	70
J	136-193:	234	136-174:	586	97-104:	135
	194-250:	285	175-211:	948	105-112:	401
	251-325:	361	212-249;	792	113-121:	912
	326-383:	174	250-288:	549	122-129:	1099
	384+:	145	289 <b>+:</b>	318	130-138:	885

Table 2. Breakdown of Sample by Variable

139+: 1956

#### Table 2 continued

Satisfaction:			
(Diff. Score) <sup>a</sup> .			
1	0	6	3
2	l	0	3
3	0	2	3
4	3	2 0	11
5	9	35	31
6	35	64	65
7	370	842	1251
8	383	962	1435
9	250	731	1458
10	94	334	613
11	38	<u>]</u> 4 4	285
12	10	50	114
13	7	26	79

<sup>a.</sup> A constant value of seven was added to each difference score to avoid negative numbers. Scores were reversed so that higher difference scores indicate greater satisfaction.

# Analytic Design

....

To determine the degree to which the independent demographic variables used in the present study were actually related to the criterion of salary and salary satisfaction within each work group, separate multiple regression and correlation analyses were conducted. Multiple correlation ( $\mathbb{R}$ ) yields a measure of the combined contribution of the several independent factors as a means of explaining the variance in the dependent factor. For the sample of hourly employees, the variables of sex, age, seniority, level of education and job level were correlated with the dependent variable of actual pay. The same independent variables plus actual pay were also correlated with the dependent variable of satisfaction with pay. This same procedure was used for the salaried and management samples. Due to the lack of females in the management work group, however, the sex variable was dropped in the analysis for that sample and the hourly and salaried data were reanalyzed using all male samples to allow for acrossgroup comparisons. Since no causal relationships could be assumed, a prediction model was followed.

The actual analysis of the above procedure was done utilizing an available computer program (Clark, 1964) for the Burroughs 5500 computer. This program relates the dependent variable to the independent variables by means of a linear equation and determines how well each equation fits the data. Normal equations are developed with sums of squares and cross-products, corrected to the mean, and the abbreviated Doolittle method is employed to invert this matrix and to calculate the regression coefficients. In the process the following measures are computed for each dependent variable:

1. Multiple correlation coefficient  $(\overline{R})$  - a measure of the combined importance of the several independent factors as a means of explaining the differences in the dependent factor (Ezekiel, 1962).

2. Standard error of estimate ( $\mathbf{O}$ est) - the standard deviation of the differences between the actual values of the dependent variable and those estimated by the regression equation (English and English, 1958).

3. Coefficient of multiple determination  $(\overline{R}^2)_-$  the percentage of variance of the dependent variable ascribable directly to the several independent variables (Ezekiel, 1962). 4. An analysis of variance for the multiple linear regression - allows for testing the significance of  $\overline{R}$  for each dependent variable.

In addition to the measures dependent on all the independent variables combined, it is desirable to have measures of the contribution or importance of each of the individual variables taken separately, while simultaneously eliminating or allowing for the variation associated with the remaining independent variables (Ezekiel, 1962). An appreciation of the relative contribution of the independent variables in accounting for the variance in the dependent variables is not readily grasped by simple inspection of the multiple regression coefficients (Ferguson, 1959). Thus, the following measures for each independent variable were computed or calculated;

l, Correlation coefficient (r) - a measure of the
relationship between the criterion variable and each independent variable.

2. Partial correlation coefficient  $(\bar{r})$  - since the correlation of any independent factor and the oriterion may be greatly influenced by its relationship to the other independent variables in the regression equation, a more meaning-ful statistic in most cases is the partial correlation. The partial correlation coefficient is a measure of the relation-ship between the dependent factor and each of the several independent factors, while eliminating any (linear) tendency

of the remaining independent factors to obscure the relation. The coefficient of partial correlation may be defined as representing the extent to which that part of the variation in the dependent variable, which was <u>not</u> explained by the other independent factors, can be explained by the addition of the factor in question (Ezekiel, 1962).

3. Reduction in unexplained variance  $(\tilde{r})$  - a measure of the percentage of variance in the dependent variable left unexplained by the other independent variables which may be accounted for by the variable in question. That is, the relative reduction in error when estimating the criterion which results from using that independent variable.

4. Beta coefficient  $(\beta)$  - the importance of individual variables may also be compared by their net regression coefficients (Ezekiel, 1962). These coefficients, however, are expressed in the units in which each variable is stated. They may be made more comparable by representing them in terms of their own standard deviation. This standard score is referred to as Beta.

5. Usefulness - the amount  $\overline{R}$  would be expected to drop if the variable in question were removed from the regression equation and the weights of the remaining predictor variables were then recalculated (Darlington, 1969).

So that the above measures may be more accurately interpreted and relationships more fully understood, a matrix of intercorrelations was computed showing the inter-relation-

\_\_\_\_

ships existing among the independent variables used.

Although all the above measures of relative importance will be presented for the ease and convenience of the reader, only the partial correlation coefficient and usefulness measure will be given full exploration in the results of the present study. These are the most meaningful and appropriate measures applicable to the design and objectives of the present research. When all independent variables are uncorrelated, all five of these measures are equivalent (Darlington, 1969). But with the independent factors used in the present study this is clearly not the case.

Beta ( $\beta$ ) weights may be of considerable interest as a measure of the "importance" of a variable when certain assumptions can be met:

 All variables which might affect the dependent variable are either included in the regression equation or are uncorrelated with the variables which are included.

2. Terms are included in the regression equation to handle any curvilinear or interactive effects.

3. The dependent variable has no effect on the independent variables (Darlington, 1969). Since these assumptions are by no means met in this study,  $\beta$  should be looked at with caution.

When a prediction model is followed rather than causal analysis, "usefulness" is a measure of greater interest (Darlington, 1969). In addition, according to Lawler and

Porter (1966), because partial correlations have the effect of holding constant other factors while determining the degree of relationship between two variables, they are considered to give the best indication of the relative ability of each factor to account for the variance in pay and satisfaction with pay.

Actually, Darlington's "usefulness" of the independent variables and the squared partial correlation are proportional. Thus, based on the above evidence, those two measures of the relative "importance" of the independent factors are felt to be the most meaningful within the constraints of the present research.

# Across-Groups Comparison

.....

To answer the question of how the various independent and dependent factors differ in their relationships for different employee groups, it was first desirable to determine whether or not the groups may be considered as coming from the same population. To test this hypothesis (that the hourly, salary and management groups are simply samples from different portions of the same universe), a technique devised by Gulliksen and Wilks (1950) was used.

According to Gulliksen and Wilks, it is clear that if one selects explicitly on one variable  $\underline{x}$  (work groups), means, variances, and covariances may be quite different, yet this selection may not systematically affect the slope of the regression of y on x nor does it, of necessity,

systematically affect the variation about this regression system. Utilizing application of the Neyman-Pearson likelihood ratio test theory, the authors devise three criteria making it possible to test the various samples and determine whether they can be regarded as having come from populations with the same regression line and hence be considered the same group. If tests of the following three hypotheses, made in sequence, yield non-significant results, the various samples may be treated as being from the same population:

- H1: the hypothesis that all standard errors of estimate are equal.
- H2: the hypothesis that all regression lines are parallel (assuming H1).
- H3: the hypothesis that all regression lines are identical (assuming H2).

#### Cross-Validation

Samples for all three work groups were divided into two equal size samples and all analyses were run on both samples in the same manner. This was accomplished by initially applying the multiple regression and correlational analysis to the data from every other questionnaire and repeating the analysis for the remaining data. The actual sample sizes upon which the results of the present study are based may be seen in Table 3.

Cross-validation was necessary to insure against spuriously high coefficients of multiple correlation due to the accumulation of sampling errors in the original sample.

2253
•

# Table 3. Sample Sizes of Both Original and Cross-Validation Samples

#### CHAPTER III

### RESEARCH FINDINGS AND RELATED DISCUSSION

To evaluate the results of the present study, an alpha level of ,001 will be taken as indication of significant findings, It was decided to work at this level due to the nature of the samples used and the objectives of this research. It was felt that a more conservative interpretation of the data and a primary effort to avoid type I error was appropriate in view of the extreme size of the samples. The effect of such large samples is to drive the probability of any type II error down to an acceptable level, thus allowing alpha to be decreased with only slight losses in power. In addition, when working with correlation coefficients and large samples, the coefficients significant at the traditional .05 level become so small as to be very difficult to interpret meaningfully. The frequent use of the .05 and .01 levels of significance is a convention having little scientific or logical basis (Winer, 1962). The question becomes one of distinguishing between practical significance and statistical significance. If all correlations are significant in all cases, little information is obtained. Even if a correlation of .03 is statistically significant at the .05 level, there appears to be little practical significance in being able to account for .0009% of the variance involved.

# Cross-Validation

Tables 4 and 5 summarize and compare multiple correlations determined on the original sample groups with those of the cross-validation samples. As can be readily seen, in no

Table 4. Differences in R Between Cross-Validation Samples--Wages Criteria

Group	a. N	R <sub>l</sub>	R <sub>2</sub>	ь. Z	
Males Only					
Management	600	.80	。78	0.93	
Salaried	1558	.64	.68	1.97	
Hourly	2253	<b>.</b> 45	。48	l.28	
With Females					
Salaried	1604	,67	。66	0,81	
Hourly	2729	.59	.58	0.59	

a.For each sample

<sup>b</sup>•Normal curve critical value (Z<sub>.001</sub>=3.291)

Table 5. Differences in R Between Cross-Validation Samples-- Satisfaction Criteria

Group	N	Rl	R <sub>2</sub>	Z	
Males Only Management Salaried Hourly With Females Salaried Hourly	600 1558 2253 1604 2729	.36 .18 .16 .195 .213	.24 .20 .14 .185 .211	2.26 0.86 0.34 0.28 0.18	

case was there any significant shrinkage in multiple corre-

lation coefficents between the original and cross-validation samples. This indicates a degree of stability in regression equations determined on the original sample. Thus, in the remainder of this paper, all discussion and data will be based on the original samples. Refer to Appendix B for supplemental data on the cross-validation groups.

## Group Similarity

Results of the application of the Gulliksen and Wilks (1950) technique to determine the degree of similarity among the regression systems for the three different work group samples are given in Table 6. According to this analysis, the

	Wages Criteria				
	Management	Salaried	Hourly		
n Gest. S	600 ,765 459.00	1558 。947 1475.43	2253 1.29 2906.37		
G a =	80.2077*	df=2			
	Satis	faction Criteria			
n G est. S	600 1.20 720.00	1558 1.37 2133.86	2253 1.54 3469,62		
G a =	135.536*	df=2			

Table 6. Test for Hypothesis of Equality of Errors of Estimate

\*p=<.001;  $\chi^2_{.001}$ = 13.82

employee groups must be considered as samples from distinct

and separate populations and not samples taken from different portions of the same universe.

As indicated previously the Gulliksen and Wilks method sets up three criteria which must be met to conclude that results obtained from various samples may be regarded as coming from the same population. If the conclusion of testing any of the three hypotheses relating to these criteria results in a significant value (G) distributed as a chi-square with (K - 1) degrees of freedom, further tests are inapplicable.

In this case, the first test applied resulted in a significantly large value of G for both the dependent variaa bles of wages and wage satisfaction. This indicates that the standard errors of estimate vary too much from sample to sample to consider them as coming from the same population (p < .001).

The importance of this finding can not be underestimated in view of existing literature and theory concerning wage and job satisfaction. There exists a prevailing tendency to conduct research on only one relatively homogeneous employee group, such as management. This results in a dangerous temptation to generalize the findings of such studies to a more general population i. e., "the worker". Of the studies cited in this author's bibliography which are directly related to wages and wage satisfaction, 26 were conducted using one group of homogeneous workers, three used different occupational groups but analyzed the data as one sample, two used

\_\_\_\_\_

different occupational groups and found serious group differences affecting satisfaction with wages, and one study specifically addressed itself to the problem of occupational differences and the implication of such differences for both research and application. That study (England and Stein, 1961) found large occupational differences existing in worker attitudes toward several aspects of the job, including pay, among 3207 employees representing seven different occupational categories. The author's conclude, and data from the present study support their suggestion, that "attitude data should be stratified occupationally before being related to other variables." Perhaps much of the confusion and conflict in satisfaction--productivity studies, as summarized by Brayfield and Crockett (1955) could be traced to inadequate control of the occupational reference group variable (England and Stein, 1961).

# Intercorrelations Among Independent Variables

An indication of the interrelationships among variables for the present samples may be seen by referring to Table 7. This Table represents the Pearson coefficients of correlation among the demographic variables describing the different work group. Although nearly all correlations are significant at the indicated level, the majority are rather low, indicating a degree of relative independence among these variables.

Although most of the relationships among the demographic variables are similar to those that have been found in other studies, where other studies are available, and as one

would intuitively expect, several relationships deserve special mention. These point out possible sources of group differences.

Table 7. Intercorrelations Among Demographic Variables Used to Predict Pay and Satisfaction With Pay By Employee Group

		Managemen	.t	
	Tenure	Education	Job Level	Pay
Age Tenure Education Job Level	。41*	.03 09	.22* .16* .20*	.42* .27* .53* .60*
		Salaried		
Age Tenure Education Job Level	.51*	23* 23*	.46* .42* .19*	,50* .38* .13* .47*
		Hourly		
Age Tenure Education Job Level	。65*	22* 19*	.00 .80* .17*	.30* .40* .05 .14*

\*P<.001

Significant negative intercorrelations of a moderate level exist between education and the variables of age and tenure in the hourly and salaried employee groups, but no significant relationship exists between these variables for management personnel (See Table 7). This may be a result of the restricted range of education level typical of the manage-

ment sample due to a specific (higher) level of education required at the time of hire into a management position. It is also interesting to note the relationship between tenure and job level. There is an apparent substantial reduction in the level of correlation between tenure and job level as one moves up from the hourly to the management levels. The extremely high correlation at the hourly level (.80) clearly represents the unions support for promotions based on seniority. Since salaried positions are often filled through the promotion of hourly personnel it seems tenable that this attitude toward promotion based on seniority may carry over to some degree. Management personnel, being farther removed from the unions, typically stress merit and ability as basis for promotion. Of course the high intercorrelations between the variables dependent on time (age and tenure) are to be expected. One puzzling item in light of other relationships is the zero correlation between age and job level in the hourly group. It is quite possible that the job level categories used for the hourly employee questionnaire were not appropriate.

#### Wages

#### Multiple Relationships

In Table 8 are summarized the measures of multiple relationship between the demographic variables and actual pay for management, salary, and hourly employees. It is somewhat peculiar to note an apparent linear increase in  $\overline{R}$  from the

hourly to the salaried to the management work groups. One would not expect demographic variables to have a stronger relationship with management pay than with salaried or hourly wages. Variables reflective of merit are more typically

Table 8. Measures of Multiple Relationships Between Demographic Variables and Actual Pay

Work Group	Na.	R	(Test.	F	$\overline{\mathbb{R}}^2$
Management	600	。801*	.765	265.5	.641
Salaried	1558	。643*	.947	273.9	.414
Hourly	2253	。451*	1.290	143.2	.203

a.Males Only

-----

\*p<.001

pointed to as determiners of salaries for managers and less typically for non-management employees. Such a situation would more likely result in a lower relationship between demographic variables and management pay than for salaried or hourly groups. The existing relationship may perhaps represent the greater degree of heterogeneity among employees in the hourly and salaried samples used in this study. Another possibility may be that management promotions are not based on merit! Determinants of Wages

Tables 9, 10, and 11 report measures relecting the relative predictive value or "importance" of each of the four independent variables in accounting for the variance found in the dependent variable of actual pay for each of the employee groups.

- - - - - -

<u>Management</u>. Education is clearly the best predictor of management compensation, with job level being almost as important. Age may also be considered a reasonably good predictor of actual pay. Tenure though significant in its relationship to salary adds little to the multiple predictive power of the demographic variables. Its "usefulness" indicates a decrease of only .014 in the coefficient of multiple determination if the variable of time with company were to be removed from the regression equation. More simply it appears that the better educated, higher level, older managers who have been with the company somewhat longer are the best paid. Table 9 summarizes these data.

Variable	r	r	ß	$\overline{r}^2$	Usefulness (F)
Education	。53*	.59*	.45	.34	.123 (205.27)*
Job Level	。60*	.57*	.44	.33	.117 (194.50)*
Age	。42*	.35*	.25	.12	.044 ( 73.00)*
Tenure	。27*	.20*	.08	.04	.014 ( 24.00)*

Table 9. Relative Importance of Demographic Variables in Predicting Management Compensation

\*p<.001

The multiple correlation coefficient between the four demographic variables and actual wages was .80 (see Table 8). This is a rather high multiple correlation; especially considering the size of some of the intercorrelations among the variables, and represents 64.1% of the variance in the dependent variable.

These findings compare favorably with Lawler and Porter (1966) with respect to the variables of job level, age, and time with company where they recorded partial correlations of .49, .25, and .22 respectively (p < .01). Although Lawler and Porter (1966) used seven demographic variables, their multiple correlation with wages was somewhat lower (.62) than that found in the present study. A major discrepancy between the results of this study and that of Lawler and Porter is that the latter found no significant correlation of education level with pay. The present study shows education to be the most useful variable in predicting pay for managers. A possible source of this difference may be that the sample used in this research was from one organization whereas Lawler and Porter (1966) selected their managers from a number of organizations distributed throughout the United States.

Salaried. The variable which accounts for the greatest amount of variance in pay of salaried employees is age, followed closely by education and job level. A low positive relationship also exists between tenure and salary. This situation is much like that found for the manager group. That is, the older, more educated, higher level salaried personnel, who have been with the company somewhat longer, are paid the highest. The rank order of these variables in their relative predictive power differs between the two groups, however. (See Table 10).

\_ \_ \_ \_ \_ \_ \_ \_

Variable	r	r	ß	<u>r</u> 2	Usefulness (F)
Age	。50*	.36*	.36	.13	.074 (186.00)*
Education	。13*	.35*	.29	.12	.071 (177.30)*
Job Level	。47*	.32*	.30	.10	.061 (152.30)*
Tenure	。38*	.15*	.14	.02	.014 ( 33.80)*

Table 10. Relative Importance of Demographic Variables in Predicting Pay of Male Salaried Personnel

The multiple correlation coefficient of the four demo-

\*p<.001

graphic variables and salary, though not as high as for the managerial group, is still quite substantial (.64).

Hourly. Table 11 reports measures of the relative importance of the demographic variables to pay determination for hourly personnel and reflects a dramatic difference in the relative importance of the different variables when compared to the manager and salary groups. Tenure, the least useful

Table 11. Relative Importance of Demographic Variables in Predicting Wages of Male Hourly Employees

Varible	r	r	ß	$\frac{1}{r^2}$	Usefulness (F)
Tenure	,40*	.32*	,40	.10	.081 (226.80)*
Job Level	,14*	.16*	.15	.03	.021 ( 58.30)*
Education	,05	.12*	.11	.01	.011 ( 31.60)*
Age	,30*	.05	.06	.00	.002 ( 6.80)

\*p <.001

varible in the two previous samples, becomes the most critical

الجاج منتقد المنتجا لمما المار يتنابين

factor in the equation; that is, the variable which accounts for the greatest portion of the variance in the dependent variable. Job level and education, though significant, account for very little of the variance in a practical sense. Age does not contribute any significant unique explanation of variance in wages of hourly employees. This means that hourly workers who have been with the company the longest are the highest paid regardless of age, with a slight tendency for higher level, better educated hourly employee to be paid more. The dominance of tenure in the regression equation is, as mentioned previously, likely indicative of the typical insistance on promotions and pay raises based on tenure above all among hourly employees.

The multiple correlation of the demographic variables and hourly wages, as seen in Table 8 is .45 (p<.001) with a coefficient of multiple determination of .203.

One inference which seems reasonable from all these data is that the amount of an employee's wages is very likely to be determined by many factors, a large portion of which are variables such as age, education, tenure and job level. Such variables may not be related to performance to any appreciable degree. This has far reaching implications for both research and industry.

In industry one would hope a greater emphasis would be placed upon merit, effort and productivity in determining wages. This is a possible explanation for the poor relation-

••••••••••••••••••

ships typically found between wages, and productivity and motivation. Secondly, these data cast doubt upon the relevance of a salary criterion. As mentioned in the introduction, salary has been used increasingly as a measure of job success (Scollay, 1956, Hilton and Dill, 1962; Williams and Harrell, 1964). According to Scollay, one assumption underlying the selection of salary as a criterion is that people are usually rewarded by salary increases for good job performance. Those who perform the best service would be expected to receive the highest increases. Evidence in this study makes this assumption tenuous to say the least. Pay seems to be based largely upon variables that are demographic in nature.

#### Wage Satisfaction

#### Multiple Relationships

Table 12 reflects the measures of multiple relationship

Table 12. Measures of Multiple Relationship Between Demographic Variables and Pay Satisfaction

مان مانگری بر میرد بردی از در میران از این میروند و از میروند و از میروند را میروند و میروند و میروند و از می مرابع			·····		
Work Group	N <sup>a</sup> .	R	Gest,	F	R <sup>2</sup>
Management Salaried Hourly	600 1558 2253	。37* 。17* 。16*	1.20 1.37 1.54	18.34 8.92 11.44	.130 .028 .025

<sup>a</sup> Males Only

\*p <.001

between the demographic variables, including the additional variable of actual pay, and satisfaction with pay for manage-

46

ment, salaried and hourly employees. As can be seen, all coefficients of multiple correlation are statistically significant and are in a low positive direction.

#### Determinants of Wage Satisfaction

Tables 13, 14, and 15 present the measure of relative importance of each of the five demographic variables in determining wage satisfaction among management, salaried and hourly workers respectively. Since satisfaction with pay was defined as the difference between answers to "what it is now" and "what it should be" plus a constant value, higher difference scores indicated greater dissatisfaction. Before entering data in the computer program, however, scores of wage dissatisfaction were reversed to allow a positive correlation to represent greater satisfaction.

<u>Management Employees</u>. The results of the multiple regression analysis for management employees revealed a significant partial correlation between actual pay and satisfaction with salary (p < .001). Thus, it was suggested that with all other things held constant higher paid managers were more highly satisfied with their pay. It is also evident that no other variable used in this study is significantly useful in predicting satisfaction with salary.

These results are in good agreement with Lawler and Porter (1966) who also found present salary to be the only variable significantly related to salary dissatisfaction. Lawler and Porter state, however, that their results differ from those of Andrews and Henry (1963). The author's contend that Andrews and Henry found a negative relationship between level of education and wage satisfaction. The present data agree with Lawler and Porter, but they also agree with the findings of Andrews and Henry. The latter did not find higher

Table 13. Relative Importance of Demographic Variables in Predicting Salary Satisfaction of Management Employees

Variable	r	r	ß	$\overline{r}^2$	Usefulness (F)
Pay	.33*	.24*	.39	.060	.0520 (34.70)*
Education	.06	13	16	.017	.0149 ( 9.40)
Tenure	.09	05	06	.003	.0023 ( 1.53)
Age	.19*	.05	.04	.002	.0017 ( 1.13)
Job Level	.24*	.03	.03	.001	.0007 ( 0.47)

\*p <.001

education as predictive of lower wage satisfaction as Lawler and Porter report. In the authors' words "Degree of satisfaction with pay showed no clear trend as a function of education (p. 33),"

Further, the Andrews and Henry study, which utilized data on 490 managers in five firms, is in agreement with the present findings that age holds no significant relationship to a manager's satisfaction with his earnings, and that higher salary is associated with higher levels of pay satisfaction. The only point of disagreement between the findings of Lawler and Porter (1966), the present study, and Andrews and Henry (1963) concerning management pay satisfaction is that the latter concluded that the degree of pay satisfaction increased steadily with increase in management level (p < .001), and the former two did not. This apparent discrepancy is easily explained and, in a sense, is not really a discrepancy at all. In Table 13, it can be seen that the Pearson r between job level and pay satisfaction is a significant on (p<.001). When pay is held constant (partial correlation), however, this relationship washes out. Thus, the significant relationship between management level and wage satisfaction is, as would be expected, a function of the relatively high inter-relationship between management level and pay (r = .60, p<.001); higher level managers are paid more. Andrews and Henry using  $\chi^2$  statistics were unable, though they suspected such, to observe or confirm this inter-relationship.

Other studies have shown significant relationships between wage satisfaction and education as well as other demographic variables. Discussion of these studies will be deferred, however, until the data from the salaried and hourly groups are presented.

The multiple correlation coefficient for the relationship between the five demographic variables and managers satisfaction with their pay was .37 (p<.001). This coefficient, though, statistically significant itself, was not significantly greater than the correlation of .33 which was found between the best single predictor (actual pay) and satisfaction with pay; and is of little practical value since it leaves 87% of the variance in the dependent variable unexplained.

Salaried. In Table 14, data reflecting the relative importance of demographic variables in determining wage satisfaction are presented for salaried employees. Once again the most, and only, "useful" variable in this relationship is actual earnings. The relationship is not as strong as for the

Table 14. Relative Importance of Demographic Variables in Predicting Pay Satisfaction of Male Salaried Employees

Variable	r	r	ß	r	Usefulness (F)
Pay	.14*	.14*	.18	.018	.0177 (29.50)*
Education	03	06	06	.004	.0034 ( 5.67)
Tenure	.02	05	06	.002	.0022 ( 3.67)
Job level	.03	05	06	.002	.0022 ( 3.67)
Age	.09*	.04	.05	.001	.0014 ( 3.67)

\*p <.001

. . . . . .

. . . .

. . ....

management sample, but it is evident that higher paid salaried employees are more satisfied with their pay. The multiple correlation of the demographic variables used with pay satisfaction was. 17; also significant at the .001 level, but with a coefficient of multiple determination of .025 meaningless in a practical sense.

This author has been unable to find any other study dealing with a similar group of employees to compare with these data, but there is no reason to suspect that similar findings would not result.

Hourly Employees. Table 15 shows a very close resemblance to the two previous tables, and also that, again for

hourly employees, the most useful variable in understanding the bases for hourly wage satisfaction is actual income. No other variable shows even this low relationship with wage satisfaction in hourly employees. Thus, once again, for this sample it appears that higher wages are associated with higher satisfaction with one's income.

Table 15. Relative Importance of Demographic Variables in Predicting Wage Satisfaction of Male Hourly Employees

Variable	r	r	ß	<del>r</del> 2	Usefulness (F)
Pay	.14*	.11*	.12	.012	.0114 (26.27)*
Age	.09*	.06	.08	.004	.0036 ( 8.29)
Education	.03	.03	.03	.001	.0011 ( 2.53)
Job Level	.05	.02	.02	.001	.0006 ( 1.38)
Tenure	.07*	02	.02	.000	.0003 ( 0.69)

\*p <.001

The multiple correlation coefficient of .16 (p <.001) represents less than 3% of the variance associated with the dependent variable; more than 2% of which may be accounted for by salary alone.

It is interesting to note that unlike the other work groups the Pearson r for the independent variable of tenure becomes significant (p < .001). This reemphasizes the very high dependence of pay upon "time with company" among hourly employees.

Thus, although a great deal of variability exists in the relative importance of the five demographic variables in determining wage satisfaction among the different employee

samples, generally it is safe to say the only variable showing even a modest relationship to satisfaction is one's present level of income. The higher a person's income the more likely is he to be satisfied with it. This is not a surprising finding, but somewhat paradoxical in light of past research.

One of the earliest studies on income satisfaction was conducted in 1946 by Centers and Cantril. A total of 1239 persons representing a cross-section of the national population 18 years of age or older were asked in what weekly income group they belonged, and "About how much more money than that do you think your family would need to have things that might make your family happier or more comfortable than it is now?" The general conclusions of their study are in complete accord with the data at hand. It was determined that:

 Over one-half of the population is dissatisfied with present income. The present study indicates 67.3% of all workers are dissatisfied to some degree.

2. The higher an employee's income the more likely he is to be satisfied with it.

3. Occupational differences exist but are subordinate in importance to income differences.

4. Satisfaction and dissatisfaction vary with income quite irrespective of education within the income group.

In addition to the above, Centers and Cantril (1946) determined that "for those who are dissatisfied, it is generally true that the more money a person has the more money

52

he wants." Herein were planted the seeds of paradox.

Ganguli (1957b) translated the above statement of Centers and Cantril to form the beginnings of a theory of income aspiration. Ganguli (1957b), in a study of Indian factory workers, found a correlation of .40 between present earnings and income expectation. In other words, a person's present income serves a frame of reference by which he sets his aspirations; "... the more money he gets the more money he wants." Ganguli also found that although age had no effect, a person's financial aspiration depends to some extent on his education and also on length of service with the company. Thus, a person with a higher education or the person with longer service would expect more money than the less educated or more recently hired individual. The paradox was completed when carried to its logical conclusion. Workers with higher financial expectation were significantly more dissatisfied than those with lower expectation (Ganguli, 1957b). Thus, the paradox: If higher financial aspiration leads to higher income dissatisfaction, and higher pay is associated with higher levels of aspiration, it follows that higher paid workers should have higher levels of dissatisfaction. But all income satisfaction studies report the higher paid as being more satisfied with their income!

Other conclusions would also logically follow which are not generally supported by research findings. First, since better educated workers report higher income aspiration,

one would expect those employees with a higher level of education to be less satisfied with their wages. One study of education level and satisfaction with pay does appear to confirm this hypothesis. Klein and Maher (1966), reporting on operational measurements of the general concept of personal expectations of 727 foreman or first-line supervisors, reached the following conclusions:

1. Higher education is associated with relative dissatisfaction with pay, and

2. These differences in satisfaction for individuals with different levels of education are not due to differences in actual level of salary.

This author would suggest, however, that Klein and Maher (1966) based their second conclusion on faulty assumptions. Klein and Maher assume that by controlling for age and skill level as "approximations of salary level" they have removed any affects of differential wages among these groups. This may or may not be the case.

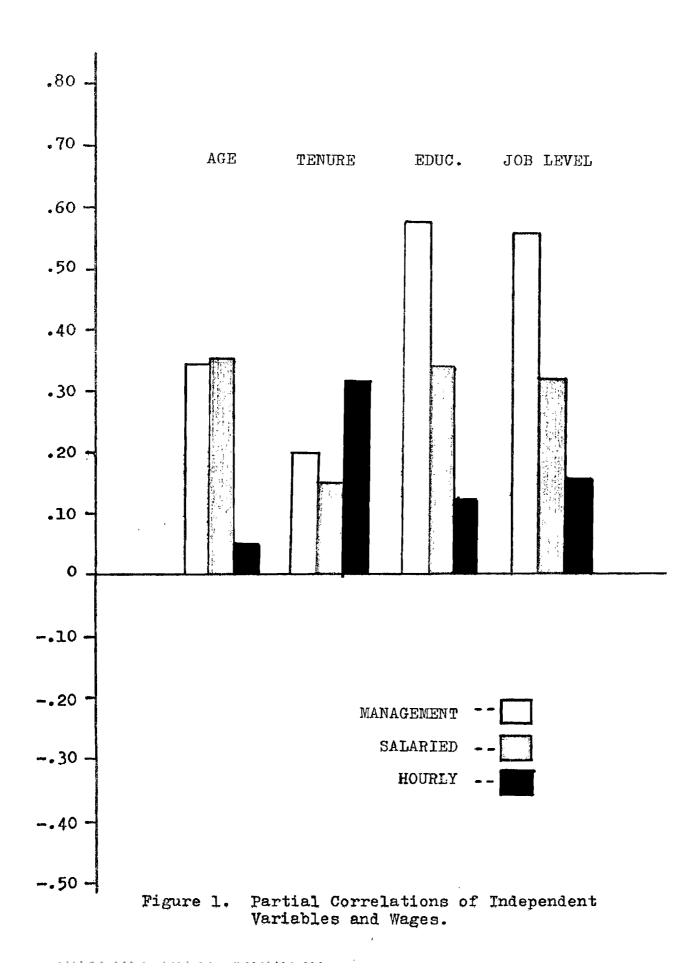
How then can this paradox be resolved? A very simple solution is possible. Higher paid employees may well expect higher wages and it may well be that higher wage aspirations may lead to a predisposition to dissatisfaction. But those groups of individuals who have been shown to expect higher wages in studies such as Ganguli (1957b), Centers and Cantril (1946) and Klein and Maher (1966) are the same groups which, in fact, do receive higher wages as shown in research such as

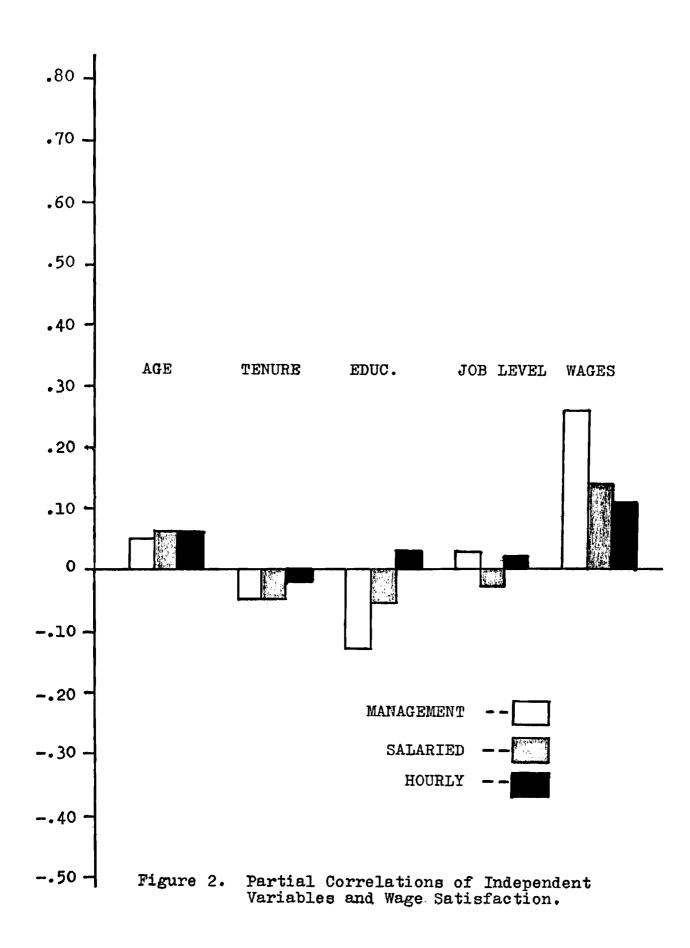
Lawler and Porter (1966) and the present study. Thus, these expectations of higher wages are, to some degree at least, met. It is suggested that expectation will only relate to dissatisfaction in employees where these expectations are not fairly well fulfilled. Higher-level managers, for instance, may expect more pay, but they get it. Higher educated employees are also paid more. The findings of Klein and Maher (1966), as well as the findings of Andrews and Henry (1963), can be attributed to the methodology used for statistical analysis. Both, using chi-square methodology, were unable to effectively control for differences in actual income. All studies which have reported present pay as the only variable useful in predicting wage satisfaction (Centers and Cantril, 1946; Lawler and Porter, 1966; and the present study) employed multiple regression techniques allowing one to partial out the effects of each variable individually.

#### Group Variability

Throughout previous sections of this paper numerous references have been made to group differences in the relative importance of the demographic variables. A clearer picture of these group differences may be seen in Figure 1 and 2. Figure 1 is a graphic representation of the magnitude of the partial correlations for each independent variable and actual pay for male hourly, salaried and management employees. Figure 2 shows the same representation for the dependent variable of wage satisfaction.

\_\_\_\_\_





57

.... ... ......

An interesting and significant feature of Figure 2 should be noted. When considering their importance in contributing to one's satisfaction with his income it appears that actual pay holds a greater relative importance for management personnel than for salaried employees, and for members of the hourly group. It will be recalled that according to Maslow's theory of need fulfillment (See Introduction) pay, a lower-order need, should become less important as the need for it becomes better fulfilled. Thus, the present study is at variance with Maslow. According to Figure 2, as one's occupational level, and along with it one's income, increases, pay becomes more, not less important.

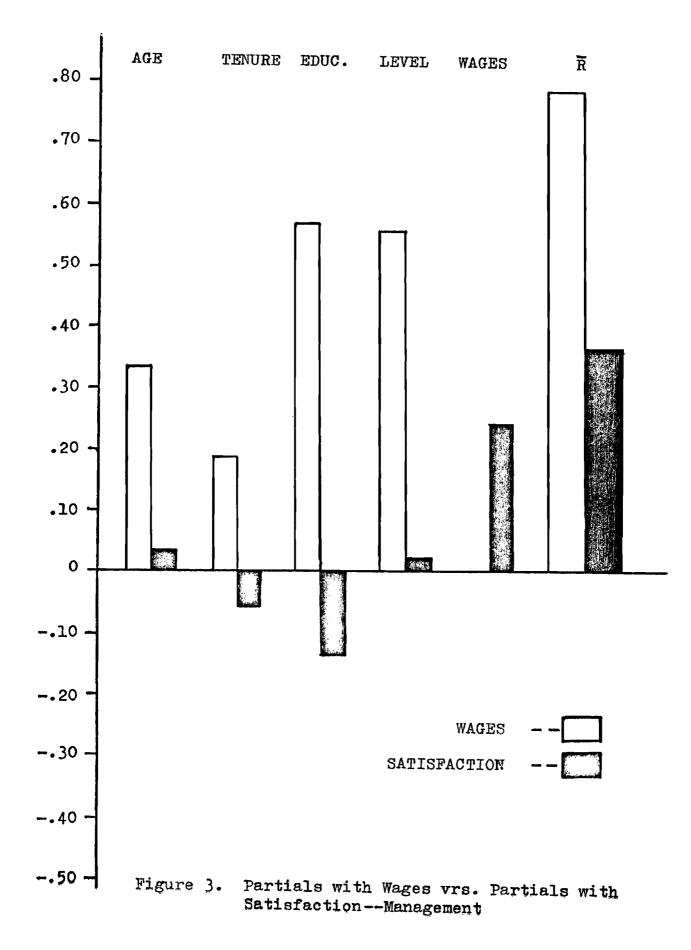
It appears as if income is a much more complex factor than Maslow's theory would indicate. It is easy to see that money for higher-paid employees becomes more than just a maintainance need which when fulfilled to a comfortable level loses its importance. Money becomes important for fulfillment of higher-order needs such as esteem, prestige and selfactualization. Money may become an index by which an individual measures his success in life. Thus, money is far more complex and important than indicated by Maslow's point of view. Evidence supporting these findings and suppositions are given by Myers (1964), Porter (1961), Phelan (1969) and were discussed in the introduction to this paper.

#### Wages versus Wage Satisfaction

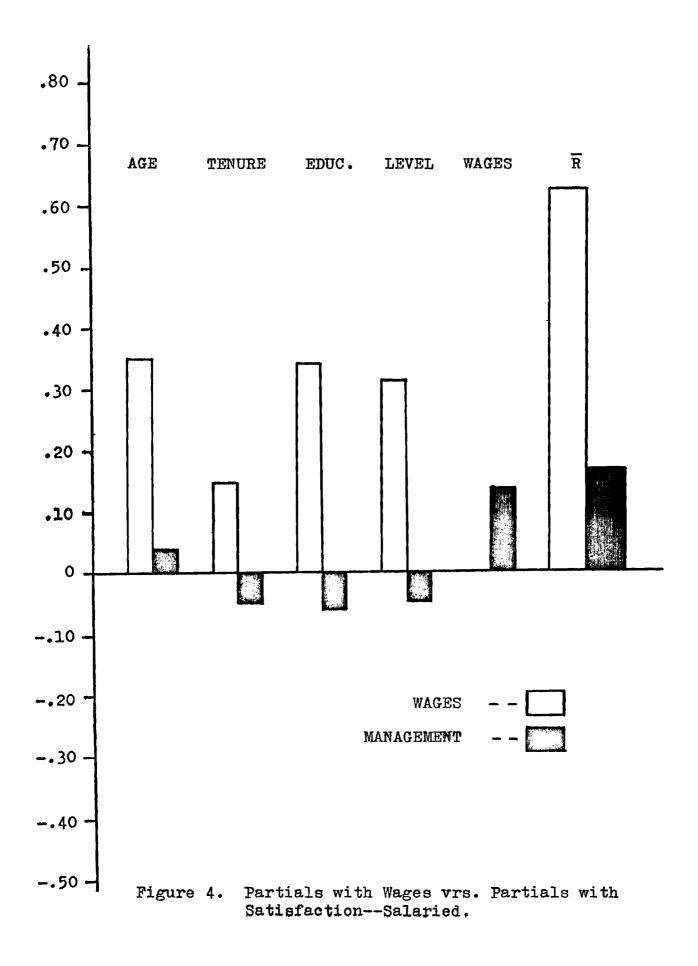
It was earlier suggested that perhaps it may be desira-

ble for the determinants of a person's pay to be related to the determinants of that individual's satisfaction with his income. While no pretense is made that any evidence bearing on the validity of the above assumption is presented by this study, it is apparent that for the employees in the present sample, variables highly related to wages have no significant importance in determining the degree to which they are satisfied with their perceived income. This relationship is quite dramatically obvious in Figures 3, 4 and 5. Figure 3 is a graphic representation of the magnitude of the partial and multiple correlation of the demographic variables with both wages and wage satisfaction for the management group. Figures 4 and 5 present the same information for the salaried and hourly samples respectively. In each case the comparison of the coefficients of multiple correlation for both dependent variables revealed a highly significant difference (p < .001; t = 12.47, 16.56 and 10.97 for management, salaried and hourly personnel in that order.

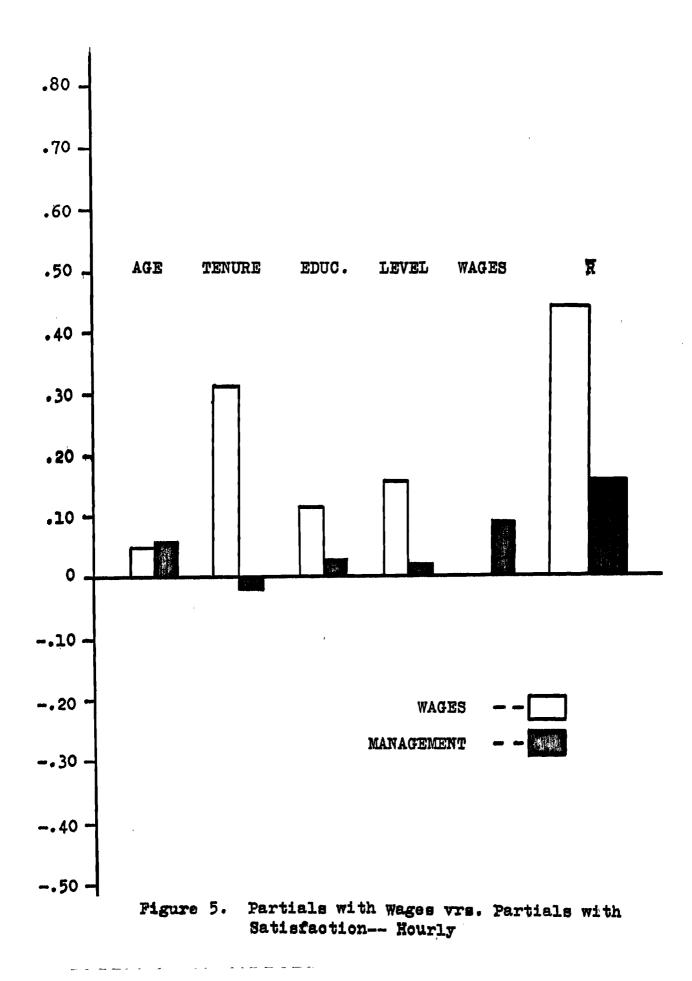
The implications of the above results are obvious. If it is an objective of an organization to provide its employees with an income which will result in a general attitude of wage satisfaction, then distribution of wages should be based primarily on variables other than age, job level, education or length of service and probably other variables of the demographic type.



- - - - - -



-



## Sex Differences

A prevalent finding in studies of satisfaction with the job has been the moderating effect of the sex variable. However, the studies comparing men and women in job satisfaction do not lead to any simple conclusion about such differences (Herzberg, Mausner, Peterson, and Capwell, 1957).

Suspecting that sex differences may also be found in the determinants of wages and wage satisfaction, the general regression analysis was recomputed in this study for the salaried and hourly samples with females included. A lack of female management employees precluded any recomputation for sex differences in that group. Not only were sex differences found but group differences were again shown.

The results imply that both hourly and salaried female employees receive significantly less pay than males (p < .001). For hourly employees sex becomes the most important variable in determining one's wage ( $\overline{r} = -.45$ ). For salaried employees sex is the least important, though still significant, factor in determining wages. Although hourly women are paid <u>less</u> than men in the same group, they are <u>more</u> satisfied with their earnings than men ( $\overline{r} = .18$ , p < .001)! Thus, it seems that being paid less than their male counterparts is not a source of dissatisfaction for female hourly workers. This is consistent with the finding that wages are usually ranked lower in importance by females than males (Herzberg, <u>et al.</u>, 1957). Women are more concerned with working conditions and social

\_\_\_\_\_

aspects of the job than pay. Sex is not a significantly important variable in salaried worker's wage satisfaction (r = .06). This last fact, coupled with the finding that sex is a relatively unimportant factor in determining wages of salaried workers, supports the general notion that job attitudes of women who are career oriented are more similar to those of men than are job attitudes of non-career women (Herzberg, <u>et al.</u>, 1959). Hourly females are less likely to be career workers than salaried women.

Herzberg, Mausner, Peterson and Capwell (1957) review 21 studies bearing on this problem. Six of these show women more satisfied than men, three show women less satisfied than men; and in five, no differences are found. It is quite possible, as suggested from the above, that differences in occupational groups from which samples were selected may be responsible for some of the contradiction among these studies.

. . . . . . . . . . . . .

## CHAPTER IV

# RESEARCH LIMITATIONS, CONCLUSIONS AND RECOMMENDATIONS

## Conclusions and Recommendations

Several of the major findings of the present study have important implications for both research and application concerning salary. In general these findings are as follows:

1. The determinants of pay for managerial, salaried and hourly employees appear to be largely demographic in nature such as age, education, seniority and job level. This is suggested by the relatively high multiple correlations of these variables with the actual pay received by members of these work groups.

2. The low multiple correlations between these same demographic variables and satisfaction of managerial, salaried, and hourly employees with their pay indicate that it is very difficult to predict satisfaction with income from these kinds of factors. Satisfaction with pay must, undoubtedly, bear a lawful relationship with some factors, but the present research suggests that such demographic variables are not important determinants of it.

3. Actual pay was the only variable even modestly related to pay satisfaction. Higher-paid employees are, in

general, better satisfied with their pay. It had been assumed by some that being paid more will simply raise one's expectations of what he should be paid and as a result one would be no better, if not less, satisfied with his pay. The results of the present study do not support this view. Other things equal, higher pay within a work group is associated with higher wage satisfaction.

4. Samples of hourly, salaried-nonsupervisory, and management employees may not be assumed to come from the same population. Important group differences exist between these samples which preclude generalization to another work group research findings based on data from one of them alone.

5. Sex may have a moderating effect on wage satisfaction such that women, though paid less, are more satisfied with their earnings than their male co-workers.

Those who are responsible for company salary policies often voice the belief that pay should be primarily a function of the job difficulty, amount of responsibility, and level of performance required. Thus, they frequently design and implement a program of job analyses, job descriptions, job evaluations, salary structures, and merit reviews. Unfortunately, a number of problems arise with such a program. It is often very difficult to obtain satisfactory measures of levels of work and responsibility, and even more difficult to obtain reliable and relevant evaluations of individual job performance.

. . . \_\_\_\_\_ \_

For these reasons, another approach to salary distribution has become common which involves the use of more easily measured variables assumed to be closely related to salary (Chandler, et al., 1963). Employee characteristics of age, seniority, education, sex and job level have been shown to be highly related to one's income. It is relatively easy to obtain reliable measures of such demographic variables. It is questionable, however, that a salary program so highly dependent on these variables would be desirable since it has also been shown that these variables have no significant relationship with one's satisfaction with his pay. Thus, further research is recommended to determine those variables more highly related to salary satisfaction. These variables will be much more subtle and more difficult to measure, but salary and wage programs based on them are more likely to result in satisfied workers.

Profitable directions for future work are hinted at by the work of Patchen (1961). As mentioned previously, it is Patchen's view that satisfaction with one's wages is highly dependent upon his choice of wage comparisons; that is, upon his relative standing on earnings and his relative status on dimensions related to earnings with those to whom he chooses to compare himself. Those who choose dissonant comparisons are less likely to be satisfied with their earnings than those who choose consonant comparisons. The "direction" of a wage comparison is meaningful to individuals only in the context

of relative standing on other status attributes (Patchen, 1961). What is now needed is a more complete understanding of what factors dictate the wage comparisons an individual will choose.

Another fruitful direction may be pointed to by the recent work of Lawler and Hackman (1970) who have discovered that employees who were allowed to participate in the development of pay incentive plans were possibly more satisfied with them and possibly with their job as evidenced by a substantial, long-lasting reduction in absenteeism. In fact, it has been suggested that greater wage satisfaction may result if the employee is allowed to select or reject on an individual basis, various benefits such as insurance, savings, vacation, retirement, and profit sharing plans such that he actually tailormakes his compensation package (Haire, Ghiselli and Porter, 1963).

In short, when investigating and implementing wage programs designed to create satisfied workers the temptation to deal with the most convenient, easily measured variables must be avoided and methods must be developed to reach into the more complex aspects of pay satisfaction for more meaningful factors upon which to base such programs.

Not independent of the above discussion, which carries with it a feel for the importance of reference groups, is the prevelant indication of group differences in the present research. This author is inclined to agree with the position

- - ----

of England and Stein (1961) who concluded that, "specific attitudinal areas may be crucial for some occupational groups and not for others and this implies that the use of scores on the same attitude scale for all groups may hide more than it reveals." This and the statement of Strong (1958) that "A way must be found to consider only those who are really satisfied or dissatisfied with each factor and to disregard those who don't really care about the factor," seem most appropriate for wage and wage satisfaction research. Perhaps attitude scales should be developed for each occupational group. The present research indicates that studies of workers in the organization should at least draw separate samples of hourly and non-hourly employees stratified by sex.

Turning to the motivational aspects of wages and wage satisfaction, the inability of Maslow's basic need theory to account for the finding of the present research that level of pay appears as a relatively more important factor in determining wage satisfaction in higher-paid employees than the less highly paid and the general difficulty of Herzberg's "dual factor" theory with respect to pay (supported by the indication in the present research that wages are important as a satisfier as well as a dissatisfier), leads this author to search for another conceptual model upon which to base future research.

A base for such a model is the work of Georgopoulos, Mahoney and Jones (1957). These authors addressed themselves

to the problem of explaining industrial motivation by first assuming that individuals in the work situation have certain goals in common. The achievement of these goals satisfy certain corresponding needs. By also assuming that human behavior is in part a function of rational calculability, or decision making in terms of goal-directedness, they arrived at a "path-goal" approach to the problem. This approach is based on the following assumptions: "individual productivity is, among other things a function of one's motivation to produce at a given level; in turn, such motivation depends upon (a) the particular needs of the individual as reflected in the goals toward which he is moving and (b) his perception regarding the relative usefulness of productivity behavior as an instrumentality, or a path to the attainment of these goals." People will maintain certain needs, they will seek and pursue among available goals those which they perceive will satisfy these needs. Thus, the "path-goal hypothesis": "If a worker sees high productivity as a path leading to the attainment of one or more of his personal goals, he will tend to be a high producer. Conversely, if he sees low productivity as a path to the achievement of his goals, he will tend to be a low producer (Georgopoulos, et al., 1957)." Certainly money must be considered a primary goal of the worker. In addition, monetary incentives can not be considered apart from all of the worker's other needs (Whyte, 1963). The important point is that the worker must be made to perceive his

change in behavior (increased productivity) as a path to a goal (money). The advantage of a monetary incentive is that it may serve to fulfill a vast number of complex needs beyond those of maintenance (which Maslow suggested). Pay is more important for what it represents (Myers, 1964). Pay may represent a form of self-actualization, an index of achievement or status, power, etc. Underlying this hypothesis is the conviction that company goals (increased productivity in whatever form) can best be served by providing the employee an opportunity to obtain his personal goals. The hypothesis maintains that goal paths will be chosen according to their utility for reaching the goals. Parker (1963) tested this hypothesis on 1,716 pharmaceutical warehouse workers and found a significant relationship between perceived performance instrumentality and group productivity. This was taken to indicate that, if worker goals and perceptions concerning what types of behavior lead to the goals are known, prediction of behavior seems possible.

Using the "path-goal" approach and incorporating the general conclusions of the present and other research, a conceptual model of the relationship between wages, wagesatisfaction (as a dimension of job satisfaction) and job performance may be developed which hopefull will be productive in development of future research. This model is represented schematically in Figure 6. This closed loop system depends upon each link to provide a clear relationship

Assuming earning money is a goal of the average worker:

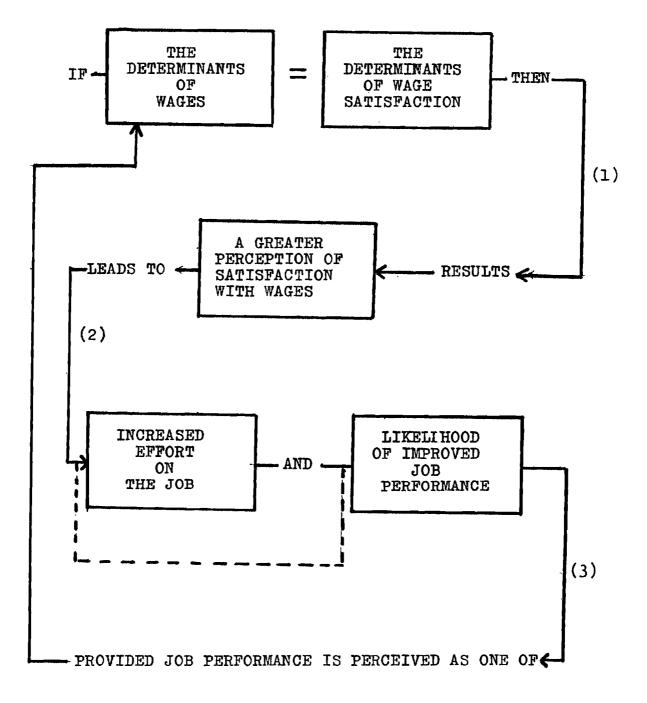


Figure 6. Incorporated Model of Wages, Wage Satisfaction, and Their Relation to Job Performance

between a wage program and job performance. If the determinants of wages are not associated with the determinants of satisfaction, the relationship is broken. Likewise, if the worker does not perceive improved performance as a path to gaining higher monetary compensation of the model does not hold. Link (1), the only original contribution, was postulated as a result of the present research and remains untested. Link (2) was derived from and empirically supported by Lawler (1964) (See Introduction), Link (3) is a common argument of Lawler (1964) and Georgopoulos, et al. (1963) and receives positive empirical support in both studies. As mentioned before, the overall framework of Figure 6 is the path-goal hypothesis of Georgopoulos, Mahoney and Jones which has been successfully supported by Parker (1963). It is recommended that research be conducted to verify or reject this model. The general model states that: if the determinants of wages closely approximate the determinants of wage satisfaction, then a greater perception of satisfaction with wages is more likely to result among employees. It has been shown that those more satisfied with their wages are more often rated high on measures of effort and performance. And this total relationship exists only if the worker perceives job performance as a determinant of wages. This model could probably be applied to any other well-established dimension of job satisfaction.

In summary then, it appears as though, like job

satisfaction, pay as an important dimension of job satisfaction, is an extremely complex factor which cannot be easily separated from many other needs and goals of the industrial worker. A great deal of research is needed to discover those factors which determine whether an employee is satisfied with his present income or not. Upon discovery of these factors, wage and salary, and incentive programs should be built around them.

## Limitations of This Research

The present research has dealt with pay satisfaction as a gross measure of equity. No distinction was made between those who indicated dissatisfaction due to perceived overpayment and those dissatisfied by perceived underpayment. It is quite possible the factors in this study may be related differently within such groups.

A more serious limitation of the present research is the lack of more sophisticated statistical techniques with which to compare correlation coefficients across more than two samples or more than two variables. A technique similar to multiple comparisons among group means is needed to avoid problems of serial dependency in testing for significant differences. Thus, many comparisons in the present research were based on observation as have similar comparisons in past research.

Another possible limitation is the use of a linear

model in all regression analyses. It is conceivable that many of the relationships tested have curvilinear properties left undetected by the techniques used.

# APPENDIX A

Pa	age
Management Questionnaire	77
Salaried Questionnaire ,	80
Hourly Questionnaire	83

.

# **EMPLOYEE OPINION STUDY**

This questionnaire has been prepared by Georgia Tech, at the request of Lockheed management, to obtain employees' opinions of their jobs and the Company. The Company and Georgia Tech agreed that this survey will be absolutely anonymous. No individual will be identified; the Company will see no records of individual opinions. Only a summary of the ideas and opinions collected will be given to the Company.

- NOTE: (1) This questionnaire was mailed directly from Georgia Tech. It should be returned directly to Georgia Tech. It will never be seen by anyone from the second
  - (2) You are not required to answer every question.

#### PLEASE DO NOT SÍGN YOUR NAME

Use the enclosed envelope to mail this questionnaire directly to: GEORGIA INSTITUTE OF TECHNOLOGY, Opinion Study Project, Atlanta, Georgia 30332.

## GENERAL INFORMATION

Your Organization: In Row One, circle the first number of your organization. In Row Two, circle the second number of your organization.

(Example: If you are in 72-44, you would circle 7 in Row One and 2 in Row Two.)

\$384 +

5 5 777 6 8 . 9

(Answers from small organizations will be combined with those from related organizations to protect individual anonymity.)

. \_\_\_\_\_ 12-1

-2 ---3 ~5

Your sex is: Male10-1	Female2
AGE (check one)	WEEKLY SALARY (check one)
18-29	\$135 or Less 12-
30-392	\$136 - 193
40-49	\$194 - 250
50-59	\$251 - 325
60 + <u>.</u> -5	\$326-383

WORK LOCATION (check one)

Charleston	13-1
Chattanooga	-2
Clarksburg	-3
Dawsonville	-4
LIP	-5
Logan	ʻ6
Marietta	-7
Other	-8
(write in)	

YEAR FIRST HIRED

<b>1967</b> .					14 t
1965-66			•		2
1963-64					-3
1961-62					-4
1959-60					5
1957-58					6
1955-56					7
1953-54					~-8
1951-52					-9
Before 1	95	1			<b>o</b>

### LEVEL OF EDUCATION

Less than High School	15-1
High Schol Graduate	2
Business/Technical School _	3
Some College	-4
Bachelor's Degree .	-5
Advanced Degree .	-6

#### FIELD OF EDUCATION

Business or Finance	16-1
Engineering	2
Law	-3
Liberal Arts	-4
Science	-5
Other	6
(write in)	

#### LEVEL OF MANAGEMENT (check one)

Office Level or Higher\_\_\_\_; 17-1 Department or Division Mgr.\_\_\_\_; -2 Ist Line Supervisor\_\_\_\_.-3

#### SECURITY REGULATIONS REMINDER

In your written comments do not reveal any classified information or Company proprietary information.

#### INSTRUCTIONS

On the following pages are some questions which ask you to give your opinions on various aspects of your job and the Company Rate your answers to each question by circling one number on each rating scale, with 7 being the highest rating, and 1 the lowest. Numbers between 1 and 7 should be used for ratings between "very little" and "very much" or between "not important" and "very important." (LOOK AT THE EXAMPLE WHICH IS ALREADY MARKED.)

## YOUR SUPERVISOR'S ABILITY TO GIVE CLEAR INSTRUCTIONS:

			DO	NOT	° CI	RCL	E AN	SYT	HING BUT NUMBERS
Ho	w important is not importan	this to t 1	o you 2	3	4	5	6	7	very important
	w much should very little	1	2		4	5	6	7	very much
	w much ability very little			3	( <b>1</b> )	5	6	7	very much

```
FEELING A PART OF THE TEAM:
 How much do you feel a part of the team?

15- very little 1 2 3 4 5 6 7 very much
 How much should you feel a part of it?

16- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
17- not important 1 2 3 4 5 6 7 very important
 COMPANY TREATMENT OF EMPLOYEES:
      How much does the Company consider individuals in making decisions?
             very little 1 2 3 4 5 6 7 very much
 How much should it consider individuals?

19- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
20- not important 1 2 3 4 5 6 7 very important
 COMPANY REPUTATION:
      How much prestige does the Company have in the aircraft
industry?
very little 1 2 3 4 5 6 7 very much
 21-
 How much should it have?
22- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
23- not important 1 2 3 4 5 6 7 very important
 YOUR CONTRIBUTION TO COMPANY PRODUCTS:
 How much do you feel your job contributes?
24- very little 1 2 3 4 5 6 7 very much
 How much would you like to feet it contributes?
25- very little 1 2 3 4 5 6 7 very much
 How important is this to you?

28- not important 1 2 3 4 5 6 7 vcry important
 CONTACT WITH FELLOW WORKERS OUTSIDE WORKING HOURS:

    HOW much do you associate with fellow workers outside working hours?

    27-
    very little
    1
    2
    3
    4
    5
    6
    7
    very much

    How much should your ssociatic?
    zeo-
    very little
    1
    2
    3
    4
    5
    6
    7
    very much

 How important is this to you? 
 \mathbf{20} - not important 1 2 3 4 5 6 7 very important
 YOUR WORK PLACE:
 How much do your working conditions help you do a good job?
30- very little 1 2 3 4 5 6 7 very much
How should they help?
31- very little 1 2 3 4 5 6 7 very much
 How important is this to you?

32- not important 1 2 3 4 5 6 7 very important
 OPPORTUNITY TO OBTAIN GOOD EQUIPMENT, SUPPLIES
AND MATERIALS:
 How much is there?

33- very little 1 2 3 4 5 6 7 very much

How much should there be?

34- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
35- not important 1 2 3 4 5 6 7 very important
 HIGHER MANAGEMENT'S SUPPORT OF YOUR SUPER-
VISOR:
How much backing does he get?
36- very little 1 2 3 4 5 6 7 very much
How much hacking should be get?

37- very little 1 2 3 4 5 6 7 very much
How important is this to you?

38- not important 1 2 3 4 5 6 7 very important
 COOPERATION AMONG YOUR FELLOW WORKERS:
How important is this to you?
41- oot important 1 2 3 4 5 6 7 very important
 PRESTIGE OF YOUR JOB OUTSIDE THE COMPANY:
 How much prestige does your job have outside the Company?

42^{-} very little 1 2 3 4 5 6 7 very much
How much prestige should your job have outside the Company?
43- very little 1 2 3 4 5 6 7 very much
How important is this to you?
44- not important 1 2 3 4 5 6 7 very important
THE PRESTIGE OF YOUR JOB IN THE COMPANY;
How much prestige does your job have?
45- very little 1 2 3 4 5 6 7 very much
How much should it have?
46- very little 1 2 3 4 5 6 7 very much
How important is this to you?

47- not important 1 2 3 4 5 6 7 very important

90- not important 1 2 3 4 5 6 7 very important
```

YOUR JOB WORK LOAD;				
How much work do you have? 48- very little 1 2 3 4	5	6	7	very much
How much should you have? 48- very little 1 2 3 4	5	6	7	very much
How important is this to you? so-not important 1 2 3 4	5	6	7	very important
COOPERATION BETWEEN DEPA	RT	IEN	TS:	
How much is there? 51- very little 1 2 3 4	5	6	7	very much
How much should there be? 52- very little   2 3 4	5		7	ŕ
How important is this to you?	, ,	6		very much
		6	7	very important
HIGHER MANAGEMENT APPRE	CIA K:	T10	NC	OF THE
Hnw much is there? 54- very little 1 2 3 4	5	6	7	very much
How much should there be? 55- very little 1 2 3 4	5	6	7	very much
How important is this to you? 58- not important 1 2 3 4	5	6	7	very important
RECOGNITION FOR GOOD IDEA	AS C	RG	:00	D WORK:
How much do you get? 57- very little 1 2 3 4	5	6	7	verv much
How much should you get? 58- very little 1 2 3 4	5	6	7	
How important is this to you?	÷	Ť		very much
se- oot important 1 2 3 4	5	6	7	very important
OPPORTUNITY TO CHANGE JOB	s w	THI	N T	HE COMPANY:
How much is there? 80- very little 1 2 3 4	5	6	7	very much
How much should there be? 61- very little 1 2 3 4	5	6	7	very much
How important is this to you? e2- not important 1 2 3 4	5	6	7	very important
OPPORTUNITY FOR PROMOTIO	NR	RON	( V	DER JOB:
How much opportunity is there?				JER 200.
	5	6	7	very much
How much should be there? 64- very little I 2 3 4 How important is this to you?	5	6	7	very much
How important is this to you? 65- not important 1 2 3 4	5	6	7	very important
FAIRNESS OF PROMOTION PRO	CED	URE	S:	
How much fairness is there? 66- very little 1 2 3 4	5	6	7	very much
How much should there be? 87- very little 1 2 3 4	5	6	7	very much
How important is this to you? 68- not important 1 2 3 4	5	6	7	very important
·				. ,
GOOD PLANNING AND SCHEDU SUPERVISOR:	LING	g of	W	ORK BY YOUR
How much is there? en-very little 1 2 3 4	5	6	7	very much
<ul> <li>very little 1 2 3 4</li> <li>How much should there be?</li> <li>very little 1 2 3 4</li> </ul>	5	6	7	very much
How important is this to you? 71- not important 1 2 3 4	5	6	7	very important
		_		
How much is there?	FUI			
72- very little 1 2 3 4 How much should there he?	5	6	7	very much
How much should there be? <b>73</b> - very little 1 2 3 4 How important is this to you? <b>74</b> - not important 1 2 3 4	5	6	7	very much
74- not important 1 2 3 4	5	6	7	very important
FREEDOM TO MAKE DECISIONS	IN	γοι	IR V	WORK:
How much is there? 75- very little 1 2 3 4	5	6	7	very much
How much should there be? 76- very little 1 2 3 4	5	6	7	very much
How important is this to you? 77- not important i 2 3 4	5	6	7	very important
OPPORTUNITY TO USE YOUR S ABILITIES:		IAL	SK	ILLS AND
How much opportunity do you h. 76- very little l 2 3 4		6	7	very much
How much opportunity should yo very little 1 2 3 4			7	very much
How important is this to you?	-	•	-	very moen

YOUR JOB WORK LOAD;

YOUR SUPERVISOR'S TECHNIC	41	IOB	KN	OWI FDCF
How much knowledge does he h		6		
How much should he have?	5		7	very much
B- very little 1 2 3 4 How important is this to you?	5	6	7	very much
• oot important 1 2 3 4	5	6	7	very important
COMPANY SPONSORED TRAINING	NG	FOF	Y	OUR JOB:
How much training have you res 10- very little 1 2 3 4 How much should you have rece	5	6	7	very much
very intre 1 2 3 4	5	6	7	very much
How important is this to you? 12- not important ? 2 3 4	5	6	7	very important
OPPORTUNITY FOR EDUCATIO? Abreast of your field;	N OI	RT	RAI	NING TO KEEP
How much opportunity is there? 13- very little 1 2 3 4	5	6	7	very much
How much should there be? 14- very little 1 2 3 4	5	6	7	very much
How important is this to you? 15- not important I 2 3 4	5	6	7	very important
OPPORTUNITY IN YOUR JOB T	0 0	EVI	ELO	P NEW SKILLS
AND KNOWLEDGE: How much is there?				
16- very little 1 2 3 4 How much should there be?	5	6	7	very much
17- very little 1 2 3 4	5	6	7	very much
How important is this tn ynu? 16- oot important I 2 3 4	5	6	7	very important
PROMPT ACTION ON YOUR COM BY YOUR SUPERVISOR:	IPL.A	INI	'S A	ND PROBLEMS
How much is there? 16- very little 1 2 3 4	5	6	7	very much
20- How much should there be? 20- very little 1 2 3 4	5	6	7	very much
21- How important is this to you? 21- oot important 1 2 3 4	5	6	7	very important
INFORMATION ABOUT WHAT Y EXPECTS OF YOU:	100	R S	UPE	RVISOR
How much information about yo				
22- get? very little 1 2 3 4	5	6	7	very much
How much should you get? 23- very little 1 2 3 4	5	6	7	very much
How important is this to you? 24- not important 1 2 3 4	5	6	7	very important
INFORMATION RELATING TO C	ом	PAN	γc	PERATIONS:
How much information does the 25- very little 1 2 3 4				
How much should be provided? 26- very little I 2 3 4	5	6	7	very much
How important is this to you? 27- not important 1 2 3 4	5	6	, 7	very important
YOUR SUPERVISOR'S ABILITY T		-		
PEOPLE:	00		AL.	
How much ability does he have? 28- vcry little 1 2 3 4	5	6	7	very much
28- Very little 1 2 3 4	5	6	7	very much
How important is this to you? 30- not important 1 2 3 4	5	6	7	very important
FEELING OF SATISFACTION FR YOU DO:		тю	e r	YPE OF WORK
How much satisfaction do you ge 31- very little 1 2 3 4	t? 5	6	7	very much
How much should you get? 32- very fittle 1 2 3 4	5	6	7	very much
How important is this to you? 33- not important   2 3 4	5	6	7	very important
SATISFACTION FROM GOOD WO				
How much satisfaction do you g your job?			dox	g good work on
34- very little 1 2 3 4 How important is this to you?	5	6	7	very much
			-	
35- not important t 2 3 4	5	6	7	very important
PAV FOR THE WORK WHICH YO			7	very important
35- not important     1     2     3     4       PAY FOR THE WORK WHICH YO       How high is it?     39- very low     1     2     3     4			7	very important very high
35- not important     1     2     3     4       PAY FOR THE WORK WHICH YO       How high is it?       39- very low     1     2     3     4       How high should it be?       37- very low     1     2     3     4	U D	0;		
<ul> <li>as not important t 2 3 4</li> <li>PAY FOR THE WORK WHICH YO How high is it?</li> <li>as you have been been been been been been been be</li></ul>	5 S	6	7	very high
<ul> <li>and important [ 2 3 4</li> <li>PAY FOR THE WORK WHICH YO How high is it?</li> <li>39- very low 1 2 3 4</li> <li>How high should it be?</li> <li>very low 1 2 3 4</li> <li>How high should it is to you?</li> </ul>	юр 5 5	6 6	7 7	very high very high

Rate each of the following by circling a number on the rating scale from 1 to 7.         very poor         poor         The Idea of Zero Defects         Applicability of ZD to Your Job         The Fairness of ZD Awards         The Fairness of ZD Awards         Charting of ZD Progress         Image: Second Colspan="2">Image: Second Colspan="2">Image: Second Colspan="2">Very poor         Progres         Image: Second Colspan="2">Image: Second Colspan="2">Image: Second Colspan="2">Image: Second Colspan="2">Very poor         Image: Second Colspan="2">Image: Second Colspan="2" Image: Second Cols												
-	The Idea of Zero Defects	1	2	3	4	5	6	7				
	Applicability of ZD to Your Job	1	2	3	4	5	6	7				
	The Fairness of ZD Awards	1	2	3	4	5	6	7				
	Charting of ZD Progress	1	2	3	4	5	6	7				
t-	Effect of ZD on Your Performance	I I	2	3	4	5	6	7				
hat do	by you feel is the purpose of the Zero Defects program?			·····		<u></u>						

· ·· -

## OTHER ASPECTS OF YOUR JOB AND THE COMPANY

Consider the following items. Rate your opinion of each by circling a number from 1 to 7 at the left. Then indicate its importance to you by circling a number at the right.

	very			•			very good	· · · · · · · · · · · · · · · · · · ·	I	Not mpor						Very portant
23	้เ	2	3	4	5	6	7	Credit Union	53-	1	2	3	4	5	6	7
24	I.	2	3	4	5	6	7	Savings Plan	54-	1	2	3	4	5	6	7
25	1	2	3	4	5	6	7	Retirement Plan	55-	1	2	3	4	5	6	7
26	1	2	3	4	5	6	7	Tuition Reimbursement	56-	1	2	3	4	5	6	7
27-	1	2	3	4	5	6	7	Group Insurance Plan	57	1	2	3	4	5	6	7
28-	1	2	3	4	5	6	7	Vacation Policy	58-	i	2	3	4	5	6	7
29	1	2	3	4	5	· 6	7	Sick Leave Policy	59-	1	2	3	4	5	6	7
30-	1	2	3	4	5	6	7	Disciplinary Policy	60-	1	2	3	4	5	6	7
31-	1	2	3	4	5	6	7	Promotion from Within	61-	1	2	3	4	5	6	7
32-	I.	2	3	4	5	6	7	B.O.M.C	62-	1	2	3	4	5	6	7
33	1 .	2	3	4	5	6	7	G.L.E.R.C.	63-	1	2	3	4	5	6	7
34-	i	2	3	4	5	6	7	Plant Medical Services	64-	1	2	3	4	5	б	7
35	1	2	3	4	5	б	7	Food Services	65-	1	2	3	4	5	6	7
36	i	2	3	4	5	6	7	Management Club	66	1	2	3	4	5	6	7
37-	1	2	3 ·	4	5	6	7	Southern Star	67	1	2	3	4	5	6	7
36-	1	2	3	4	5	6	7	Southern Craftsman	68	1	2	3	4	5	6	7
30-	1	2	3	4	5	6	7	This Opinion Survey	69	1	2	3	4	5	6	7
40-	1	2	3	4	5	6	7	Housekeeping	70	1	2	3	4	5	6	7
41-	1	2	3	4	5	6	7	Your Job Security	71	1	2	3	4	5	6	7
42-	1	2	3	4	5	6	7	Parking	72-	1	2	3	4	5	6	7
43	1	2	3	4	5	6	7	Performance of Subordinates	73-	I	2	3	4	5	6	7
44	1	2	3	4	5	6	7	Safety Practices	74-	1	2	3	4	5	6	7
45	I	2	3	4	5	6	7	Company Interest in Community	75-	1	2	3	4	5	6	7
46	1	2	3	4	5	6	7	Management Support of Your Decisions	76-	1	2	3	4	5	6	7
47	i	2	3	4	5	6	7	Your Pay Compared to Other	77	1	2	3	4	5	6	7
48	1	2	3	4	5	6	7	Usefulness of Paperwork on Your Job	78	1	2	3	4	5	6	7
49	1	2	3	4	5	6	7	Opportunity to Feel a Part of Management	79	1	2	3	4	5	6	7
50	1	2	3	4	5	6	7	Plant Maintenance	80	1	2	3	4	5	6	7
51-	1	2	3	4	5	6	7	Information on Company Policies	7-	1	2	3	4	5	6	7
52-7	i	2	3	4	5	6	7	Morale of Your Co-workers	8-	i	2	3	4	5	6	7

## YOUR WRITTEN COMMENTS

You may have ideas and opinions not fully covered in this survey. Write in the space below. If you need more space, attach a separate sheet.

# EMPLOYEE OPINION STUDY

This questionnaire has been prepared by Georgia Tech. at the request of **Constant** management, to obtain employees' opinions of their jobs and the Company. The Company and Georgia Tech agreed that this survey will be absolutely anonymous. No individual will be identified; the Company will see no records of individual opinions. Only a summary of the ideas and opinions collected will be given to the Company.

- NOTE: (1) This questionnaire was mailed directly from Georgia Tech. It should be returned directly to Georgia Tech. It will never be seen by anyone from an angle of the second s
  - (2) You are not required to answer every question.

#### PLEASE DO NOT SIGN YOUR NAME

Use the enclosed envelope to mail this questionnaire directly to: GEORGIA INSTITUTE OF TECHNOLOGY, Opinion Study Project, Atlanta, Georgia 30332.

## GENERAL INFORMATION

Your Organization: In Row One, circle the first number of your organization.

In Row Two, circle the second number of your organization.

(Example: If you are in 72-44, you would circle 7 in Row One and 2 in Row Two.)

8- Row One - 0 1 2 3 4 5 6 7 8 9 9- Row Two - 0 1 2 3 4 5 6 7 8 9

(Answers from small organizations will be combined with those from related organizations to protect individual anonymity.)

Your sex is: Male10-1	Female	
AGE (check one)	WEEKLY SALARY (check one)	WORK LOCATION (check one)
18-29	\$135 or Less 12-1	Charleston 13-1
30-392	\$136 - 1742	Chattanooga2
40-493	\$175-2113	Clarksburg
50-59	<b>\$212 -</b> 2494	Dawsonville
60 +	\$250 - 2885	LIP
	\$289 + · · · <b></b> -6	Logan
		Marietta
•		Other ~8
YEAR FIRST HIRED		(write in)
IEAR FIRST HIRED	LEVEL OF EDUCATION	FIELD OF EDUCATION
1967	Less than High School 15-1	Business or Finance 18-1
1965-66		Engineering
1963-64	Business/Technical School -3	Law
1961-62	Some College	Liberai Arts4
1959-60	Bachelor's Degree5	Science
1957-58	Advanced Degree6	Other6
1955-567		(write in)
1953-54		AT WHAT LEVEL
1951-52	YOUR JOB IS:	IS YOUR JOB?
Before 19510	Engineer	Associate
	Scientist	Intermediate
	Other3	Senior
	(write in)	Specialist
IF IN ENGINEERING, WHICH	OPCANIZATION?	Other5
Advanced Design 19-1	C-141	Research
C-5	Development Tests8	Structures
C-130	Engineering Adm	Subsystems
<u> </u>	Lagareering Adm.	

## SECURITY REGULATIONS REMINDER

In your written comments do not reveal any classified information or Company proprietary information.

#### INSTRUCTIONS

On the following pages are some questions which ask you to give your opinions on various aspects of your job and the Company. Rate your answers to each question by circling one number on each rating scale, with 7 being the highest rating, and I the lowest. Numbers between I and 7 should be used for ratings between "very little" and "very much" or between "not important" and "very important." (LOOK AT THE EXAMPLE WHICH IS ALREADY MARKED.)

## YOUR SUPERVISOR'S ABILITY TO GIVE CLEAR INSTRUCTIONS:

			DO	NOT	' Cli	RCLE	E AN	ITT	HING BUT NUMBERS
	not importan	τI	2	3	4	$(\mathfrak{S})$	6	7	very important
F	fow important is not important	this te	ο <b>γο</b> ι	1?		$\sim$			
ł	low much should very little	he ha l	ave? 2	3	4	5 (	6	7	very much
	low much ability very little			3	4	5	6	7	very much
	low much ability	I does	he	have?					

```
How much do you feel a part of the tcam?

<sup>15-</sup> very little 1 2 3 4 5 6 7 very much
 How much should you feel a part of it?

16- very little 1 2 3 4 5 6 7 very much
 How important is this to you?

17- not important 1 2 3 4 5 6 7 very important
 COMPANY TREATMENT OF EMPLOYEES:
      How much does the Company consider individuals in making decisions?
           very little 1 2 3 4 5 6 7 very much
How much should it consider individuals?
19- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
20- not important 1 2 3 4 5 6 7 very important
 COMPANY REPUTATION:
     How much prestige does the Company have in the aircraft industry?
           very little 1 2 3 4 5 6 7 very much
How much should it have?
22- very little 1 2 3 4 5 6 7 very much
How important is this to you?
23~ not important 1 2 3 4 5 6 7 very important
 YOUR CONTRIBUTION TO COMPANY PRODUCTS:
      How much do you feel your job contributes?
very little 1 2 3 4 5 6 7 very much
 24-
How much would you like to feel it contributes?
25- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
26- not important 1 2 3 4 5 6 7 very important
CONTACT WITH FELLOW WORKERS OUTSIDE WORKING HOURS:
     How much do you associate with fellow workers outside work-
ing hours?
very little ! 2 3 4 5 6 7 very much
How much should your associate?
28- very little 1 2 3 4 5 6 7 very much
How important is this to you?
2P not important 1 2 3 4 5 6 7 very important
 YOUR WORK PLACE:
 How much do your working conditions help you do a good job'
30- very little 1 2 3 4 5 6 7 very much
How should they help?

31- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
32- not important 1 2 3 4 5 6 7 very important
OPPORTUNITY TO OBTAIN GOOD EQUIPMENT, SUPPLIES
AND MATERIALS:
 How much is there?
33- very little 1 2 3 4 5 6 7 very much
How much should there be?

34- very little 1 2 3 4 5 6 7 very much
How important is this to you?
as- not important 1 2 3 4 5 6 7 very important
HIGHER MANAGEMENT'S SUPPORT OF YOUR SUPER-
How much backing does he get?

36- very little 1 2 3 4 5 6 7 very much
How much backing should be get?

37- very little 1 2 3 4 5 6 7 very much
How important is this to you?

se not important 1 2 3 4 5 6 7 very important
COOPERATION AMONG YOUR FELLOW WORKERS
How much teamwork is there?

39- very little 1 2 3 4 5 6 7 very much
How much should there be?
40- very little 1 2 3 4 5 6 7 very much
How important is this to you?
41- not important 1 2 3 4 5 6 7 very important
PRESTIGE OF YOUR JOB OUTSIDE THE COMPANY:
How much prestige does your job have outside the Company?

42- very little 1 2 3 4 5 6 7 very much
How much prestige should your job have outside the Company?
43- verv little 1 2 3 4 5 6 7 very much
How important is this to you?
44- not important 1 2 3 4 5 6 7 very important
THE PRESTICE OF YOUR JOB IN THE COMPANY:
How much prestige does your job have?
45- very little 1 2 3 4 5 6 7 very much
How much should it have?

48- very little 1 2 3 4 5 6 7 very much
How important is this to you?

47- not important 1 2 3 4 5 6 7 very important
```

FEELING A PART OF THE TEAM:

```
How much should there be?
52- very little 1 2 3 4 5 6 7 very much
How important is this to you?
53- not important 1 2 3 4 5 6 7 very important
HIGHER MANAGEMENT APPRECIATION OF THE
IMPORTANCE OF YOUR WORK:
How much is there?
54- very little 1 2 3 4 5 6 7 very much
How much should there be?
55- very little 1 2 3 4 5 6 7 very much
How important is this to you?
56- not important 1 2 3 4 5 6 7 very important
RECOGNITION FOR GOOD IDEAS OR GOOD WORK:
How much do you get?
57- very little 1 2 3 4 5 6 7 very much
How much should you get?
58- very little 1 2 3 4 5 6 7 very much
How important is this to you?
59- not important 1 2 3 4 5 6 7 very important
OPPORTUNITY TO CHANGE JOBS WITHIN THE COMPANY:
How much is there?
60- very little 1 2 3 4 5 6 7 very much
How much should there be?

61- very little 1 2 3 4 5 6 7 very much
How important is this to you?

52-not important 1 2 3 4 5 6 7 very important
OPPORTUNITY FOR PROMOTION FROM YOUR JOB:
How much opportunity is there?

63- very little 1 2 3 4 5 6 7 very much
How much should be there?
64- very little 1 2 3 4 5 6 7 very much
How important is this to you?

65- not important 1 2 3 4 5 6 7 very important
FAIRNESS OF PROMOTION PROCEDURES:
How much fairness is there? 
 \mathbf{ee} very little l=2,3,4,5,6,7 very much
How much should there he?

67- very little 1 2 3 4 5 6 7 very much
How important is this to you?
88- not important 1 2 3 4 5 6 7 very important
GOOD PLANNING AND SCHEDULING OF WORK BY YOUR 
SUPERVISOR:
How much is there?

sp- very little 1 2 3 4 5 6 7 very much
How much should there be?
70- very little 1 2 3 4 5 6 7 very much
How important is this to you?
71- not important 1 2 3 4 5 6 7 very important
COMPANY PLANNING FOR THE FUTURE.
How much is there?

72- very little 1 2 3 4 5 6 7 very much
How much should there be?

73- very little 1 2 3 4 5 6 7 very much
How important is this to you?
74- not important 1 2 3 4 5 6 7 very important
FREEDOM TO MAKE DECISIONS IN YOUR WORK:
How much is there?
75- very little 1 2 3 4 5 6 7 very much
How much should there be?

76- very little 1 2 3 4 5 6 7 very much
How important is this to you?
77- not important 1 2 3 4 5 6 7 very important
OPPORTUNITY TO USE YOUR SPECIAL SKILLS AND
ABILITIES:
```

YOUR JOB WORK LOAD;

How much work do you have? 48-- very little | 2 3 4 5 6 7 very much

How much should you have? AP- very little 1 2 3 4 5 6 7 very much

How much is there? 51- verv little 1 2 3 4 5 6 7 very much

COOPERATION BETWEEN DEPARTMENTS:

How important is this to you? 50- not important 1 2 3 4 5 6 7 very important

	How much oppo	ortu	nity -	do y	ou h	avc?			
78-	very little	1	2	3	4	5	6	7	very much
	How much oppo	ortu	nity '	shou.	ld ye	ou ha	ave?		
79-	very little	1	ź	3	4	5	6	7	very much
	How important:	is th	is to	you	?				
a 0-	not important	1	2	3	4	5	6	7	very important

How much knowledge does he 7- very little 1 2 3	4 5	6	7	very much
How much should he have?	4 5	6	7	very much
How important is this to you? not important 1 2 3	4 5	6	7	very important
COMPANY SPONSORED TRAIN	and the second	FOR		DUR JOB:
How much training have you				
How much should you have re-	a 5 ceived	6 ?	7	very much
How important is this to you?		6	7	very much
	4 5	6	7	very important
OPPORTUNITY FOR EDUCATION ABREAST OF YOUR FIELD:	DN O	RTJ	RAII	NING TO KEEP
How much opportunity is there 13- very little 1 2 3 4	;? 4 5	6	7	very much
How much should there be? 14- very little 1 2 3 4		6	7	very much
How important is this to you? 15 not important 1 2 3	1 5	6	7	very important
OPPORTUNITY IN YOUR JOB AND KNOWLEDGE:	то в	)EVI	ELO	P NEW SKILLS
How much is there? 16- very little 1 2 3 4	5	6	7	very much
How much should there be? 17- very little 1 2 3 4	5	6	7	very much
How important is this to you? 18- not important 1 2 3 4	4 5	6	7	very important
	MPL	UNT	IS A	ND PROBLEMS
PROMPT ACTION ON YOUR CO BY YOUR SUPERVISOR: How much is there?				
How much is there? very little 1 2 3 4 How much should there he?	\$ 5	6	7	very much
How much should there be? 20- very little 1 2 3 4	5	6	7	very much
21- How important is this to you? not important 1 2 3 4	5	6	7	very important
INFORMATION ABOUT WHAT EXPECTS OF YOU:	YOU	R S	UPE	RVISOR
How much information about				nsibilities do you
$2z - \frac{get?}{very little}$ 1 2 3 4	5	6	7	very much
23- How much should you get? very little 1 2 3 4	5	6	7	very much
<ul> <li>23- very little 1 2 3 4</li> <li>How important is this to you?</li> <li>24- not important 1 2 3 4</li> </ul>	5	6 6	7 7	very much very important
How important is this to you? 24- not important 1 2 3 4 INFORMATION RELATING TO	5 СОМ	6 PAN	, 7 1 <b>Y C</b>	very important
How important is this to you? 24- not important 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4	5 СОМ 16 Сот 5	6 PAN	, 7 1 <b>Y C</b>	very important
How important is this to you? and important i 2 3 4 INFORMATION RELATING TO How much information does th very little 1 2 3 4 How much should be provided 26~ very little 1 2 3 4	5 СОМ 16 Сот 5	6 PAN	, 7 1 <b>Y C</b>	very important
How important is this to you? 24- not important 1 2 3 4 INFORMATION RELATING TO How much information does tt 25- very little 1 2 3 4 How much should be provided	5 СОМ 16 Сот 5	6 PAN npan 6	7 1 <b>¥ C</b> 19 pr 7	very important <b>PERATIONS:</b> ovide? very much
How important is this to you? not important i 2 3 4 INFORMATION RELATING TO How much information does th 23- very little 1 2 3 4 How much should be provided 28- very little 1 2 3 4 How important is this to you? 27- not important 1 2 3 4 YOUR SUPER VISOR'S ABILITY	5 COM 10 Cor 5 7 5 5 5	6 <b>PAN</b> 0 6 6 6	7 19 C 19 pr 7 7 7 7	very important <b>PERATIONS:</b> ovide? very much very much
How important is this to you? 24- not important i 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How important is this to you? 27- not important i 1 2 3 4 YOUR SUPERVISOR'S ABILITY PEOPLE	5 COM 10 Cor 5 7 5 5 5 5 5 7 5 5 7 5 7 5 7 5 7 5 7	6 PAN 6 6 6	7 7 7 7 7 7 <b>AL</b>	very important <b>PERATIONS:</b> ovide? very much very much very important <b>DNG WITH</b>
How important is this to you? 24- not important i 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How important 1 2 3 4 YOUR SUPERVISOR'S ABILITY PEOPLE: How much ability does he have? How much should be have?	5 COM COM Cor 5 5 5 5 TO C	6 PAN 6 6 6 FET 6	7 <b>IV C</b> <i>y</i> pr 7 7 7 <b>ALC</b> 7	very important <b>PERATIONS:</b> ovide? very much very much very important <b>DNG WITH</b> very much
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How important is this to you? 27- not important is 1 2 3 4 YOUR SUPERVISOR'S ABILITY PEOPLE: How much should be have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How more to you?	5 COM the Cor 5 5 5 TO C	6 PAN 6 6 6 ET 6 6	7 19 C 19 pr 7 7 7 <b>ALC</b> 7 7	very important <b>PERATIONS:</b> voride? very much very important <b>DNG WITH</b> very much very much
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How important is this to you? 27- not important is 1 2 3 4 YOUR SUPERVISOR'S ABILITY PEOPLE: How much ability does he have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 20- not important to its you? 30- not important to you?	5 COM e Cor 5 5 5 5 TO C 5 5 5 5 5 5 5	6 PAN 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 <b>ALA</b> 7 7 7 7	very important <b>PPERATIONS:</b> vorde? very much very important <b>DNG WITH</b> very much very much very important
How important is this to you? at - not important i 1 2 3 4 INFORMATION RELATING TO How much information does th 25 - very little 1 2 3 4 How much should be provided every little 1 2 3 4 How important 1 2 3 4 YOUR SUPERVISOR'S ABILITY PEOPLE: How much should be have? 29 - very little 1 2 3 4 How much should be have? 29 - very little 1 2 3 4 How much should be have? 29 - very little 1 2 3 4 How much should be have? 29 - very little 1 2 3 4 How mportant s this to you? 30 - not important 1 2 3 4	5 COM The Corr 5 5 5 5 5 5 5 5 5 5 5 5 5	6 PAN 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 <b>ALA</b> 7 7 7 7	very important <b>PPERATIONS:</b> vorde? very much very important <b>DNG WITH</b> very much very much very important
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How important is this to you? 27- not important is this to you? 27- not important is this to you? 28- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 29- not important is this to you? 30- not important is this to you? 30- not important is this to you? 40- not important is t	5 COM e Cor 5 5 5 5 TO C 5 5 5 5 5 5 5	6 PAN 6 6 6 6 6 6 6 6 6 6	7 7 7 7 7 7 <b>ALA</b> 7 7 7 7	very important <b>PPERATIONS:</b> vorde? very much very important <b>DNG WITH</b> very much very much very important
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How much should be to you? 27- not important is this to you? 27- not important 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 30- not important 1 2 3 4 How much statisfaction do you 31- very little 1 2 3 4 How much satisfaction do you 31- very little 1 2 3 4 How much satisfaction do you 31- very little 1 2 3 4 How much satisfaction do you 32- wery little 1 2 3 4 How much satisfaction do you 31- very little 1 2 3 4 How much satisfaction do you 32- very little 1 2 3 4 How much satisfaction do you 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 33- very little 1 2 3 4 How much should you get? 34- very little 1 2 3 4 How much should you get? 35- very little 1 2 3 4 How much should you get? 35- very little 1 2 3 4 How much should you get? 35- very little 1 2 3 4 How much should you get? 35- very little 1 2 3 4 How much should you get? 35- very little 1 2 3 4 How much should you get? 35- very little 1 2 3 45- very litt	5 COM The Corr 5 5 5 5 5 5 5 5 5 5 5 5 5	6 PAN npao 6 6 6 5 ET 6 6 7 HI	7 19 C 19 pr 7 7 7 <b>ALC</b> 7 7 7 7 7 7	very important <b>PERATIONS:</b> vorde? very much very much very important <b>DNG WITH</b> very much very much very much very important <b>PERATIONS:</b>
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How important is this to you? 27- not important is this to you? 27- not important is this to you? 28- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 29- not important is this to you? 30- not important is 1 2 3 4 FEELING OF SATISFACTION F How much suifaction do you 31- very little 1 2 3 4	5 COM the Cor 5 5 5 5 5 5 5 5 5 5 8 7 5 5 5 5 5 5 5 5 5 5 5 5 5	6 PAN npan 6 6 6 6 6 7 THI 6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	very important <b>PERATIONS:</b> very much very much very much very much very much very important <b>PEOF WORK</b> very much
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How important is this to you? 27- not important 1 1 2 3 4 How much ability does he have 28- very little 1 2 3 4 How much ability does he have 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How important is this to you? 30- not important is this to you? 30- mot important is this to you? 30- mot important is this to you? 31- very little 1 2 3 4 How much statisfaction do you 31- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much statisfaction do you 31- very little 1 2 3 4 How much statisfaction do you 32- very little 1 2 3 4 How much statisfaction do you 32- very little 1 2 3 4 How much statisfaction do you 34- not important is this to you? 35- not important 1 2 3 4	5 COM re Corr 7 5 5 5 5 7 5 5 8 8 8 8 8 8 8 8 8 8 7 5 5 5 5 5 8 8 8 8 7 5 5 5 5 5 5 5 5 5 5 5 5 5	6 PAN npao 6 6 6 6 6 6 7 TH1 6 6 6 6 6 6	7 19 CC 19 pr 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	very important PERATIONS: ovide? very much very much very much very much very much very much very important PE OF WORK very much very much very much very much very much
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How important is this to you? 27- not important 1 1 2 3 4 How much ability does he have 28- very little 1 2 3 4 How much ability does he have 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How important is this to you? 30- not important is this to you? 30- mot important is this to you? 30- mot important is this to you? 31- very little 1 2 3 4 How much statisfaction do you 31- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much statisfaction do you 31- very little 1 2 3 4 How much statisfaction do you 32- very little 1 2 3 4 How much statisfaction do you 32- very little 1 2 3 4 How much statisfaction do you 34- not important is this to you? 35- not important 1 2 3 4	5 COM re Corr 7 5 5 5 5 7 5 5 8 8 8 8 8 8 8 8 8 8 7 5 5 5 5 5 8 8 8 8 7 5 5 5 5 5 5 5 5 5 5 5 5 5	6 PAN npao 6 6 6 6 6 6 7 TH1 6 6 6 6 6 6	7 19 CC 19 pr 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	very important PERATIONS: ovide? very much very much very much very much very much very much very important PE OF WORK very much very much very much very much very much
How important is this to you? at - not important i 2 3 4 INFORMATION RELATING TO How much information does th 25 - very little 1 2 3 4 How much should be provided 26 - very little 1 2 3 4 How important 1 2 3 4 YOUR SUPERVISOR'S ABILITY PEOPLE: How much ability does he have? 29 - very little 1 2 3 4 How much should be have? 29 - very little 1 2 3 4 How much should be have? 29 - very little 1 2 3 4 How much should be have? 29 - very little 1 2 3 4 How much statisfaction do you 30 - not important i 1 2 3 4 How much satisfaction do you 31 - very little 1 2 3 4 How much satisfaction do you 32 - very little 1 2 3 4 How much satisfaction do you 33 - not important i 1 2 3 4 How much statisfaction do you 34 - very little 1 2 3 4 How much satisfaction do you 35 - not important 1 2 3 4 How much satisfaction do you your job? 34 - very little 1 2 3 4 How much satisfaction do you your job?	5 COM The Cor 5 5 5 5 5 5 5 7 5 5 7 7 5 5 7 5 5 7 5 5 7 7 5 5 7 5 5 7 5 5 7 7 5 5 7 7 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7	6 PAN npan 6 6 6 6 6 6 6 7 TH1 6 6 6 6 6 5 7 TH1 6 6 6 6 6 6 6 6 7 7 8 7 8 7 8 7 8 7 8 7	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	very important <b>PERATIONS:</b> very much very much
How important is this to you? 24- not important i 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How important 1 2 3 4 YOUR SUPERVISOR'S ABILITY PEOPLE: How much ability does he have? 29- very little 1 2 3 4 How much should he have? 29- very little 1 2 3 4 How much should he have? 29- very little 1 2 3 4 How much should he have? 29- very little 1 2 3 4 How much statisfaction do you 30- not important 1 2 3 4 How much statisfaction to you? 31- very little 1 2 3 4 How much statisfaction of you 32- very little 1 2 3 4 How much statisfaction do you 33- not important to you? 34- very little 1 2 3 4 How much statisfaction do you 35- not important to you? 34- very little 1 2 3 4 How much statisfaction do you 35- not important to you? 34- very little 1 2 3 4 How much statisfaction do you 35- not important to you? 35- not important to you? 35- not important to you? 35- not important to you? 36- not important to you? 37- not important to you? 38- not important to you? 39- not important to you? 39- not important to you? 30- not important to you? 30- not important to you? 31- not important to you? 32- not important to you? 33- not important to you? 34- now important to you? 35- not important to you? 36- not important to you? 37- not important to you? 38- not important to you? 39- not important to you? 30- not important to you? 30- not important to you? 30- not important to you? 30- not important to you? 31- not important to you? 32- not important to you? 31- not important to you?	5 COM 12 15 15 15 15 15 15 15 15 15 15	6 PAN npan 6 6 6 6 7 7 7 8 6 6 6 7 7 7 8 7 7 7 7 7 7 7 7 7 7 7 7 7	7 19 CC 19 pr 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	very important PERATIONS: ovide? very much very much very much very much very much very much very important PE OF WORK very much very much very much very much very much
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How much should be have? 27- not important is this to you? 27- not important is the to you? 27- very little 1 2 3 4 How much ability does he have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 30- not important is this to you? 30- not important is this to you? 31- very little 1 2 3 4 How much satisfaction do you very little 1 2 3 4 How much satisfaction do you very little 1 2 3 4 How much satisfaction do you your jnb? 34- very little 1 2 3 4 How important is this to you? 35- not important i this to you? 36- not important i this to you? 36- not important i this to you? 37- not important i this to you? 38- not important i this to you? 39- not important i this to you? 30- not important i this to you? 30- not important i this to you? 31- not important i this to you? 32- not important i this to you? 34- How mech satisfaction do you your jnb? 34- How mech satisfaction do you your jnb? 34- How mech satisfaction do you your jnb? 34- How mech satisfaction do you your jnb? 35- not important i this this to you? 36- not important i this to you? 37- not important i this this to you? 38- not important i this to you? 39- not important i this to you? 30- not important i this	5 COM the Cor 5 5 5 5 5 5 5 8 COM 8 8 8 8 8 8 8 8 8 8 8 8 8	6 PPAN 10 10 10 10 10 10 10 10 10 10	7 7 7 7 7 7 7 7 7 7 7 7 7 7	very important <b>PERATIONS:</b> very much very important g good work on very much very much very much very much very much very much
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How much should be have? 27- not important is this to you? 27- not important is 1 2 3 4 How much ability does he have? 29- very little 1 2 3 4 How much should he have? 29- very little 1 2 3 4 How much should he have? 29- very little 1 2 3 4 How much should heave? 30- not important is this to you? 30- not important is this to you? 30- not important is this to you? 31- very little 1 2 3 4 How much should you get? 32- very little 1 2 3 4 How much should you get? 33- not important is this to you? 34- Wery little 1 2 3 4 How much statisfaction do you your job? 34- How important is this to you? 35- not important i this to you? 36- not important is this to you? 37- not important is this to you? 38- Wery little 1 2 3 4 How important is this to you? 39- not important is this to you? 30- not important is this to you? 30- not important is this to you? 31- very little 1 2 3 4 How important is this to you? 35- not important is this to you? 36- not important is this to you? 37- not important is this to you? 38- Norther More More Michaeleee How high is it? 36- very low 1 2 3 4 How high should it be?	5 COM the Cor 5 5 5 5 5 5 5 7 5 5 7 5 5 7 5 5 7 5 5 7 5 5 7 5 5 5 7 5 5 5 5 5 5 5 5 5 5 5 5 5	6 PPAN 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	very important <b>PERATIONS:</b> very much very important g good work on very much very much
How important is this to you? 24- not important is 1 2 3 4 INFORMATION RELATING TO How much information does th 25- very little 1 2 3 4 How much should be provided 26- very little 1 2 3 4 How miportant is this to you? 27- not important i 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 29- very little 1 2 3 4 How much should be have? 30- not important is this to you? 30- not important is this to you? 30- not important is this to you? 31- very little 1 2 3 4 How much satisfaction do you 31- very little 1 2 3 4 How much satisfaction do you 31- very little 1 2 3 4 How much satisfaction do you 31- very little 1 2 3 4 How much satisfaction do you 31- very little 1 2 3 4 How much satisfaction do you 31- very little 1 2 3 4 How much satisfaction do you 32- very little 1 2 3 4 How much satisfaction do you 35- not important is this to you? 36- not important is this to you? 36- not important is this to you? 36- not important is this to you? 37- not important is this to you? 36- not important is this to you? 37- not important is this to you? 38- very little 1 2 3 4 How much satisfaction do you 39- not important is this to you? 30- not important is this to you?	5 COM the Cor 5 5 5 5 5 5 5 8 COM 8 8 8 8 8 8 8 8 8 8 8 8 8	6 PPAN 10 10 10 10 10 10 10 10 10 10	7 7 7 7 7 7 7 7 7 7 7 7 7 7	very important <b>PERATIONS:</b> very much very important g good work on very much very much very much very much very much very much

YOUR SUPERVISOR'S TECHNICAL JOB KNOWLEDGE:

How much knowledge does he have?

THE	"ZERO DEFECTS" PROGRAM							82
R	tate each of the following by circling a number on the rating scale fro	om 1 to	7.					~2
		very						very good
20	The Idea of Zero Defects	1	2	3	4	5	6	7
21-	Applicability of ZD to Your Work	1	2	3	4	5	6	7
22	The Fairness of ZD Awards	1	2	3	4	5	6	7
23	Charting of ZD Progress	1	2	3	4	5	6	7
24-	The Idea of Zero Defects	1	2	3	4	5	6	7
What	do you feel is the purpose of the Zero Defects program?							
					·			
what	is the chief result of the Zero Defects program?							

## OTHER ASPECTS OF YOUR JOB AND THE COMPANY

Consider the following items. Rate your opinion of each by circling a number from 1 to 7 at the left. Then indicate its importance to you by circling a number at the right.

	very	,	•	-			verv	at the right.		not						very
	<b>p</b> 00						good	-		mport		_		-		portant
25-	1	2	3	4	5	6	7	Credit Union	57-	1	2	3	4	5	6	7
26-	1	2	3	4	5	6	7	Savings Plan	58-	1	2	3	4	5	6	7
27-	1	2	3	4	5	6	7	Retirement Plan	59	1	2	3	4	5	6	7
28	1	2	3	4	5	6	7	Tuition Reimbursement	60	1	2	3	4	5	6	7
29	1	2	3	4	5	6	7	Group Insurance Plan	61	1	2	3	4	5	6	7
30	1	2	3	4	5	6	7	Vacation Policy	62-	1	2	3	4	5	6	7
31-	1	. 2	3	4	5	6	7	Sick Leave Policy	63	1	2	3	4	5	6	7
32-	1	2	3	4	5	6	7	Disciplinary Policy	64	1	2	3	4	5	6	7
33-	1	2	3	4	5	6	7	Promotion from Within	65	1	2	3	4	5	6	7
34	1	2	3	4	5	6	7	B.O.M.C.	66-	1	2	3	4	5	6	7
35-	1	2	3	4	5	6	7	G.L.E.R.C.	67	1	2	3	4	5	6	7
36—	1	2	3	4	5	6	7	Plant Medical Services	68	1	2	3	4	5	6	7
37—	1	2	3	4	5	6	7	Food Services	69-	1	2	3	4	5	6	7
38—	1	2	3	4	5.	6	7	Management Club	70-	1	2	3	4	5	6	7
39	1	2	3	4	5	6	7	Southern Star	71	1	2	3	4	5	6	7
40-	1	2	3	4	5	6	7	Southern Craftsman	72	1	2	3	4	5	6	7
41-	1	2	3	4	5	6	7	This Opinion Survey	73	1	2	3	4	5	6	7
42-	1	2	3	4	5	6	7	Housekeeping	74-	1	2	3	4	5	6	7
43-	1	.2	3	4	5	6	7	Morale of Your Co-workers	75	1	2	3	4	5	6	7
44	1	2	3	4	5	6	7	Your Job Security	76	1	2	3	4	5	6	7
45-	1	2	3	4	5	6	7	Parking	77	1	2	3	4	5	6	7
46-	1	2	3	4	5	6	7	Pay for Overtime Worked	78	1	2	3	4	5	6	7
47	1	2	3	4	5	6	7	Fairness of Overtime Distribution	79-	1	2	3	4	5	6	7
48-	1	2	3	4	5	6	7	Safety Practices	80	1	2	3	4	5	6	7
49-	1	2	3	4	5	6	7	Company Interest in Community	7-	1	2	3	4	5	6	7
50-	1	2	3	4	5	6	7	Your Pay Compared to Other Companies	8	1	2	3	4	5	6	7
51	1	2	3	4	5	6	7	Chance to Meet New People in Your Work	9	1	2	3	4	5	6	7
52	1	2	3	4	5	6	7	Usefulness of Paperwork on Your Job	10	1	2	3.	4	5	6	7
53-	1	2	3	4	5	6	7	Your Opportunity for Contact with Higher Management	11-	1	2	3	4	5	6	7
54	1	2	3	4	5	6	7	Plant Maintenance	12	1	2	3	4	5	6	7
55	1	2	3	4	5	6	.7	Information on Company Policies	13	1	2	3	4	5	6	7
56	1	2	3	4	5	6	7	Your Supervisor's Concern for You as a Person	14	1	2	3	4	5	6	7

## YOUR WRITTEN COMMENTS

.

\_\_\_\_\_

\_\_\_\_

\_\_\_\_\_

You may have ideas and opinions not fully covered in this survey. Write in the space below. If you need more space, attach a separate sheet.

\_\_\_\_

# EMPLOYEE OPINION STUDY

This questionnaire has been prepared by Georgia Tech, at the request of **Control** management, to obtain employees' opinions of their jobs and the Company. The Company and Georgia Tech agreed that this survey will be absolutely anonymous. No individual will be identified; the Company will see no records of individual opinions. Only a summary of the ideas and opinions collected will be given to the Company.

- NOTE: (1) This questionnaire was mailed directly from Georgia Tech. It should be returned directly to Georgia Tech. It will never be seen by anyone from Executive.
  - (2) You are not required to answer every question.

#### PLEASE DO NOT SIGN YOUR NAME

Use the enclosed envelope to mail this questionnaire directly to: GEORGIA INSTITUTE OF TECHNOLOGY, Opinion Study Project, Atlanta, Georgia 30332.

#### **GENERAL INFORMATION**

Before 1951 . . ......

1955-56 . . . . . ......

1953-54 . . . . . .

Your Organization Number is: \_\_\_\_\_8- \_\_\_\_ 9- \_\_\_\_ 10- \_\_\_\_ \_ 11-

(Answers from small organizations will be combined with those from related organizations to protect individual anonymity.) .

Your sex is: Male\_\_\_\_12-1 Female\_\_\_\_\_2

AGE (check one)	HOURLY RATE (check one)	WORK LOCATION (check one)
18-29	\$2.40 or Less 14-1	Charleston
30-39 <u></u> 2	\$2.4I - 2.612	Chattanooga2
40-49	\$2.62 - 2.82	Clarksburg3
50-59	\$2.83 - 3.034	Dawsonville4
60 +	\$3.04 - 3.245	LIP · · · · · ·
	\$3.25 - 3.456	Logan
	\$3.46 or over	Marietta7
		Other8
YEAR FIRST HIRED	LEVEL OF EDUCATION	FIELD OF EDUCATION
1967	Less than High School 17-1	Business or Finance 18-1
1965-66	High Schol Graduate2	Engineering
1963-64	Business/Technical School3	Law

Liberal Arts . . . . .....

Factory . . . . . .

Professional & Tech.

(write in)

Office & Technical . \_\_

(write in)

Other ...

Other\_

YOUR JOB IS:

-3

-6

20-1

-2

--3

About how many miles is it from your home to the plant?\_\_\_\_\_ 21-, 22-, 23-

-4

-6

--- 7

~0

#### SECURITY REGULATIONS REMINDER

In your written comments do not reveal any classified information or Company proprietary information.

Some College . . . . .

Bachelor's Degree . . . \_\_\_\_

Advanced Degree . . . \_\_\_\_

(see time card)

SHIFT NUMBER \_\_

- 5

\_\_\_ 10---

#### INSTRUCTIONS

On the following pages are some questions which ask you to give your opinions on various aspects of your job and the Company. Rate your answers to each question by circling one number on each rating scale, with 7 being the highest rating, and 1 the lowest. Numbers between 1 and 7 should be used for ratings between "very little" and "very much" or between "not important" and "very important." (LOOK AT THE EXAMPLE WHICH IS ALREADY MARKED.)

## YOUR SUPERVISOR'S ABILITY TO GIVE CLEAR INSTRUCTIONS:

	DO	NOT	CH	RCLI	E AN	IYTH	IING BUT NUMBERS
not important ]	2	3	4	ঙ	6	7	very important
How important is this to not important 1	o you	ı?		$\sim$	-		
How much should he h. very little 1	ave? 2	3	4	5	6	7	very much
			$\odot$	-	Ŭ	,	
How much ability does very little 1	2	3 (	$\widehat{\mathbf{A}}$	5	6	7	very much
How much ability does	i hr 1	have?					

```
How much do you feel a part of the team?
15- very little 1 2 3 4 5 6 7 very much
 How much should you feel a part of it?

16- very little 1 2 3 4 5 6 7 very much
 How important is this to you?

17- not important 1 2 3 4 5 6 7 very important
 COMPANY TREATMENT OF EMPLOYEES:
      How much does the Company consider individuals in making decisions?
           very little 1 2 3 4 5 6 7 very much
How much should it consider individuals?

19- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
20- not important 1 2 3 4 5 6 7 very important
 COMPANY REPUTATION:
      How much prestige does the Company have in the aircraft
industry?
very little 1 2 3 4 5 6 7 very much
How much should it have?

22- very little 1 2 3 4 5 6 7 very much
How important is this to you?

23- not important 1 2 3 4 5 6 7 very important
 YOUR CONTRIBUTION TO COMPANY PRODUCTS:
      How much do you feel your job contributes?
very little 1 2 3 4 5 6 7 very much
 24-
 How much would you like to feel it contributes?
25- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
26- not important 1 2 3 4 5 6 7 very important
 CONTACT WITH FELLOW WORKERS OUTSIDE WORKING
HOURS:
     How much do you associate with fellow workers outside work-
ing hours?
           very little 1 2 3 4 5 6 7 very much
How much should your associate?
26- very listle 1 2 3 4 5 6 7 very much
How important is this to you?

29- not important 1 2 3 4 5 6 7 very important
 YOUR WORK PLACE:
 How much do your working conditions help you do a good job:
30- very little 1 2 3 4 5 6 7 very much
How should they help?
31- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
32- oot important 1 2 3 4 5 6 7 very important
OPPORTUNITY TO OBTAIN GOOD EQUIPMENT, SUPPLIES
AND MATERIALS:
How much is there?

33— very little 1 2 3 4 5 6 7 very much
How much should there he?

34- very little 1 2 3 4 5 6 7 very much
 How important is this to you?
35- not important 1 2 3 4 5 6 7 very important
HIGHER MANAGEMENT'S SUPPORT OF YOUR SUPER-
How much backing does he get?

36- very little t 2 3 4 5 6 7 very much
How much backing should be get?

37- very little 1 2 3 4 5 6 7 very much
How important is this to you?

sen not important 1 2 3 4 5 6 7 very important
COOPERATION AMONG YOUR FELLOW WORKERS:
How much teamwork is there?

39- very little 1 2 3 4 5 6 7 very much
How much should there be?
40- very little 1 2 3 4 5 6 7 very much
How important is this to you?

41- not important 1 2 3 4 5 6 7 very important
PRESTIGE OF YOUR JOB OUTSIDE THE COMPANY:
How much prestige does your job have outside the Company?
42- very little 1 2 3 4 5 6 7 very much
How much prestige should your job have outside the Company
43- verv little 1 2 3 4 5 6 7 very much
How important is this to you?
44- not important 1 2 3 4 5 6 7 very important
THE PRESTIGE OF YOUR JOB IN THE COMPANY:
How much prestige does your job have?

45^{-1} very little 1 2 3 4 5 6 7 very much
How much should it have?
48- very little 1 2 3 4 5 6 7 very much
How important is this to you?
47- oot important 1 2 3 4 5 6 7 very important
```

FEELING A PART OF THE TEAM:

```
How much should there be?

52- very little | 2 3 4 5 6 7 very much
How important is this to you?
53- oot important | 2 3 4 5 6 7 very important
 HIGHER MANAGEMENT APPRECIATION OF THE
How much is there?
54- very little 1 2 3 4 5 6 7 very much
How much should there be?
55- very little 1 2 3 4 5 6 7 very much
How important is this to you?
56- not important 1 2 3 4 5 6 7 very important
RECOGNITION FOR GOOD IDEAS OR GOOD WORK:
How much do you get?

57- very little 1 2 3 4 5 6 7 very much
How much should you get?
58- very little 1 2 3 4 5 6 7 very much
How important is this to you?

59- not important 1 2 3 4 5 6 7 very important
OPPORTUNITY TO CHANGE JOBS WITHIN THE COMPANY:
How much is there?
80- very little 1 2 3 4 5 6 7 very much
How much should there be?

e1- verv little | 2 3 4 5 6 7 very much
How important is this to you?

62- not important 1 2 3 4 5 6 7 very important
OPPORTUNITY FOR PROMOTION FROM YOUR JOB:
How much opportunity is there?

63- very little 1 2 3 4 5 6 7 very much
 How much should be there?
64- very little 1 2 3 4 5 6 7 very much
How important is this to you?
65- not important 1 2 3 4 5 6 7 very important
 FAIRNESS OF PROMOTION PROCEDURES:
How much fairness is there?
66- very little 1 2 3 4 5 6 7 very much
How much should there be?

67- very little 1 2 3 4 5 6 7 very much
How important is this to you?
68- not important 1 2 3 4 5 6 7 very important
GOOD PLANNING AND SCHEDULING OF WORK BY YOUR SUPERVISOR:
How much is there?

B9- very little 1 2 3 4 5 6 7 very much
How much should there be?
79- very little 1 2 3 4 5 6 7 very much
How important is this to you?
71- not important | 2 3 4 5 6 7 very important
COMPANY PLANNING FOR THE ELITURE-
How much is there?

7^{2} very little 1 2 3 4 5 6 7 very much
How much should there be?

73- very little 1 2 3 4 5 6 7 very much
How important is this to you?
74- not important 1 2 3 4 5 6 7 very important
FREEDOM TO MAKE DECISIONS IN YOUR WORK:
How much is there?
75- very little 1 2 3 4 5 6 7 very much
How much should there be?

76- very little 1 2 3 4 5 6 7 very much
How important is this to you?

77 not important 1 2 3 4 5 6 7 very important
OPPORTUNITY TO USE YOUR SPECIAL SKILLS AND ABILITIES:
How much opportunity do you have?
78- very little ! 2 3 4 5 6 7 very much
How much opportunity should you have?
79- very little 1 2 3 4 5 6 7 very much
```

How important is this to you? 80- not important 1 2 3 4 5 6 7 very important

YOUR JOB WORK LOAD;

How much work do you have? 48- verv little 1 2 3 4 5 6 7 very much

How much should you have? 4P- very little 1 2 3 4 5 6 7 very much

How much is there? 51- very little | 2 3 4 5 6 7 very much

COOPERATION BETWEEN DEPARTMENTS:

How important is this to you? 50- not important 1 2 3 4 5 6 7 very important

11-	very little	1 2	3	4	5	6	7	very much
12-	How important not important				5	6	7	very important
OPI A					0 0	R TI	<b>KA</b> I	NING TO KEEP
13-	How much op very little	í 2	3	ere? 4	5	6	7	very much
14-	How much she very little	1 2	3	4	5	6	7	very much
15	How important	tasthis 12	ιο γοι 3	4	5	6	7	very important
OPI A	PORTUNITY I	DGE:	R JO	вт	0 1	DEVE	a.o	P NEW SKILLS
16-	How much is very little	1 2		4	5	6	7	very much
17-	How much she very little	ould ther	e be?	4	5	6	7	very much
18-	How importan not important	tisthist I 2	ιο γοι 3	1? 4	5	6	7	very important
PR( B	MPT ACTION Y YOUR SUP	i on Yo ERVISO	UR ( R:	сом	PL.	AINT	5 A	ND PROBLEMS
19-	How much is very little	there?	3	4	5	6	7	very much
20-	How much she very little	uld then	e be? 3	4	5	6	7	very much
21-	How importan not important	tisthist I 2	ю уоц 3	°4	5	6	7	very important
INF E	ORMATION A	ABOUT (OU:	WH/	(Т 1	οι	R S	UPE	RVISOR
	How much inf get?	ormation	abou	ut yo	ur j	ob re	spo	nsibilities do you
22	very little How much sho	12	3	4	5	6	7	very much
23-	very little	1 2	3	4	5	6	7	very much
24	How important out important	1 2	o you 3	4	5	6	7	very important
INF	ORMATION F							
25-	How much inf very little	1 2	3	4	Cor 5	прал; 6	y pr 7	ovide? very much
26-	How much she very little				5	6	7	very much
27-	How importan not important	us this t 12	n you 3	4	5	6	7	very important
YOI P	UR SUPERVIS EOPLE:				ю	GET	AL.	ONG WITH
26-	How much abi very little	1 2	3	ave <sup>9</sup> 4	5	6	7	very much
28-	How much she very little	1 2	nave? 3	4	5	6	7	very much
30	How important not important	Listhis I 2	to yai 3	1? 4	5	6	7	very important
FEF Y	OU DO:				ом	THE	т	YPE OF WORK
31-	How much sat very little			u ge 4	C 5	6	7	very much
32-	How much sho very little			4	5	6	7	very much
33-	How important not important	tisthist 12	to you 3	1? 4	5	6	7	very important
SAT	ISFACTION F							
	your job?							ig good work on
34~	very little How important	t 2. Listhus 1	3 to you 3	4 1?	5	6	7	very much
35-	riow important		3	4	5	6	7	very important
	oot important	1 2				<b>.</b>		
	oot important	ORK W		( <b>Y</b> O	υI	<b>DO:</b>		,
	oot important FOR THE W How high is it very low How high show	ORK W		4 ¥0	5 S	<b>00:</b> 6	7	vcry high
	oot important FOR THE W How high is it	ORK W ? 1 2 1d it be? 1 2	нісн 3 3	4			7 7	

YOUR SUPERVISOR'S TECHNICAL JOB KNOWLEDGE:

How important is this to you? not important 1 2 3 4 5 6 7 very important

COMPANY SPONSORED TRAINING FOR YOUR JOB:

How much training have you received? to- very little 1 2 3 4 5 6 7 very much

How much should you have received? 11- very little 1 2 3 4 5 6 7 very much

## THE "ZERO DEFECTS" PROGRAM

Rate each of the following by circling a number on the rating scale from 1 to 7.

		very poor						very good
24	The Idea of Zero Defects	1	2	3	4	5	6	7
25	Applicability of ZD to Your Job	l	2	3	4	5		7
26	The Fairness of ZD Awards	1	2	3	4	5	6	7
27	Charting of ZD Progress	1	2	3	4	5	6	7
28	Effect of ZD on Your Performance	1	2	3	4	5	6	7
	to you feel is the purpose of the Zero Defects program?							
What d								

#### **OTHER ASPECTS OF YOUR JOB AND THE COMPANY**

Consider the following items. Rate your opinion of each by circling a number from 1 to 7 at the left. Then indicate its importance to you by circling a number at the right,

-	very poor			-			very good		i	not mport	ant				im	very portant
20	1	2	3	4	5	6	7	Credit Union	57	1	2	3	4	5	6	7
30	1	2	3	4	5	б	7	Savings Plan	58	1	2	3	4	5	6	7
31	L	2	3	4	5	6	7	Retirement Plan	59-	1	2	3	4	5	6	7
32-	1	2	3	4	5	6	7	Tuition Reimbursement	60	- L	2	3	4	5	6	7
33	1	2	3	4	5	6	7	Group Insurance Plan	61	1	2	3	4	5	6	7
34	l	2	3	4	5	`6	7	Vacation Policy	62-	1	2	3.	4	5	6	7
35	1	2	3	4	5	6	7	Sick Leave Policy	63-	1	2	3	4	5	6	7
36	1	2	3	4	5	6	7	Disciplinary Policy	64	. 1	2	3	4	5	6	7
87-	1	2	3	4	5	6	7	Promotion from Within	65	- L	2	3	4	5	6	7
38	ì	2	3	4	5	6	7	B.O.M.C.	66-	1	2	3	4	5	6	7
39	1	2	3	4	5	6	7	G.L.E.R.C.	67	1	2	3	4	5	6	7
40-	i	2	3	4	5	6	7	Plant Medical Services	68	1	2	3	4	5	6	7
41	1	2	3	4	5	6	7	Food Services	69-	1	2	3	4	5	6	7
42	1	2	3	4	5	6	7	Southern Star	70	1	2	3	4	5	6	7
43	1	2	3	4	5	6	7	Southern Craftsman	71-	1	2	3	4	5	6	7
44	1	2	3	4	5	6	7	This Opinion Survey	72	1	2	3	4	5	6	7
45-	1	2	3	4	5	6	7	Housekeeping	73	1	2	3	4	5	6	7
46	1	2	3	4	5	6	7	Your Job Security	74	1	2	3	4	5	6	7
47-	1	2	3	4	5	6	7	Parking	75	1	2	3	4	5	6	7
48	1	2	3	4	5	6	7	Safety Practices	76	l	2	3	4	5	6	7
49	1	2	3	4	5	6	7	Company Interest in Community	77	1	2	3	4	5	6	7
\$O	1	2	3	4	5	6	7	Your Pay Compared to Other Companies	78	I	2	3	4	5	6	7
51	1	2	3	4	5	6	7	Chance to Do Different Things on Your Job	7 <b>0</b> -	1	2	3	4	5	6	7
52-	1	2	3	4	5	6	7	Plant Maintenance	80	1	2	3	4	5	6	7
53-	1	2	3	4	5	6	7	Information on Company Policies	7	I	2	3	4	5	6	7
54-	1	2	3	4	5	6	7	Distribution of Overtime	8-	1	2	3	4	.5	6	7
55	1	2	3	4	5	6	7	Your Supervisor's Concern for You as a Person	9-	L	2	3	4	5	6	7
56	1	2	3	4	5	6	7	Morale of Your Co-workers	10	1	2	3	4	5	6	7

## YOUR WRITTEN COMMENTS

You may have ideas and opinions not fully covered in this survey. Write in the space below. If you need more space, attach a separate sheet.

# APPENDIX B

Pa Original Sample (Males Only)	ge 87
Cross-Validation Sample (Males Only)	93
Original Sample (With Females)	99
Cross-Validation Sample (With Females) 1	03

----

GENERAL MULTIPLE REGRESSION AND CORRELATION ANALYSIS MANAGEMENT EMPLOYEES LNDEPENDENT VARIABLES; ORIGINAL SAMPLE THESES NGHT/SAL RANHATI=45 X I. Awe 3. EDUCATION MALES ONLY SAMPLE SIZE OUD ND. UF INDEPENDENT VARIABLES ND. UF DEPENDENT VARIABLES 2. TEN TRE 4. JOB LEVEL 1 DEPENDENT VARIABLE S. ACTUAL PAY NEANS OF INDEPENDENT AND DEPENDENT VARIABLES 1 2.7/0000004+00 2 1.52000000+00 3 3.908333334+00 4 2.576666678+00 5 3.808333338+00 . , • VARIANCES OF INDEPENDENT AND DEPENDENT VARIABLES 1 6.615358938-01 2 4.650684478+00 3 2.003269348+00 4 3.580523098-01 5 1.62096550#+00 -• .... . ----... . .. DEPENDENT VARIABLE NO. 1 REGRESSION CUEFFICIENTS THE CUNSTANT TERM 15 2.95731332#+00 1 3.885907558=01 2 8.006063938=02 3 4.017185428-01 4 -9.304588688-01 THE ERROR SUM SQUARE IS 1.486237310+02 THE ERROR HEAN SQUARE IS 5-859222378-01 ..... THE STANDARD ERROR OF ESTIMATE IS 7.654555750=01 THE CULFFECTENT OF DETERMINATION IS 6.409408250-01 THE MULTIPLE CURRELATION COEFFICIENT IS 8.005927968-01 STANDARD DEVIATIONS OF THE REGRESSION CUEFFICIENTS 3 2.275949488-02 4 5.497603229-02 1 4.279213139-02 2 1.005356908-02 .. ------T VALUE OF REGRESSION COEFFICIENTS 2 4,967092878+00 3 1.765059138+01 4 -1.692480948+01 .. . . .. 1 9.080892769+00 ANALYSIS OF VARIANCE FUR THE MULTIPLE LINEAR REGRESSION F RATIO SOURCE OF VANIATION 0.5. SUN UF MEAN SQUARES SUUARES DUE TJ REGRESSION Deviation about regression 2.655303470+02 6.22334602#+02 1.55583651#+02 4 595 05.859222378-01 3.486237318+02 TUTAL 599 ¥.70¥5d333#+02 • . . . . . . . . - -- --. .... DEPENDENT VARIABLE NO. 1 . . CORRELATION COEFFICIENTS . . ROW 4,15213189#=01 -1.000000000000000 2 4.071347808-01 3 3.386208418-02 4 2.209754128-01 5 1 ROM -4 1.55[43334#\*01 2.65569245#=01 1.0000000000+00 -4./10331634-02 5 2 RUN 3 ... **.**. . ----2.0 591900#=01 5.322003402\*01 з 5 нОн -- -- - ---------4 1.0000000000+00 5 6.041204878-01 RÜM 1.0000000000000000 5 . . . . . . . ----PARTIAL CORRELATION CULFFICIERIS -1 1.405070708-01 3 5.862258518-01 4 5.700660130-01 2 2.003072948-01 . ....

	G	ENERAL MUL	TIPLE REARESSIE	IN ANU CURRELATION ANA	LYSIS	t .
	Managehealt Éhploy <b>des</b> Origi <b>nal Sample</b>		THESTS HUNTADIE	RANNATIM45 X	INDEPKNOONT	VARIABLES! 4. EDUCATION
	SANPLE STZE AUU		MALES ON	<b>ny</b>	2. PAY	
	NO. OF INDEPENDENT VARIABLES 5 NO. OF DEPENDENT VARIABLES 1					s. Joe Level
					3. TENURE	
				<b>.</b> .	DEDMOLONT V	
	NEANS OF INDEPENDENT AND DEPENDENT	VARIABLES	5		6. SATILFA	LTION (DIF SCORE
	] 2.770000000000 2 3.80083333	3∉+30 <b>3</b>	7.52000000000000000000000000000000000000	4 3.4003333336+00	> 2.576666674+00	6 5,8610006/4+00
	VARIANCES OF UNDERLADENT AND DEPEN	DENT VARIA	ULLS	· · · · · · · · · · · · · · · · · · ·		
	1 0.6153504334*01 2 1.0204055	0≓+00 3	4+5⊃05d4q <b>7</b> #+ប្រ	4 2+003269340+00	5 3.580523092-01	6 1+6580282/4+00
•	an ann an gru caraong ga ann a	-	DEPENDENT VAR	LABLÉ NU	· · · · · · · · · · · · · · · · · · ·	
	REGRESSION CUEFFICIENTS	-				
	THE CUNSIANT INRM IS 5.14155497	د د + غ				
	THE CUNSIANT IERM 15 5-14155497 1 7+9521/0/44=02 2 3-9631487	SH=)1 3	- 3. 21 334 37 08- 02	4 = 1+406504728=01	5 +7+37962938e-02	
	THE ERROR SUM SAUARE IS 8.60655	487#+02	· - ·			
	THE ERROR MEAN SAUGHE IS 1.44891	4962+00				
¥	THE STANDARD ERROR OF ESTIMATE IS	1.20370	10843+00			
· ·	THE CUEFFICIENT OF DETERMINATION I	s 1.	337276308-01			
····· -	THE MULTIPLE CURRELATION COEFFICIE	NT IS 3.	656996318-01			
:	STANDARD DEVILIONS OF THE REGRESS	JON COLFFI	CLENTS			and a second
- •	1 7.180415234-02 2 6.4467818	08-02 3	2.576708368-02	4 4 + 4 + 7 7 - 37 30 + 02	5 1 + 052240484=01	
·		34+003	*1.270455652+00	4	5 -7+01325365+-01	legal menagar a designa, en o rom a canada (gagis bigana) e anexe enas 100
	Fuk th		UF VARIANCE Linkar Regress	ION		
	SBURCE OF VANIATION D.	F•	SUH UF	MEAN	F	
•		5 1.32	0623472+02 2	- SAUARES -657255938+01 1 دلع	396335#+01	
	DEVIATION ABUJI REGRESSION 5 TUTAL 5	94 6.60 99 9.93	)05540/#+42 1  518333#+02	•44571496#+00		
	,		••	<b></b>		
			OFPENDENT VAH	το τ		
			DEPENDENT TAN			
	CORRELATION COUFFICIENTS					
1						
	RD4 1 1 1+00000000++00 2 4+1521310				5 - 3. 300754138401	
		94-01 J	4+0/134/206-01	4 3,305506414-05	> '2+20975412P=01 _	
·· • ·	RD# 2 2 1.00000003+00 3 2.5358924	5#=0L 4	5,322633448-01	5 5+0412048/4-01	o 3+33-128376≠=01	
	RON 3 3 1,00000002+00 4 +d,7183316	s#=02 5	1.55143334#-01	6 3.905/63902-02	•	
	RD# 4 4 1+000000004+00 5 2+0359190	d#=01 6	6.0005455402			
	RDA 5 5 5 1,00000000000 8400 6 2,4075313					-
	ND4 6	· ~.				
	6 1.000000C.4+00					
	PARTIAL CONNELLITERS CIEFFECTERIS				<b>4</b> –	
	1 4.537363934-62 2 2.4438891	5 <b>*=01 3</b>	=======================================	4 -1.342580054-01	5 2+874382192-02	

SULARIED EMPLOYEES	GENERAL MULI	IPLE REGRESSION AND	CORRELATION ANALYSIS	TNDEDEDIDENT	and the second value of th
ORIGINAL SAMPLE	T	HESTS SALARY/SAL RA		1. Ac.2	J. EDUCAT
FRUID FRUIDE (ELA		HALES ONL		- 2. Tenure	4. Joe 10
SAMPLE SIZE 1554 NG: OF INDEPENDENT VARIABLES NG: OF DEPENDENT VARIABLES	4 1	a had a set of	7	<u>Dependent</u> VAR 5, Actual	
NEANS OF INDEPENDENT AND DEPE	NUENT VAPIANLES			ana ana sy mananana a a ma	• ••••
1 2.1848523/0+00 2 4.67	7150198+00 3	4,641848522+00 4	2.934531458+00 5	3.746469832+00	
VARIANCES OF INDEPENJENT AND	DEPENDENT VARIA	LES			
1 0.937321308-01 2 7.99	46434668+00 3	8-517350524+01 4	1+331613498+00 5	1.526561070+00	
		DEPENDENT VARIABLE	NQ. 1		
REGRESSION COEFFICIENTS			• - • • • • • • • • • • • • • • • • • •		
THE CUNSTANT TERM IS -3.530 I 4.607454508-01 2 6.13		3.949550488-01. 4			,
THE ERKOR SUN SQUARE IS 1.	343004164+03			: 4* _ • ملامد محمد محمد محمد محمد محمد محمد محمد م	·
	97362625#=01	¥ .			
		· · ·			
THE STANDARD ENROR OF ESTIMAT	E IS 9,472922	590-01			
THE COEFFICIENT OF DETERMINAT				*** ***********************************	
THE HULTIPLE CORNELATION COEF					
STANDARD DEVIATIONS OF THE RE					
1 3.124234520-02 2 1.02		2.700959338*02 4			
T VALUE OF REGRESSION COEFFIC					-
1 1.500350558+01 2 5.96	689513e+00 3	1.452276922+01 4	1+346237969+01	**************************	
۶	ANALYSIS O OR THE MULTIPLE	F VARIANCE LINEAR REGRESSION			
STURCE OF VARIATION		UN OF	EAN P		
STURCE OF VANIATION Due to Regression Deviation About Regression Total	4 9,632 1553 1.393	QUARES 54 514283+02 2.4581 604168+03 8.9736	EAN F UAHES RATIC 2857#+02 2,7392812 2625#=01	08+03	
DUE TO REGRESSION DEVIATION AUDUL REGRESSION	4 9,632 1553 1.393	QUARES 54 514283+02 2.4581 604168+03 8.9736	28574+02 2.7392812	00+02	
DUE TO REGRESSION DEVIATION AUDUL REGRESSION	4 9,532 1553 1.393 1557 2.376	QUARES 54 514283+02 2.4581 604168+03 8.9736	2857#+02 2.7 <u>19281</u> 2625#=01	000+02	
DUE TO REGRESSION DEVIATION AUDUL REGRESSION	4 9,432 1553 1,393 1557 2,376	QUARES 53 514283+02 2.4581 604160+03 8.9736 855580+03 DEPENDENT VANTABLE	2857#+02 2.7392812 2625#=01 NO. 1	200+02	
DUE TO REGRESSION DEVIATION ABOUT REGRESSION TOTAL CORRELATION COEFFICIENTS ROM 1 1 1:000000000+00 2 3.10	4 9, 532 1553 1, 393 1557 2, 376	QUARES 53 514283+02 2,4583 604168+03 8,9736 855588+03	2857#+02 2.7392812 2625#=01 NO. 1	200+02	
DUE TO REGRESSION DEVIATION AUDUL REGRESSION TOTAL CORRELATION COEFFICIENIS ROM. 1 1 1.00000000000000000000000000000000000	4 4,332 1553 1,393 1557 2,376 1557 2,376	QUARES 53 514283+02 2,4583 604168+03 8,9736 855588+03 DEPENDENT VAHIABLE 2.274195998+01 4	2857#+02 2.7392813 2625#-01 NO. 1 4,56310560#-01 5	5.014200440-01	
DUE TO REGRESSION DEVIATION ABOUT REGRESSION TOTAL CORRELATION COEFFICIENTS ROM 1 1 1.00000000+100 2 5.10 ROM 2 2 1.00000000+100 3 -2.20 ROM 3 3 1.00000000+00 4 1.07	4 9,832 1553 1,393 1557 2,376 1557 2,376 13402458-01 3 - 94124678-01 4 2/31978-01 5	QUARES 53 514283+02 2,4581 604168+03 8,9730 855588+03 DEPENDENT VAHIARLE 2.27419599#=01 4 4.2095659/8=01 5 1.247771078=01	2857#+02 2.7392812 2625#=01 NO. 1 4,56310560#=01 5 3,84014530#=01	5.01420064P-01	
DUE TO REGRESSION DEVIATION ABOUT REGRESSION TOTAL CORRELATION COEFFICIENIS RDM 1 1.0000000000000000000000000000000000	4 4,832 1553 1.393 1557 2.376 1557 3.376 1557 3.376 1557 3.376 1557 3.376 1557 3.376 1557 5.372 1553 3.259 1553 3.259 1555 3.25	QUARES 53 514283+02 2.4583 604168+03 8.9736 855588+03 DEPENDENT VANTARLE 2.274195994+01 4 4.209565978-01 5 1.247771078-01	2857#+02 2.7392812 2625#=01 NO. 1 4,56310560#=01 5 3,84014530#=01	200+02 5.014200440-01	
DUE TO REGRESSION DEVIATION ABOUT REGRESSION TOTAL CORRELATION COEFFICIENIS RDM 1 1.0000000000000000000000000000000000	4 4,832 1553 1.393 1557 2.376 1557 3.376 1557 3.376 1557 3.376 1557 3.376 1557 3.376 1557 5.372 1553 3.259 1553 3.259 1555 3.25	QUARES 54 514283+02 2,4581 604168+03 8,9736 855588+03 DEPENDENT VANIARLE 2.274195998+01 4 4.2095659/8-01 5 1.247771078-01	2857#+02 2.7392812 2625#=01 NO. 1 4,58310560#=01 5 3,84014530#=01	5.014200640-01	
DUE TO REGRESSION DEVIATION ABOUT REGRESSION TOTAL CORRELATION COEFFICIENTS RDM 1 1 1.000000004+00 2 3.10 RDM 2 3 1.000000004+00 4 1.67 RDM 4 4 1.000000004+00 5 4.71 RDM 5	4 4,832 1553 1.393 1557 2.376 03402450-01 3 - 042450-01 4 22/31970-01 5 12539230-01	QUARES 54 514283+02 2.4583 604168+03 8.9736 855588+03 DEPENDENT VAHIAALE 2.274195998+01 4 4.209565978-01 5 1.247771078-01	2857#+02 2.7392812 2625#=01 NO. 1 4,56310560#=01 5 3,84014530#=01	5.014200640-01	

.

.

Salaries Employees			IN AND CORRELATION AN		INDEPENDEN	T VARIAN	18.
One was Same a					I. AGE	4. EDUCAT	
ORIGINAL SAMPLE		THESIS SALARY/D		• •	Z. PAY	S. JOB L	-
SAMPLE STE 1558		HALES	only		3. Tinvur		
NO. OF INDEPENDENT VARIABLES				1	CPENDENT		
	-			-		FACTION (	NE SC.
NEANS OF INDEPENDENT AND OF	PENDENT VARIA	HES			· · · · ·		
1 2.184852374+00 2 3.	746469838+00	3 4+677150198+00		5 2.9	30531058400	6 5.668R	
			···· ·				
VARIANCES OF INDEPENDENT AN	ID DEPENDENT V	ARIABLES					
1 8.932321 <sup>8</sup> 8#=01 2 1.	52656107#+00	3 7.946439668+00	4 8.517350528*01	5 1.3	31613490+00	6 1.9223	53230+00
REGRESSION COEFFICIENTS,							
THE CONSTANT TERM 15 5.5 1 1.0320908/8-02 2 1.	63787398+00 970144738-01	3 -2,860093750-02	4 -9.635820274-02	5 -7+0	0894684 <b>F</b> -02	··· · ·	
THE ERROR SUN SQUARE IS	2.909531718+0	د		• • • • • • • • • • • • • • • • • •			
THE ERHOR MEAN SQUARE IS		<u>^</u>					
THE STANDARD ERROR OF ESTIN	ATE_151.3	6919621#+0D					
THE CUEFFICIENT OF DETERMIN							
THE HULTIPLE CORRELATION CO							
1 4.631912024-02 2 3.	667710300-02	3 1.503073820-02	4 4.164001078-02	5 3.6	2240240-02		
1 4.631912024-02 2 3. Y VALUE OF REGRESSION COEFF 1 1.455343328+00 2 5.	ICIENTS		a =2.11407728a+00	5	14301126.00		
T VALUE OF REGRESSION COEFF	1C LENTS 371581368+00 ANALY	3 -1.902829868≠00 SIS OF VARIANCE	4 -2.31407728#+00	5 -1.8	14301126.00		
Y VALUE ÖF REGRESSIUN COEFF 1 1.455343320+00 2 5.	ICIENTS 371581360+00 ANALY FOR THE MULT	3 -1.902829868+00 SIS OF VARIANCE IPLE LINEAR REGRESS	4 -2.314077288+00		9829112#+00		
Y VALUE OF REGRESSION COEFF 1 1.455343320+00 2 5.	ICIENTS 371581360+00 FOR THE MULT 0.F. 5 1552	3 -1.902829868+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUM OF SQUARES 8.357227010+01 1 2.909531710+03 1	4 -2.314077288+00	5 -1.8 F HATIO 15810250+1	9829]   2#+00 00		
Y VALUE OF REGRESSION COEFF 1 1.45534332#+00 2 5. SOURCE DF VAHIATION DUE TO REGRESSION DEVIATION ABOUT REGRESSION	ICIENTS 37158136#+00 ANALY FOR THE MULT 0.F. 5 1552 1557	3 -1.902829864+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUM OF SQUARES 8.157227010+01 1 2.909531714+03 1 2.993103980+03	4 -2.314077288+00 10N MEAN SQUARES .671445409+01 8.9 .874693278+00	5 -1.8 F HATIO 15810250++	9829112#+00 00		
Y VALUE OF REGRESSION COEFF 1 1.455343320+00 2 5. SOURCE OF VANIATION DUE TO REGRESSION DEVIATION ADOUT REGRESSION TOTAL	ICIENTS 37158136#+00 ANALY FOR THE MULT 0+F+ 5 1552 1557	3 -1.902829864+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUM OF SQUARES 0.357227010+01 1 2.909531714+03 1 2.993103980+03 DEPENDENT VAR	4 -2.314077288+00 ION MEAN SQUARES .671445408+01 8.9 .874695278+00 IABLE NU. 1	5 -1.8 F HATIO 15810250+	2829]   2#+00 00		
Y VALUE OF REGRESSION COEFF 1 1.45534332#+00 2 5. SOURCE DF VAHIATION DUE TO REGRESSION DEVIATION ABOUT REGRESSION TOTAL	1CIENTS 371581360+00 ANALY FOR THE MULT 0.F. 5 1552 1557	3 -1.902829860+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUM OF SQUARES 0.357227010+01 1 2.909531710+03 1 2.993103980+03 DEPENDENT VAR	4 -2.314077280+00 10N MEAN SQUARES .671445400+01 8.9 .874698270+00 IABLE NU. 1	5 -1.8 FATIO 1581 0250+	2829112#+00 20		
Y VALUE OF REGRESSION COEFF         1 1.455343320+00       2 5.         SOURCE OF VAHIATION         DUE TO REGRESSION         DUE TO REGRESSION         DEVIATION ABOUT REGRESSION         TOTAL	1CIENTS 371581360+00 ANALY FOR THE MULT 0.F. 5 1552 1557 013 0640-01	3 -1.902629860+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUM OF SQUARES 0.357227010+01 1 2.909531714+03 1 2.909531714+03 1 DEPENDENT VAR - 3 5.103402450-01	4 -2.314077280+00 10N MEAN SQUARES .671445400+01 8.9 .874698270+00 IABLE NU. 1	5 =1.8 HATIO 15810250+1	2829112#+00 20		
Y VALUE OF REGRESSION COEFF         1 1.45534332#+00       2 5.         SOURCE DF VAHIATION         DUE TO REGRESSION         DEVIATION ABOUT REGRESSION         TOTAL	ICIENTS 37158136#+00 ANALY FOR THE MULT 	3 -1.902829860+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUH OF SQUARES 0.357227010+01 1 2.909531710+03 1 2.903103980+03 OEPENDENT VAR - 3 5.103402450-01 4 1.247771070-01	4 =2.31407728#+00 ION MEAN SQUARES .67144540#+01 d.9 .87469827#+00 IABLE NO. 1 4 =2.27419599e-01 5 4.71253923#=01	5 -1.8 HATIO 15810250+1 5 4.5 6 1.4	0829112#+00 00 5310560#=017		
Y VALUE OF REGRESSION COEFF         1 1.45534332+00       2 5.         SOURCE DF VAHIATION         DUE TO REGRESSION         DEVIATION ABOUT REGRESSION         TOTAL	1C [ENTS 37158136#+00 ANALY FOR THE MULT 0.F. 5 1552 1557 015 064#=01 8*01*530#=01 26912967#=01	3 -1.902629860+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUM OF SQUARES 0.157227010+01 1 2.909531714+03 1 2.909531714+03 1 OEPENDENT VAR 	4 =2.314077280.00 10N MEAN SQUARES .671445400.01 IABLE NU. 1 4 =2.274195990.01 5 4.712539238-01 6 2.373035630-02	5 -1.8 HATIO 15810250+1 5 4.5 6 1.4	0829112#+00 00 5310560#=017		
Y VALUE OF REGRESSION COEFF         1       1.45534332#+00       2       5.         SOURCE DF VAHIATION         DUE TO REGRESSION         DEVIATION ABOUT REGRESSION         TOTAL	1CIENTS 37158136#+00 ANALY FOR THE MULT 0.F. 5 1552 1557 013 064#=01 8*01*530#=01 26912967*=01 87273197#=01	3 -1.902829860+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUH OF SQUARES 0.357227010+01 1 2.909531710+03 1 2.903103980+03 OEPENDENT VAR - 3 5.103402450-01 4 1.247771070-01	4 =2.314077280.00 10N MEAN SQUARES .671445400.01 IABLE NU. 1 4 =2.274195990.01 5 4.712539238-01 6 2.373035630-02	5 -1.8 HATIO 15810250+1 5 4.5 6 1.4	0829112#+00 00 5310560#=017		
Y VALUE OF REGRESSION COEFF         1 1.45534332+00       2 5.         SOURCE OF VAHIATION         DUE TO REGRESSION         DEVIATION ABOUT REGRESSION         TOTAL	1C [ENTS 37158136#+00 ANALY FOR THE MULT 0.F. 5 1552 1557 015 064#=01 8*01*530#=01 26912967#=01	3 -1.902629860+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUM OF SQUARES 0.157227010+01 1 2.909531714+03 1 2.909531714+03 1 OEPENDENT VAR 	4 =2.314077280.00 10N MEAN SQUARES .671445400.01 IABLE NU. 1 4 =2.274195990.01 5 4.712539238-01 6 2.373035630-02	5 -1.8 HATIO 15810250+1 5 4.5 6 1.4	0829112#+00 00 5310560#=017		
Y VALUE OF REGRESSION COEFF         1       1.45534332+00       2       5.         SOURCE DF VANIATION         DUE TO REGRESSION         DEVIATION ANOUT REGRESSION         DEVIATION COEFFICIENTS         RD4         1       1.00000000+00       2         RD4       1         2       1.00000000+00       3         RD4       1       2       1.00000000+00         RD4       1.00000000+00       4       -2.         RD4       5       1.00000000+00       4	1CIENTS 37158136#+00 ANALY FOR THE MULT 0.F. 5 1552 1557 013 064#=01 8*01*530#=01 26912967*=01 87273197#=01	3 -1.902629860+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUM OF SQUARES 0.157227010+01 1 2.909531714+03 1 2.909531714+03 1 OEPENDENT VAR 	4 =2.314077280.00 10N MEAN SQUARES .671445400.01 IABLE NU. 1 4 =2.274195990.01 5 4.712539238-01 6 2.373035630-02	5 -1.8 HATIO 15810250+1 5 4.5 6 1.4	0829112#+00 00 5310560#=017		
Y VALUE OF REGRESSION COEFF         1 1.45534332+00       2 5.         SOURCE OF VAHIATION         DUE TO REGRESSION         DEVIATION ABOUT REGRESSION         TOTAL	1CIENTS 37158136#+00 ANALY FOR THE MULT 	3 -1.902629860+00 SIS OF VARIANCE IPLE LINEAR REGRESS SUM OF SQUARES 0.157227010+01 1 2.909531714+03 1 2.909531714+03 1 OEPENDENT VAR 	4 =2.314077280.00 10N MEAN SQUARES .671445400.01 IABLE NU. 1 4 =2.274195990.01 5 4.712539238-01 6 2.373035630-02	5 -1.8 HATIO 15810250+1 5 4.5 6 1.4	0829112#+00 00 5310560#=017		

,	Houa	wy Engloyees		GENERAL	NULTIPLE PEGRESS	IUN AND	CURRELATION AN	ALYSIS	INDEPENDENT	VARIADLES : 3. EDUCATU	~~~
	DRIE	INAL SAMPLE			THESIS HOURLY	/SAL HA	WHAT 3=700X		1. TONURE	4. Jos Lon	NCL.
					MALE	s only			•	VARIABLE:	
	NO. 0	LE SIZE 2353 De Independent Var Bedependent Var	ARTSHLFS TARLES	4 1					DEPENDENT S. ACTUA	and the second se	
	MEAN	S OF INDEPENDENT	AND DEPEN	IUENT VARIA	RLFS						
	T	* 1590221 Vator	2 4.94	115979#+00	3 7,5264092384	00 4	1.716378160+30	, 5 5,1	0084332#+10		
	VARE	ANCES OF INDER	INFNT AND C	EPENDENT V	ARTABLES						
	1	1.777598808+00	2 8.071	**3905#+00	3 1.186358198	+∩u 4	1+020322228+00	5 2.0	95190230+00		
		ESSION COFFETCIE									
	1 HE	CONSTANT TERM 15 7.475882054-02	3.8609	98618#+09 819338#**01	3 1,453550168*	01 4	2+13932258#=01		مشد د م مدرسه م منه	-	
	THE	ERRAR SUN SQUARE	15 3.7	60288669+0	3						
	THE	ERROR NEAN SOULR	F 15 1.6	72776274+0	0						-
							tina nutrinana nyana na				
1			•								
	THE	STANDARD FROM D	F ESTIMATE	15 1,2	93339192+00						
	THE	COEFFICIENT OF D	FTERMINATI	TH IS	2,030531868-01						
	THE	MULTIPLE COMPFLA	TION COFFE	ICTENT IS	4,506142328-01		•••	-	•		
•	STAN	DARD DEVIATIONS	OF THE REA	RESSION CO	EFFICTENTS					•	
•- •	1	3.294324558-12	2 1.209	968948- 12	3 2,600807938-	02 4	2.753186978-02	2			
۰	T VAI	LUE OF REGRESSIO	N COEFFICI	ENTS							··· -•
•				32447#+01	3 5,5717024984	00 4	7.770349802+00	<b>,</b>			4
		······			SIS OF VARIANCE	•••					
					IPLE LINEAR REGRE	SSIUN		-		•	
ı		SHURCE HE MARI	ATION	۵.۴.	SHM DF		EAN	F	-		
· <b></b> ·		TO REGRESSION Ation About regr	TOTAL	2248	SQUARES 9.580797378+02 3.780285668+03 4.715368408+03	2.3951	UARES 99340+02 1+4 26270+00	RATIO 31913514	02		
					• • • • •				• •		
		•							· · · · · · · · · · · · · · · · · · ·		
		a a declaration of the state of the second			DEPENDENT V	AHIAHLE	ND, 1	****			a
	CORRI	ELATION CHEFTCI	ENTS	•				-	•	-	
		1.00000009+00	2 1.535	079458-11	3 -7,186162523-	01 4	-3+63218901#-03	5 2.5	5234053P=01		
		2 1,000000098+00	3 -1,941	453018-01	4 -4.063268628-	02 5	4.031153598-01			Second of the Second	
		3 1.00000000+00	A 1,732	974948-01	5 4,500784928-	02		· · · ··			
	80¥	4	5 1.340	106798-01						···· ·	<b>*•</b>
	ROW							• • • • •		·	· •
		141 COURFLATTON	COFFFICIEN	15							
					3 1,167109428-	01 4	1.617286928-01				

						an e la vers sectoremente recent
Ila	uruy Ennoyers	GENERA	L MULTIPLE REGRESSIU	N AND CORRELATION ANA	1004	AGE 4. EDUCATION
_	IGINAL SAMPLE		THESIS HOURLYPD	IF HANMATS=700X	1	AGE 4. EQUCATION
	And all one trees		HALES		7	PAY S. JOR LEVEL
544	PLE ST/E 2253					, TENURE
ND.	OF ENDEPENJENT V	AGIABLES 5 TABLES 1				ENDENT VARIABLES:
		AND DEPENDENT VARI	AHLES			. SATISFICTION (ME SO
	-			4 2.526409238400		00 6 5.254771420+00
•						
		DENT AND DEPENDENT				
1	1+222548808+00	2 2+095190238+00	3 8+97763905#+00	4 1+186358199+00	5 1+020322228+	00 6 2+43506270#+00
REG	RESSION COEFFICIE	NTS			• · ·	
		4+14505858#+00	3 -1.195506540-02	4 4.84461910#=02	5 3.721507450-	02
	ERNOR SUM SQUARE			-		
THE	ERROR MEAN SQUAR	E LS 2,379916698+	00	· ·		
THE	STANDARD ERROR D	F ESTIMATE 15 1.	54269786#+00			
, THE	CUEFFICIENT OF U	ETERMINATION IS	2.481661968-02			
, THE	UNULTIPLE CORRELA	TION COEFFICIENT IS	1.575329168-01			
·	NARA DENTATIONE	OF THE AFCORESION C	DEFFICIENTS			
					5 3.337817378	02
-						
"Y "V	ALUE OF REGRESSIO	N CUEFFICIENTS				
"1	2+885226588+00	2 3.143766288+00	3°-7.855901850-01	4 1.54621864#+00	5 1.1183027984	00
······		ANAL FOR THE MUL	YSIS OF VARIANCE TIPLE LINEAR REGRESS	101		
···		ATION D.F.	SUM DE			• • • • • • • • • • • • • • • • • • •
·			SUDARES	MEAN SQUARES	RATIO	
DUE	TU REGRESSION TATION ABOUT RELR	5 ESSION 2247		.721/6832#+01 1.14 .379216698+00	130401/#+01	
······		TUTAL 2252	5,483761218+03	· · · · · · · · · · · · · · · · · · ·		
H	·····					
1	·····			IARLE NO. 1		
,ROW	1+000000000+00	2 2.952340530-01	3 8.536079460-01	4 *2*18616252**01	- 3-83189010	03 6 9+339126974=02
	2 1+000000000+00	3 4.03115359#=01	4 4.50078491#=02	5 1.300106798-01		01
ROw	3 1.000000000#+00		5 -8.063268628-02		С	
ROM 4	4 1+000000000+00	5 1.732974948-01	6 3.026434638*02	و معروف من		······································
	1.000000000+0U	6 4.78346750#=02		a		
	6 1.000000000+00		taga satas in a sine in ar tanang s		·····	
. PAR	TTAL CORRELATION	COEFFICIENTS				
1	6,075407350-02	2 1.07579203#**01	3 -1,657047208-02	4 3+26015649#-07	5 2+35850635#-	50

CROSE-VAUDATION SAMPLE		L HULTTPLE REGRESS THESIS HGHT/5	AL RANMATIE45	x		<u>rt Variables:</u> 3. Education
SAMPLE STZF 600		MALE	s Only		2. Tenur	_
ND. OF INDEPENDENT VARIABLES ND. OF DEPENDENT VARIABLES	4					
	·				DEPENDENT	
HEANS OF INDEPENDENT AND DEPEN	NDENT VARI	ABLES			5. Actu	al Pay
		1 1,83033333A+	00 4 2.59333	3334+00 5	]•10200004+00	
VARIANCES OF INDEPENDENT AND D						
1 7.044379524-01 2 4.676	544964#+00	3 1.77181692#+	00 4 3.25164	162#=01 5	1.567253768+00	
		DEPENDENT V	ARTABLE NO. 1		,	n - Managaman kan ku jawa na kana ka ka
REGRESSION COFFFICIENTS						- and Ball interaction
	490628+00 1033028+00	3 4.22>65708#*	01 4 -8.53697	7528-01		
THE ERROR SUM SQUARE 15 3.7	716002588+1			•		
	245382504-					
THE STANDARD FRRMP OF ESTINATE	ETS 7.	007773248-01				an a
THE COEFFICIENT OF DETERMINATI		6.041689438=01				
THE MULTIPLE CORPELATION COEFF		• • • • •				an a
THE HOLITELE CONMICNING COLF	* ICICMI 13	1.11203035#-01				
STANDARD DEVIATIONS OF THE REG	GHESSION C	NEFFICIENTS				
	4207202-02	3 2.53435004#*	02 4 5,98709	1438702		
T VALUE OF REGRESSION COLFFICI	IENTS					
1 7.899510358+00 2 5.862	2569428+00	3 1.66/35337#+	01 4 =1.42589	7300+01		
		YSIS DE VARIANCE TIPLE LINEAR REGRE	SSIUN	e e nome de la companya de la compa	·	
···	D.F.	SUM DF	HŁAN		- · · · · · · · · · · ·	
SOURCE OF VARIATION				ł		
DUE TO REGRESSION Deviation Argut Regression	4 595	\$QUARES 5.671847428+02 3.716002588+02	SQUARES 1.41/961858+02 6.245382506-01	- RA11 2,270416	ρ	
DUE TO REGRESSION		5.6718A7428+02	1.41/96185#+02	- RA11 2,270416	ρ	······
DUE TO REGRESSION Deviation Argut Regression	595	5.471847428+02 3.716002549+02 9.387850008+02	1.41796185#+02 6.24538250#=01	- RA11 2,270416	ρ	······································
DUE TO REGRESSION Deviation Argut Regression	595	5.471847428+02 3.716002549+02 9.387850008+02	1.417961850+02 6.245382506-01	RA11 2,270416	0 35#+02	
DUE TO REGRESSION DEVIATION ARGHT REGRESSIUN TOTAL	595	5.471847428+02 3.716002549+02 9.387850008+02	1.417961850+02 6.245382506-01	RA11 2,270416	0 35#+02	
DUE TO REGRESSION DEVIATION ARGHT REGRESSION TOTAL	595 599	5.471447428+02 3.716002549+02 9.78785000+02 	1.417961859+02 6.245382506-01 	Ra11 2,270416	0 35#+02	
DUE TO REGRESSION DEVIATION ABOUT REGRESSION TOTAL CORRELATION CREFFICTENTS ROW 1 1 1.000000000+00 2 4.457 ROW 2	595 599	5.471447424+02 3.716002500+02 9.787850000+02 DEPENDENT Y	1.417961859+02 6.745382504-01 ARIABLE NU. 1 02 4 -1.78479	RAI 2,270416 1930-01 5	0 35#+02	
DUE TO REGRESSION DEVIATION AROUT REGRESSION TOTAL CORRELATION CREFFICTENTS ROW 1 1 1.000000000+00 2 4.457 ROW 2 2 1.00000000+00 3 *1.008 ROW 3	595 599	5.471447424+02 3.7160025H+02 9.38785000+02 0EPENDENT V 3 4.28993156P- 4 -1.74/16104#-	1.417961859+02 6.245382504=01 ARIABLE NU. 1 02 4 =1.78479 01 5 2.984570	RAI 2,270416 1930-01 5	0 35#+02 3.40210/810+01	
DUE TO REGRESSION DEVIATION ARGHT REGRESSIUN TOTAL CORRELATION CREFFICTENTS ANN 1 1 1+000000000+00 2 4+AB7 ROW 2 2 1+00000000+00 3 *1+008 ROW 1 3 1+000000000+00 4 *2+407 ROW 4	595 599 8640288-01 8619378-01 7215426-01	5.471447424+02 3.7160025H+02 9.38785000+02 0EPENDENT V 3 4.28993156P- 4 -1.74/16104#-	1.417961859+02 6.245382504=01 ARIABLE NU. 1 02 4 =1.78479 01 5 2.984570	RAI 2,270416 1930-01 > 0040-01 >	0 35#+02 3.40210/810+01	· .
DUE TO REGRESSION DEVIATION AROUT REGRESSIUN TOTAL CORRELATION CREFFICTENTS ROW 1 1 1.000000000+00 2 4.457 ROW 2 2 1.000000000+00 3 *1.008 ROW 3 3 1.000000000+00 4 *2.407 ROW 4 4 1.000000000+00 5 *5.682 ROW 5	595 599 8640288-01 8619378-01 7215426-01	5.471447424+02 3.7160025H+02 9.38785000+02 0EPENDENT V 3 4.28993156P- 4 -1.74/16104#-	1.417961859+02 6.245382504=01 ARIABLE NU. 1 02 4 =1.78479 01 5 2.984570	RAI 2,270416 1930-01 > 0040-01 >	0 35#+02 3.40210/81#+01	
DUE TO REGRESSION DEVIATION ARONE REGRESSIUN TOTAL CORRELATION CREFFICIENTS ROW 1 1 1.0000000000+00 2 4.457 RDW 2 2 1.000000000+00 3 71.008 ROW 1 3 1.000000000+00 4 72.407 ROW 4 4 1.000000000+00 5 75.682	595 599 2860288-01 3819378-01 2215426-01 2281028-01	5.471447424+02 3.7160025H+02 9.38785000+02 0EPENDENT V 3 4.28993156P- 4 -1.74/16104#-	1.417961859+02 6.245382504=01 ARIABLE NU. 1 02 4 =1.78479 01 5 2.984570	RAI 2,270416 1930-01 > 0040-01 >	0 35#+02 3.40210/81#+01	·

- -

Contri-Maisance Super Save to the Annual Super Save to the Save to the Annual Super Save to the Save to the	MANAGEMENT EMPLOYEES	GENERAL W	WLTIPLE REGRESSIUN	AND CURRELATION	N ANALYSI	S INCOMPONENT	Mainales;
<sup>11</sup> (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	CROSS-VALIBATION SAMPLE		THESIS HEMT/DIF	RAMMAT1845 X		I. Asia	1. EDUCATION
No. OF PER-MARKET VALUATIONS         1           No. OF PER-MARKET VALUATION VALUATIONS         1           No. OF PER-MARKET VALUATION VALUATIONS         1           No. OF PER-MARKET VALUATION VALUATIONS         1           No. OF PER-MARKET VALUATION VALUATION VALUATION VALUATION VALUATION VALUATIONS           No. OF PER-MARKET VALUATION	SAMPLE STYE 600		MALEI	Only		-	" Jon Lever
Defension:         Defension:           1         2,10.3335320.00         2         1.75000000000000000000000000000000000000							
LEAKS OF -UNTERLATION DIPENDENT VARIANTES 1 2,700333334000 2 3.70700000000 0 3 7.733866677400 4 3.838333334400 5 7.593333349400 6 3.901668867400 VARIANCES OF INFERTION DIPENDENT VARIANTES 1 7.00137072401 2 1.54725769400 3 4.67046866400 4 1.773816924400 2 3.25164152401 6 1.61688877400 DEPENDENT VARIANTED IF 5 5.67294259400 1 1.4444114671 2 1.512675484001 1 -3,00423850402 4 4.6310162284002 5 -1.500368204001 THE EXAMP MENU SUINE IS 5.67294259400 THE EXAMP MENU SUINE IS 5.61297864001 1 -3,00423850402 THE EXAMP MENU SUINE IS 5.6129786400 THE EXAMP MENU SUINE IS 5.6129786400 THE EXAMP MENU SUINE IS 5.61298784400 THE MENUT OF DEDEESTING OFFICIENT IS 1.2388378400 THE MENUT OF DEDEESTING OFFICIENT IS 1.2388378400 THE MENUT OF DEDEESTING OFFICIENT IS 1.23893980400 T VAUUT OF DEDEESTING OFFICIENT IS 1.23893980400 T VAUUT OF DEDEESTING OFFICIENT IS 1.238939930402 3 3.766666774402 4 4.610125059402 5 1.008083224-01 T VAUUT OF DEDEESTING OFFICIENT IS 1.238939930402 3 3.766666774402 4 4.610125059402 5 1.008083224-01 T VAUUT OF DEDEESTING OFFICIENT IS 1.238939930402 1 3.7766666774402 4 4.610125059402 5 1.008083224-01 T VAUUT OF DEDEESTING OFFICIENTS S0000E DF VAUIATION OFFICIENT IS 1.128039930402 1 3.7766666774402 3 -1.1389320134400 5 -1.13893488400 T VAUUT OF MENTIONALLARE (LINKAN RECEIPTION VAUIANC FD VAUUT OF VAUIANC S0000E DF VAUIATION OFFICIENTS S0000E DF VAUIATION OFFICIENTS S0000E DF VAUIATION OFFICIENTS S0000E DF VAUIANC S0000E D	Rue of Orthopher Photpotto	-					
μ1AX OF VARCEVONT AND DEPENDENT VARIANCES         1       2,700,33334200       2       1,700,00000000       5       3.0000000000       5       3.00000000000       5       3.0000000000000       5       3.000000000000000000000000000000000000							
VARIANCES OF TWO FEENDENT AND DEPENDENT AND	HEANS OF THREPENDENT AND DEPE	NUENT VARIANL	f 5			L. JATI	SFACTION (DIF Scored
1 7.001070520-01 2 1.547253760+00 3 4.677445444414 NU 4 1.77381972+00 > 3.251441527+01 6 1.6146868377+00 DEPENDENT 44414RLE NU, 1 REGRESSION COTFFTETENTS THE CONSTANT TERM IS 5.476294229400 THE STANDON KONUSE IS 4.104776300+02 THE STANDON FROM A FESTIVATION 1 4-2,48046238920-02 THE STANDON FROM A FESTIVATION 1 4 4.27450378+00 THE STANDON FROM A FESTIVATION 1 4 4.27450378+00 THE STANDON FROM A FESTIVATION 1 4 4.27450378+00 THE STANDON FROM A FESTIVATION CERTICIENTS 1 7.154604012072 4 4.630020000 3 -11077675408+00 4 -1137632313+00 5 -11389168589+00 THE STANDON FROM A FESTIVATION OF 1 2.745446774-02 4 4.610325059+02 5 1.086483239+01 THE AULTIME CONFTLATION CONFTICIENTS 1 7.154604012072 2 4.423903878+00 3 -11077675408+00 4 -1137632313+00 5 -11389168589+00 AMALYSIS OF VARIANCE FOO THE AULTIME CONFTICIENTS 5000-CE OF VERIATION SOUNCE OF VERIATION	1 2.700333338+00 2 3.70	500000 <b>0</b> 00	a 7,53666667a+00	4 3.83833333e	+00 <b>5</b>	2.59333334+00	6 5.901666672+00
DEPENDINT VANIABLE NU. 1           REGESSION: COFFFTETES           THE CONSTANT TEOM TE S. 2.470294229+00           1.4444188-mil 2.14610284-01           1.4444188-mil 2.14610284-02           THE ERRON BIM SUNCE IS 9.1087048094-02           THE ERRON MEAN SNIGE IS 9.1087048094-02           THE ERRON MEAN SNIGE IS 1.333465719+00           THE KONTELECONFLICTION COEFFICIENTS           1.100000000-F00 FROM THE STRUCTURES           1.100000000+00 2.3.5473509-00 3.1.077075480-00 4.4.510325050-02 3.1.080483230-01           TATEL           SOUNCE DF MARIATION           NOT FROM THE NULTINE INFORMATION IS 4.407460754800 4.4.510325050-02 3.1.080483230-01           TANDER DERRONGANT DE 2.3.54735000 3.1.077075480-00 4.4.510325050-02 3.1.0804883230-01           TANDER DERRONGANT DE 2.3.547310000 1.1.2010000000000 1.1.2010000000000	VARIANCES OF TNDEPENDENT AND	DEPENUENT VAR	TAHLES				
REGRESSIN: CHTFFTFTFTS         THE CONSTANT TEN IS 1.5770452900         1 1.414471168-n1         1 1.414471168-n1         2 1.4009268208-01         THE ERRING SUM SUMME IS 1.533865718+00         THE ERRING MEAN STILL 1.15.33865718+00         THE ERRING MEAN STILL 1.15.33865718+00         THE ERRING MEAN STILL 1.15.33865718+00         THE ERRING MEAN STILL CONSTLATION CONFERENCE         StAMURAD -FV13LING ON THE STAMESSION CONFERENCE         1 7.715646018-02         StAMURAD -FV13LING ON THE STAMESSION CONFERENCE         1 7.715646018-02         2 4.42003030-02         1 7.715646018-02         2 4.42003030-02         1 7.715646019-02         2 4.42003030-02         1 7.715646010-02         2 4.42003040-01         2 4.42003130-02         1 7.715646010-02         2 4.42003130-02         1 7.715646010-02         2 4.42003130-02         1 7.715646010-02         2 4.42003130-02         1 7.715646010-02         1 7.715647010-01         1 7.715647010-01         1 7.715647010-01         1 7.715647010-01         1 7.715700         1 7.715700         1 7.7157700         1 7	1 7.041379524-01 2 1.56	7253768+00	3 4.675449649+00	4 1+77181692#	+00 >	3.251041022-01	6 1+6146883/#+00
REGRESSIN: CHTFFTFTFTS         THE CONSTANT TEN IS 1.5770452900         1 1.414471168-n1         1 1.414471168-n1         2 1.4009268208-01         THE ERRING SUM SUMME IS 1.533865718+00         THE ERRING MEAN STILL 1.15.33865718+00         THE ERRING MEAN STILL 1.15.33865718+00         THE ERRING MEAN STILL 1.15.33865718+00         THE ERRING MEAN STILL CONSTLATION CONFERENCE         StAMURAD -FV13LING ON THE STAMESSION CONFERENCE         1 7.715646018-02         StAMURAD -FV13LING ON THE STAMESSION CONFERENCE         1 7.715646018-02         2 4.42003030-02         1 7.715646018-02         2 4.42003030-02         1 7.715646019-02         2 4.42003030-02         1 7.715646010-02         2 4.42003040-01         2 4.42003130-02         1 7.715646010-02         2 4.42003130-02         1 7.715646010-02         2 4.42003130-02         1 7.715646010-02         2 4.42003130-02         1 7.715646010-02         1 7.715647010-01         1 7.715647010-01         1 7.715647010-01         1 7.715647010-01         1 7.715700         1 7.715700         1 7.7157700         1 7	)		DEPENDENT VARI	ABLE NU. I	-	.a	
THE CONKINUT TEOD IC       5.670242224400         I International Control (1000000000000000000000000000000000000						•••	· · · · · ·
1       1	· · · · · · · · · · · · · · · · · · ·						· · ·
THE ERROP KEAN SYNLAP IS       1.533465710*00         THE STAMMARD FERTIMATELIS       1.238331920*00         THE CREFFICIENT OF DIFERVITATELIN IS       S.D22V73AD0=02         THE WULTTALE CONFELATION COEFFICIENTIS       1.2.38331920*00         STÁNUARD -FVIATIONS OF THE SEGHESSION COEFFICIENTS       1.7.15KAD60[0*00 2 6.423903M3H*02 1 2.746666774*02 4 4.610325050*02 5 1.0866683230*01         T VALUE DE REGREGED COEFFICIENTS       1.7.15KAD60[0*00 3 -1.077075860*00 4 -1.378323130*00 5 -1.380168580*00         SOUNCE DE VARIATION       2.7.2773934730*00 3 -1.077075860*00 4 -1.378323130*00 5 -1.380168580*00         SOUNCE DE VARIATION       D.F.         SOUNCE DE VARIATION       D.F. </td <td>1 1.414611480-01 2 1.91</td> <td>042836=01</td> <td>1 12,960623829102</td> <td>4 -6+630102208</td> <td>-02 5</td> <td>-1-202286506-01</td> <td></td>	1 1.414611480-01 2 1.91	042836=01	1 12,960623829102	4 -6+630102208	-02 5	-1-202286506-01	
THE STANNARD FRAME OF ESTIMATE IS       1.238331820400         THE COEFFFCIENT OF OFTERMINATION IS       5.822973800-00         THE HULTINLE CONFFLATION COEFFICIENT IS       2.413003840-01         STÄNUARD -FVIAITON OFFFICIENT IS       2.4.2003840-01         STÄNUARD -FVIAITON OFFFICIENTS       1.7.746866772-02       4.4.810325050-02       5.1.088683230-01         T VALUE OF FEREFSION COEFFICIENTS       1.7.7797588-00       31.07797588-00       41.378323130-00       5.1.389168380-00         SOUNCE OF VARIATION       2.7.77393473000       31.07797588-00       4.1.378323130-00       5.1.389168380-00         SOUNCE OF VARIATION       D.F.       SUM DF       VIAN       4.1.378323130-00       7.345318170-00         DUE TO REFERSION       D.F.       SUM DF       VIAN       4.1.0000000000       7.345318170-00         DUE TO REFERSION       D.F.       SUM DF       VIAN       4.1.23930070-00       7.345318170+00         DEFENDENT VARIATION       D.F.       SUM DF       VIAN       4.1000       1.2.3465710+00         DEFENDENT VARIATION       D.F.       SUM DF       VIAN       4.1.00000000000000000000000000000000000	THE ERROR SUM SQUARE IS 9.	108796300+02					• • • • •
THE CDEFFFCIENT OF DETERMINATION 15       K.822V7360P=02         THE HULTIALE CONFELATION CDEFFICIENT IS       2.443083844P=01         STÄNDARD -FV1ATIONS ON THE REGHESSION CDEFFICIENTS       1.7.156406014=02       2.4.423V03H34=02       1.2.746466774=02       4.4.610325054=02       3.1.086683234=00         T VALUE DE REGHESSION CDEFFICIENTS       1.1.077675467014+00       2.2.973936734=00       3.=1.077675484=00       4.=1.37832313++00       5.=1.389168584+60         MARLYSIS OF VARIANCE FOH THE HULTIPIC LINKAR REGRESSION       SUM OF       V4.0       4.       5	THE ERROR MEAN SPILAPE 15 1.	533465718+00			-		• • •
THE HULTIMLE CONMPLATION COEFFICIENTS         STAULARD -FVIATIONS OF THE REGALSSION COEFFICIENTS         1       7.1554004000-002 2 4.423903030-02 3 2.746466774-02 4 4.810325050-02 5 1.086683230-01         T VALUE OF REGALFSION COEFFICIENTS         1       1.97666761000 COEFFICIENTS         1       1.977666761000 COEFFICIENTS         SOUNCE OF VARIATION       0.1-077975680-00 4 -1.37832313.00 5 -1.3891680500         SOUNCE OF VARIATION       0.1-077975680-00 4 -1.37832313.00 5 -1.3891680500         SOUNCE OF VARIATION       0.1-077975680-00 4 -1.37832313.00 5 -1.38916805000         SOUNCE OF VARIATION       0.1-0.077975680-00 4 -1.37832313.00 5 -1.38916805000         00110 RETHERSION       0.1-0.077975680-00 4 -1.378320000000000         00110 RETHERSION       0.1-0.077975680-00 1 -1.32894000000000000000000000000000000000000	THE STANDARD ERROR OF ESTERAT	E IS 1.238	331828+00				
SIXWUARD -FVIAIIONS OF THE SEGMESSION COLFFICIENIS 1 7.15540609=02 2 6.423903H3=02 1 2.7466A677=02 4 4.81032505=02 5 1.08668323=01 T VALUE OF REGRETSION COLFFICIENTS 1 1.97664701=00 2 2.97393673=00 3 -1.0779548=00 4 -1.37832313=00 5 -1.38916658=00 AMALYSIS OF VARIATE FOM THE HULIPLE LINLAR REGRESSION SOUNCE OF VARIATION DIF TO RE-SESSION SOUNCE OF VARIATION SOUNCE OF VARIATION DIF TO RE-SESSION SOUNCE OF VARIATION DIF TO RE-SESSION SOUNCE OF VARIATION DIF TO RE-SESSION SOUNCE OF VARIATION SOUNCE OF VARIATI		10N 15	5,822973600-02				
1 7.1554060914-02 2 6.4233903838-02 1 2.746466774-02 4 4.810325059-02 5 1.0000083238-01 1 VALUE DE REGHESSIDA CDEFFICIENTS 1 1.070647014-00 2 2.973936738-00 3 -1.077975484-00 4 -1.37832313+00 5 -1.389168588+80 AMALYSIS OF VARIANCE FDM THE HULIPIE LIMEAR REGALSSIDA SOU-CE DE MARIATION D.F. SUB DE NELTO DE TRESSIDA 54.010765000 0 -1.2839405718+00 7.345414178+00 DEFENDENT REGRESSIDA 594 9.10078600 1.233405718+00 TOTAL 599 9.47190333+02 DEFENDENT VARIANLE NULL REGRESSIDA 594 9.100786304+02 1.533405718+00 DEFENDENT VARIANLE NULL REGRESSIDA 594 9.100786304+02 1.533405718+00 DEFENDENT VARIANLE NULL REGRESSIDA 594 9.100786304+02 1.533405718+00 DEFENDENT VARIANLE NULL REGRESSIDA 594 9.100786304+02 1.533405718+00 TOTAL 599 9.47190333+02 DEFENDENT VARIANLE NULL REGRESSIDA 5940931508-02 5 -1.764791938-01 6 1.53642210/0-01 mm 7 1 1.000000000+00 3 2.9404570040+01 4 5.354010030-01 5 -5.682201025 0 -1.764791938-01 6 1.53642210/0-01 mm 7 1 1.0000000000+00 3 2.9404570040+01 4 5.354010030-01 5 -5.682201025 0 -1.764791938-01 6 1.53642210/0-01 mm 7 1 1.00000000000+00 3 2.9404570040+01 4 5.354010030-01 5 -5.682201025 0 -1.764791938-01 6 1.53642210/0-01 mm 7 1 1.00000000000+00 3 2.9404570040+01 4 5.354010030-01 5 -5.682201025 0 -1.764791938-01 6 1.53642210/0-01 mm 7 1 00000000000000000000 0 -0 5 -2.24072154220-01 6 5.477140000000000000000000000000000000000	THE HULTTOLE CORPELATION COEF	FICIENT IS	2.413083840-01	-	- ***		
T VALUE Dr REGRESSION CDEFFICIENTS         1° 1.070447010+00 2 2.073934730+00 3 -1.07797548±400 4 -1.37832313+400 5'-1.389168580+00         ANALYSIS OF VARIANCE FDM THE HULTIPLE LINEAR REGRESSION         SOUNCE DF VARIATION         SOUNCE DF VARIATION         OF WILL HULTIPLE LINEAR REGRESSION         SOUNCE DF VARIATION         OF WILL HULTIPLE LINEAR REGRESSION         SOUNCE DF VARIATION         DIE TO RESSION 500 0.5 5, 6137034001 1.1203400760 7, J495414170+00         DEFENDENT VARIANCE SCIDES MATTO         DEFENDENT VARIANCE NULL 1         OFPENDENT VARIANCE NULL 1         OFPENDENT VARIANCE NULL 1         COMPRESSION 500 0.0000         DEFENDENT VARIANCE NULL 1         COMPRESSION 500 0.0000         OFPENDENT VARIANCE NULL 1         COMPRESSION 500 0.00000         OFPENDENT VARIANCE NULL 1         COMPRESSION 5000000000000000000000000000000000000	STANDARD REVIATEONS OF THE RE	GHESSION COEF	FICTENIS	e ant a completings area	87		
1       1,0776447010+00       2       2,073936739+00       3       -1,07797588±400       4       -1,37832313+400       5       -1,389168580+,60         ANALYSIS OF VARIANCE FOH THE HULTIPLE LINEAR REGELSSION       ANALYSIS OF VARIANCE FOH THE HULTIPLE LINEAR REGELSSION       k       k         DUE TO RE-BESSION       5       5,43197034+01       1.120394070401       7,345414170+00         DE TO RE-BESSION       5       5,43197034+01       1.120394070401       7,345414170+00         DEVIATION AHQUIT REGESSION       54       50,000       1.533465710+00       7,345414170+00         DEVIATION AHQUIT REGESSION       54       5,43197034+01       1.12039407000       7,345414170+00         DEFPENDENT VAHIAHLE       NU.       1       000000000000000000000000000000000000	1 7+155806910-02 2 6+42	3403H3=05	3 2.74646677a=02	4 4.81032505e	-02 5	1.086683230-01	
1       1,0776447010+00       2       2,073936739+00       3       -1,07797588±400       4       -1,37832313+400       5       -1,389168580+,60         ANALYSIS OF VARIANCE FOH THE HULTIPLE LINEAR REGELSSION       ANALYSIS OF VARIANCE FOH THE HULTIPLE LINEAR REGELSSION       k       k         DUE TO RE-BESSION       5       5,43197034+01       1.120394070401       7,345414170+00         DE TO RE-BESSION       5       5,43197034+01       1.120394070401       7,345414170+00         DEVIATION AHQUIT REGESSION       54       50,000       1.533465710+00       7,345414170+00         DEVIATION AHQUIT REGESSION       54       5,43197034+01       1.12039407000       7,345414170+00         DEFPENDENT VAHIAHLE       NU.       1       000000000000000000000000000000000000	T VALUE DE REGRESSION COLEFIC	IENTS		<b></b> .			
ANALYSIS OF VARIANCE         FOW THE HULTIPLE LINEAR REGALSSION         SOUGEE OF VARIATION       D.F.         SUB OF       State         DHE TO REGRESSION       State         DEVIATION ABOUT REGRESSION       State         SUB OF       State         DEVIATION ABOUT REGRESSION       State         SUB OF       State         DEVIATION ABOUT REGRESSION       State         SUB OF       State         DEFENDENT VARIANCE       1.126394007400         TOTAL       SUP OF         SUB OF       State         DEFENDENT VARIANCE       7.34541417+00         DEFENDENT VARIANCE       1.33445718+00         TOTAL       SUP OF         TOTAL       SUP OF         DEFENDENT VARIANCE       1.334457194007         SUB OF       SUB OF         SUB OF       SUB OF         TOTAL       SUP OF         SUB OF       SUB OF	ч		1 =1.07797548-+00	4 -1. 17832313-		-1-38916858 - 00	<b></b>
FOR THE MULTIPLE LINEAR REGalSSION         SOUNCE OF VARIATION       Dif         SUB TO RETARISION       Dif         DUE TO RETARISION       5         DUE TO RETARISION       5         SUB TO RETARISION       5         DUE TO RETARISION       5         SUB TO RETARIAN       5         SUB TO RETARISION       5         SUB TO RET				10011021010			
SOURCES       SOURES       SOURES       FATTO         DUE TO REFRESSION       SURVES       FATTO       SOURES       FATTO         DUE TO REFRESSION       SURVES       SOURES       FATTO         DEVIATION ANDUL       SURVESSION       SURVESSION       SURVESSION         DEVIATION CONTRACTOR       SURVESSION       SURVESSION       SURVESSION         DEVIATION CONTRACTOR       SURVESSION       SURVESSION       SURVESSION         PON 2       SURVESSION       SURVESSION       SURVESSION       SURVESSION         2 SURVESSION       SURVESSION       SURVESSION       SURVESSION       SURVESSION         2 SURVESSION       SURVESSION       SURVESSION       SURVESSION       SURVESSION         2 SURVESSION       SURVESSION       SUR		ON THE MULTIP	LE LINEAR REGRESSI			··· ·· ··· ···	· •• •••
DEVIATION ARBONT REGRESSION TOTAL       594       0.108766309+02 9.67198333++02       1.53346571#+00         DEPENDENT VARIABLE NU.       1         DEPENDENT VARIABLE NU.       1         CORRELATION COEFFICIENTS       0         RDW 1       1         1       1.000000000+00       2         2       3.946218761F=01       3         8       4       4.289931560=02       3 =1.764791930=01         8       1.000000000+00       2       3.946218761F=01         9       2       1.000000000+00       3         1       1.0000000000+00       3       2.948457004F=01         9       2       1.000000000000000000000000000000000000	. SOUPCE OF MARIATION						
CDR#ELATION CDEFFICIENTS RD# 1 1 1.000000000+00 2 3.94218781F01 3 4.48786028=01 4 4.289931568=02 5 =1.784791938=01 6 1.546421078=01 #D# 2 2 1.000000000+00 3 2.9484576044=01 4 5.353630038=01 5 =5.682281618=01 6 2.115626108=01 #D# 3 3 1.000000008+00 5 =2.40721542=01 6 =1.747161048=01 6 6.662421908=02 #D# 4 4 1.00000008+00 5 =2.40721542=01 6 =4.671495818=02 #DW 5 5 1.00000008+00 6 =1.658707338=01 POW 6 6 1.00000008+00 PAHTIAL COMRELATION COLFFICIENTS	DEVIATION ABOUT REGRESSION	594 P.	108786308+02 1.		7.345414	[7 <b>\</b> +00	,
CDR#ELATION CDEFFICIENTS RD# 1 1 1.000000000+00 2 3.94218781F01 3 4.48786028=01 4 4.289931568=02 5 =1.784791938=01 6 1.546421078=01 #D# 2 2 1.000000000+00 3 2.9484576044=01 4 5.353630038=01 5 =5.682281618=01 6 2.115626108=01 #D# 3 3 1.000000008+00 5 =2.40721542=01 6 =1.747161048=01 6 6.662421908=02 #D# 4 4 1.00000008+00 5 =2.40721542=01 6 =4.671495818=02 #DW 5 5 1.00000008+00 6 =1.658707338=01 POW 6 6 1.00000008+00 PAHTIAL COMRELATION COLFFICIENTS	and the set of the set	A 7047 . 1		-18 M 1-			-
CDRRELATION CREFFICIENTS RDW 1 1 1.000000000+00 2 3.942187818=01 3 4.48786028=01 4 4.289931568=02 5 +1.784791938=01 6 1.546421078=01 #0% 2 2 1.000000008+00 3 2.984570048=01 4 5.353630038=01 5 =5.682281028=02 6 2.115626108=01 #0% 3 3 1.000000008+00 4 =1.000019378=01 5 =1.747161048=01 6 6.682421908=02 #0% 4 4 1.000000008+00 5 =2.407215428=01 6 5.671495618=02 #0% 5 5 1.000000008+00 6 =1.658707338=01 #0% 6 0 1.000000008+00 #AHTIAL COMRELATION COLFFICIENTS			OFPENDENT VANI	AHLF NO. 1			
ROW 1 1 1.00.000000+00 2 3.56216781F=01 3 4.45786628=01 4 4.289931568=02 5 *1.764791938=01 6 1.5464210/8=01 BOW 2 2 1.00.000000+00 3 2.58457604F=01 4 5.353630038=01 5 *5.662281028=01 6 2.115626108=01 3 1.00.0000008+00 4 *1.604819378=01 5 *1.747161048=01 6 6.662421908=02 ROM 4 4 1.00.0000008+00 5 -2.40721542#=01 6 5.67149581#=02 ROM 5 5 1.00.0000008+00 6 *1.65870733#=01 PON 6 6 1.00.0000008+00 PAHTIAL COMRELATION COLFFICIENTS	CORPELATION COFFEETCTENTS						
RDW 1 1 1.000000000+00 2 3.942187810-01 3 4.48786028=01 4 4.289931560-02 5 +1.784791930-01 6 1.546421070-01 PDW 2 2 1.000000000+00 3 2.984570040-01 4 5.354630030-01 5 -5.682281020-01 6 2.115626100-01 RDM 3 3 1.00000000+00 5 -2.407215420-01 5 -1.747161040-01 6 6.6662421900-02 RDW 4 4 1.000000000+00 5 -2.407215420-01 6 5.671495810-02 RDW 5 5 1.000000000+00 6 -1.658707330-01 PDW 6 6 1.000000000+00 6 -1.658707330-01 PDW 6			*		tern a numer		αظهمية
RDW 1 1 1.000000000+00 2 3.942187810-01 3 4.48786028=01 4 4.289931560-02 5 +1.784791930-01 6 1.546421070-01 PDW 2 2 1.000000000+00 3 2.984570040-01 4 5.354630030-01 5 -5.682281020-01 6 2.115626100-01 RDM 3 3 1.00000000+00 5 -2.407215420-01 5 -1.747161040-01 6 6.6662421900-02 RDW 4 4 1.000000000+00 5 -2.407215420-01 6 5.671495810-02 RDW 5 5 1.000000000+00 6 -1.658707330-01 PDW 6 6 1.000000000+00 6 -1.658707330-01 PDW 6							
<pre>1 1.00000000+00 2 3.94218761P=01 3 4.48786028=01 4 4.289931568=02 5 +1.784/91938=01 6 1.5864210/8=01 PDW 2 2 1.00000000+00 3 2.98457604P=01 4 5.355630038=01 5 =5.682281028=01 6 2.115626108=01 PDW 3 3 1.00000000+00 4 =1.600019378=01 5 =1.747161048=01 6 6.662421908=02 RDW 4 4 1.00000008+00 5 =2.407215428=01 6 5.671495818=02 RDW 5 5 1.00000008+00 6 =1.658707338=01 POW 6 6 1.00000008+00 PAHTIAL CONRELATION COLFFICIENTS</pre>	terran and the second		••	• a mandal and an a			
BDN       2       1.000000000+00       3       2.4984570040+01       4       5.35463003001       5.54682281020+01       6       2.115626100+01         RDM       3       1.000000000+00       5       -1.0000100000+00       5       -2.40/215420+01       6       5.662281900+02         RDM       4       1.00000000+00       5       -2.40/215420+01       6       5.662281900+02         RDM       4       1.00000000+00       5       -2.40/215420+01       6       5.662281900+02         RDM       5       5       1.000000000+00       5       -2.40/215420+01       6       5.662281900+02         RDM       5       5       1.000000000+00       5       -2.40/215420+01       6       5.662281900+02         RDM       5       5       1.000000000+00       6       -1.658707330+01       6       5.662281900+02         PDM       6       1.0000000000+00       6       -1.658707330+01       6       1.658707330+01         PAHTIAL CONRELATION COLEFICIENTS       5       5       5       5       5       5		2187818-01		4 4.289931568	-02 5	-1.764/91939-01	
3 1+00000000+00 4 *1+004419379*01 5 *1+747[6]04**01 6 6+66242[909*02 RDH 4 4 1+00000000+00 5 *2+40721542#=01 6 5+6714958[#=02 RDH 5 5 1+000000000+00 6 *1+65870733**01 POH 6 6 1+000000000#*00 PAHTIAL COURFLATION COLFFICIENTS	2 1.0000000000 3 2.98	4576048-01		5 -5.682281010	-u1 6	2.115020108-01	
4 1+00000000+00 5 -2+40/21542+-01 6 4+67149581A-02 ROM 5 5 1+00000000++00 6 -1+65870733+-01 POM 6 6 1+000000000++00 PAHTIAL COMMELATION COLEFICIENTS	3 1+0000000004+00 4 "1+00"	8819378-01	5 -1.74/161044-01	0 6.6624219UP	- 62		
ROW 5 5 1:00000000+00 6 "1:65870733*"01 POH 6 6 1:000000000+00 PARTIAL CONRELATION COLEFICIENTS		/21542#=01	6 5.67149581A-02				
PON 6 6 I+000000000+00 PAHTIAL CONRELATION COLEFICIENTS		5707336+01					
PARTIAL CORRELATION FOLFFICIENIS	PON A	•					
		u L C					
1 \$.094.008[49=02 2 1.211237054=01 3 =4.418666998=02 4 =5.646306296=02 5 =5.690591808=02							· ·
	1 8.094008149=02 2 1.21	123705#*01	3 -4.018666998-02	4 -5+646300298	P02 5 9	-2+980281406-05	

---

Lauge (T) 153     Lauge (T) 153     1       Mill, DR (T) 154     1     1		GENERAL HILL	TTPLE REGRESSIU	N AND CURRELATION	ANALYSIS	Turner	LAGINALES :
Construction			1 JC C 15 EAL ADY / C	41 KAN4477=73/X		•	3. EDUCATIO
SAME C LTP, 153         1							
S. Acrows       S. Acrows         MEAKS OF UNDERFORMENT AND DEFENDENT VARIAULTS       1 2.200701774+10. 2 0.444040202000 1 0.200701000000 2 0.7710270024000000000000000000000000000000	NO. OF INDEPENDENT VARIABLES	<b>n</b>					
HEAVS DF INTERVIEWE AND DEFENDENT VARIABLES         1 2.20278777410.0 2 4.0000000000 1 4.0000000000000000000000	NO. OF REPENDENT VARIABLES	1					
1       2.2202741774+10       2.4454702724+10       1.4.554722016+00       2.27172012++00       3.27172012++00         VARIANCES OF 14.15707744 AND THENDENT VARIABLES       1.1.57207300++00       2.1.57207300++00       1.1.57207300++00       1.1.57207300++00         REGARCESSION COFFET/LENTS       DEFEND(NT VARIABLE NO. 1         REGARCESSION COFFET/LENTS       DEFEND(NT VARIABLE NO. 1         THE CONSTANT FC*/15       -5.6643533230+21       1.4.201161164-21       4.3.80173000+00         THE CONSTANT FC*/15       -5.6643533230+21       1.4.201161164-21       4.3.80173000+01         THE CONSTANT FC*/15       1.225673204+13       THE CONSTANT FC*/15       1.225673204+13         THE CONSTANT NO OFFERIES       1.225673204+13       THE CONSTANT FC*/15       1.2567531040-01         THE CONSTANT OF CESTIONE CONFERENCE       A.32002531+01       1.57206531+01       THE CONSTANT FC*/15         THE CONSTANTIONE OFFERENCE       A.32002531+01       4.1.57206531+01       THE CONSTANT FC*/15         TALE CONSTANTIONE OFFERENCE       A.32002531+01       4.1.57206531+01       THE CONSTANT FC*/15         THE CONSTANTIONE OFFERENCE       A.32002531+01       4.1.57206531+01       THE CONSTANT FC*/15         THE CONSTANT       A.1.420047730+01       4.1.57206531+01       THE FC*/200501+02       THE FC*/200501+02         THE						S. Actum	My
VARIANCES OF INNERTIAN DIPENDENT VARIANES         1 1.024870284400 2 3.373725318400 1 0.0400253255401 4 1.3720/3004400 5 1.210844038400         DEPENDENT VARIARLE NO. 1         REGRESSING COEFFICIENTS         THE CONSTANT TERM IS -2.00373234000 1 0.00373244000 1 0.0037324000001         THE CONSTANT TERM IS -2.003732400001         THE CONSTANT TERM IS -2.0037622044133         THE ERROR NEAR SOUGHT IS 1.2200722644133         THE ERROR NEAR SOUGHT IS 1.220072644133         THE COEFFICIENT TO DETERMINATION IS 4.05073704001         THE UDETERMINATION COEFFICIENT IS 4.0307026510-01         STANDARD DEVIATIONS OF THE RESULUSION COEFFICIENTS         I -2.774472104412 2 7.9570708201413 1 0.44007730402 4 2.213970708402         T VALUE OF REGRESSION COEFFICIENTS         I -2.03373344401 2 9.557270702400 1 1.740806704011 4 1.572060310402         STANDARD DEVIATION COEFFICIENTS         I -2.03373344401 2 9.557270702400 1 1.740806704011 4 1.5720603104002         STANDARD DEVIATION COEFFICIENTS         SUBLE OF REGRESSION         SUBLE OF REGRESSION COEFFICIENTS         SUBLE OF REGRESSION COEFFICIENTS         SUBLE OF REGRESSION				4 3 01/20150		3. 21 05 26 328. 30	
1 1.02487038410 2 3.373723518400 1 0.010533554001 4 1.37287386400 2 1.510884038400 DEPENDENT VARIABLE ND. 1 REGRESSION COEFFICIENTS THE CONSTANT TEN IS -5.663533038401 1 4.00070755401 2 4.201087748407 THE CONSTANT TEN IS -5.663533038401 THE CONSTANT TEN IS 1.200073264403 THE CONSTANT TEN IS 1.200073264400 THE CONSTANT TEN IS 1.200074004040 THE CONSTANT TEN IS 1.2000740040400 TO THE MULTIPLE CONSTANT IS 1.200074004040 STUNCE OF VARIATION OFF STUDY STUDE TO POORTSCIN STUDE TO POORTSCIN STU				4 5.41150134		34, 1026, 3244 W	
DEPEndent VARIABLE ND. 1           REGRESSION CDEFFICIENTS           THE CONSTANT TEN IS ->.6435339394-01           1 \$.000070350+01           THE EVENTS							
REGRESSION COEFFICIENTS         THE CONSTANT TEAM IS       -5.6435332330-21         1       1.000070730-11       2.1.201647740-02         THE EQUARS SUM SUMLE IS       1.22007/320-13         THE EQUARS OF UP ESTIMATE IS       1.000352204-01         THE COEFFICIENT OF OFTERMINATION IS       1.656/33749-01         TAE WILTIPLE CONSCLATION COEFFICIENT IS       1.00036519-01         STANDARD DEVIATIONS OF THE REGUESSION COEFFICIENTS       1.000000000000000000000000000000000000	1 1.074879988410 2 5.3737	75518+00 3	9.61025325#=01	4 1.3720/386	+00 ÷	1,51008463#+90	
THE CONSTANT TEN IS -5.66353930-01         1 A.0000/0150-11       2 4.20104773-02       1 4.201361164-01       4 3.40173404-01         THE ERROY SUINE IS       1.2000/3264433         THE ERROY SUINE FIS       1.2000/3264433         THE ERROY OF CONSTRUCT IS       4.003452264-01         THE COLEFFICIENT OF OFTERMINATION IS       4.656/3378+-01         THE OULTIONE CONSCLATION OFFTERMINATION IS       4.656/3378+-01         THE MULTIONE CONSCLATION OFFTERMINATION IS       4.656/3378+-01         THE MULTIONE CONSCLATION OF THE RESMERSION CONFERICIENTS       1 0.40378344+01         TANDARD DEVIATIONS OF THE RESMERSION CONFERICIENTS       1 1.403183184+01         TAULUE OF RECRESSION CONFERICIENTS       1 1.40938314+01         SUMMEE OF VARIATION       0.1.740866764+01       4 1.57260318+01         SUMMEE OF VARIATION       0.4.5737718+02       4.2213878708+02         DEVIATION CONFERICIENTS       SUMMEE OF VARIANCE       FMIL         DEVIATION CONFERICIENTS       SUMMEE OF VARIANCE       FMIL         DEVIATION CONFERICIENTS       SUMMEE OF VARIANCE       SUMMEE OF VARIANCE         DEVIATION CONFERICIENTS       SUMMEE OF VARIANCE       SUMMEE OF VARIANCE         DEVIATION CONFERICIENTS       SUMMEE OF VARIANCE       SUMMEE OF VARIANCE         DEVIATION CONFERICIENTS       SUMMEE OF VARIANC		• • • • • • • • • • • • •	DEPENDENT VAR	JARLE ND. 1	• • •		
1         4.201047742*02         1         4.20114114*01         4         3.40173404*01           THE ERROR SINK Samake is         1.20073264*133         THE ERROR VEAN COMART IS         4.203073264*133           THE ERROR VEAN COMART IS         4.003052754*01         4         4.30173404*01           THE ERROR VEAN COMART IS         4.003052754*01         4         4.40173404*01           THE CONFICTENT OF OFTERMINATION IS         4.6567337AP=01         4         4.4017748*02           THE MULTIPLE CONFELATION CONFFICIENT IS         4.30402519*01         4         4.4017748*02           THE MULTIPLE CONFELATION CONFFICIENTS         1         2.44097738*02         4.2213670700*02           TWALUE OF REGRESSION CONFFICIENTS         1         4.40334334*401         4         1.572605319*31           SOURCE OF VAGIATION         0.F.         SUM OF         SOURCE         RATE           DUE TA OFTAFSSIN         0.F.         SUM OF         SOURCE         RATE           DUE TA OFTAFSSIN         0.F.         SUM OF         SOURCE         RATE           DUE TA OFTAFSSIN         1.05507220*03         0.09345224*01         3.40335809*02           DUEVIATION CONFFICIENTS         1.050070000*00         1.0500720*01         3.4000720*02           DUEVIATION CONFFICIENTS </td <td>REGRESSION COFFETCIENTS</td> <td></td> <td></td> <td></td> <td></td> <td>a an ana ana an a</td> <td></td>	REGRESSION COFFETCIENTS					a an ana ana an a	
THE EQRNO HEAN SOMARE IS       4.093852258-31         INE STANDARD FROM UF ESTIMATE IS       4.09365380000         THE COEFFICIENT AF OFTERMUNATION IS       a.656/33780-01         THE MULTIPLE COMPELATION COEFFICIENT IS       A.390026518-01         STANDARD DEVIATION OFFFICIENT IS       A.390026518-01         STANDARD DEVIATION COEFFICIENT IS       A.390026518-01         TVALUE OF RECRESSION COEFFICIENTS       I.7488677388-02         TVALUE OF RECRESSION COEFFICIENTS       I.748866768+01         SOURCE OF VARIATION       D.574787832+00       X.1748866768+01         SOURCE OF VARIATION       D.7. SOUNDE       SOURCE OF VARIATION         SOURCE OF VARIATION       D.F. SOUNDE       SOURCE OF VARIATION         DIE TO RECRESSION       A.1.7488667528+01       A.1.572680318+01         DIE TO RECRESSION       A.1.7488667528+01       A.1.572680318+02         DIE TO RECRESSION       A.1.7488667528+01       A.1.572680318+02         DIE TO RECRESSION       A.1.7488667528+01       A.1.3330303489+02         DEFENDENT VARIARLE NUL II       D.55075298+03       A.9339264+02         DEFENDENT VARIARLE NUL I       DEFENDENT VARIARLE NUL I       CORRELATION COEFFICIENTS         RMN I       I.0000000004+00       Z.5.02423132**01       X.722246604**01       X.74040526121**01			4.281361168-31	4 3.48173464	e+ J1		
THE ERRIN HEAN SOMART IS       4.093452264-31         INE STANDARD FROMO UF ESTIMATION IS       4.656/33764-01         THE GORFICIENT TO OFFERMINATION IS       4.656/33764-01         THE NULTIPLE CORRELATION COEFFICIENT IS       4.374026518-01         STANDARD DEVIATIONS OF THE RESHESSION COEFFICIENTS       1         I 3.7544731264-12       7.9.550968543+03       1.2.448077388-02         I VALUE OF REGRESSION COEFFICIENTS       1       1.740966764+01       4         I 1.40338334+01       2       9.57768634+03       1.740966764+01       4         I 1.40338334+01       2       9.59768634+03       1.740966764+01       4       1.572603318+01         SOURCE OF VARIATION       0.1       0.75       SUM OF       VEAN       F         SOURCE OF VARIATION       0.1       0.75072794+03       0.7034932264+01       3.0303080+02         DEFINOENT VARIANCE       NULL       1557       2.57244374+03       3.0303080+02         DEFENDENT VARIANCE NULL       1557       2.7324473474+03       3.0303080+02       3.0303080+02         DEFENDENT VARIANCE NULL       1557       2.7224460644+01       4.374263618+01       5.045851368+01         TUTAL       1557       2.722446064+01       4.374263618+01       5.045851368+01        0.7740320204+03<	THE ETRAT SUN SOUNE IS 1.2	06979264403					
THE STANDARD FROME UF ESTIMATE IS 9.096593040-01         THE COEFFICIENT OF DFERMINATION IS 4.656/337A0-01         THE WULTIPLE CONNELATION COEFFICIENT IS 4.304026510-01         STANDARD DEVIATIONS OF THE RESERV COEFFICIENTS         T VALUE OF REGESSION COEFFICIENTS         T VALUE OF REGESSION COEFFICIENTS         SOURCE OF VARIATION         SOURCE OF VARIATION         DUE IN REGESSION         DUE IN REGESSION         ANALYSIC OF JANAGES         SOURCE OF VARIATION         D.F.         SOURCE SOURCE OF VARIATION         DUE IN REGESSION         DUE IN REGESSION         TOTAL         DEFLORENT VARIANCE         SOURCE OF VARIATION         D.F.         SOURCE OF VARIATION         DEFLORENT VARIARCE							
THE COEFFICIENT OF DFTERMINATION IS #.656/3378#=01         THE MULTIPLE CORPELATION CREFFICIENT IS <.32402651#=01				• • · · · · · · ·	· •		
THE COEFFICIENT OF OFTERMINATION IS       a.656/337AP=01         THE WILTIPLE CORRELATION COEFFICIENT IS       x.320026519=01         STANDARD DEVIATIONS OF THE REGRESSION COEFFICIENTS							
THE COEFFICIENT OF OFTERMINATION IS       a.656/337AP=01         THE WILTIPLE CORRELATION COEFFICIENT IS       x.320026519=01         STANDARD DEVIATIONS OF THE REGRESSION COEFFICIENTS					a		***
THE HULTIPLE CORRELATION COEFFICIENT IS A.374076518-01         STANDARD DEVIATIONS OF THE REGRESSION COEFFICIENTS         1       >77844721264-12       Z.9.550908544-33       1.2.448077388-02       4.2.21370708-02         T VALUE OF REGRESSION COEFFICIENTS       1.1.4033431434+11       2.9.57978478324+00       1.740866764+01       4.1.572685318+01         1       1.4.4033431434+11       2.9.5797878324+00       1.740866764+01       4.1.572685318+01         Source of variation       0.4.6       7.748872784403       4.1.572685318+01         Source of variation       0.4.6       Sum of MEAN F       8.410         DUE TO REGRESSION       4.1.405372114+03       2.710680248+02       3.30303689*02         DUE TO REGRESSION       4.1.40537214+03       2.710680248+02       3.30303689*02         DEVIATION ADDIT OF CRESSION       4.1.405372584403       0.903452268+01       3.30303689*02         DEFENDENT VARIABLE NO. 1       0.004450       2.5.045053160+01       5.0450531360+01         DEFENDENT VARIABLE NO. 1       0.702231324+01       1.72.202846064+01       4.374263618+01       5.0450531360+01         TOTAL       1557       2.152464/378+03       3.366801218+01       5.0450531360+01       7.12.2028460644+03         DEFENDENT VARIABLE NO. 1       0.72237284401       3.72228460644+03       3	THE STANDARD FRRDA UP ESTIMATE	IS 5,99658	3048-01				
STANDARD DEVIATIONS OF THE REGRESSION COEFFICIENTS         1       >;754471269-12       Z       >;559284549-03       1       >;448077388-02       4       2:213770708-02         T VALUE OF REGRESSION COEFFICIENTS       1       1       1:4033833349+01       2       9;5974788329+00       1       1:740866769+01       4       1:572685318+01         ANILYSIS OF VARIANCE FOR THE HULTION OF VARIANCE DUE TO REGRESSION       RATIO DUE TO REGRESSION A 1:-05072564+01       0:00000244+02       3:38300089++02         DEFENDENT VARIABLE NU.       1       DEFENDENT VARIABLE NU.       1         CORRELATION COEFFICIENTS ROM I 1:100000000000000000000000000000000000	a familiar and a second second		656/33782-01	-	··		
STANDARD DEVIATIONS OF THE RESHESSION COEFFICIENTS         1       >;744871264-12       Z       9;550984549-03       1       2,448077388-02       4       2:213778788-02         T VALUE OF REGRESSITY COEFFICIENTS       1       1       1.403383344+01       2       9;57478823+00       1.748866764+01       4       1:572685318+01         S01402       OF REGRESSITY COEFFICIENTS	THE MULTIPLE CORRELATION COEFFI	ICIENT IS K.	324026518-01				
1 1.4933A3344+01 2 8.58747A824+00 1 1.744866764+01 4 1.572665318+01 ANILYSIC OF JARJANCF FOR THE AULTION D.F. SUM OF YEAN F SOURCE OF VARIATION D.F. SUM OF YEAN F DUE TO REGRESSION 4 1.05697250401 2.736460248+02 3.383654699+02 DEVIATION ARDIN DEGRESSION 1553 1.056975250401 d.009395266+01 TOTAL 1557 2.15244/3/8+03 DÉPENDENT VARIABLE NU. 1 CORRELATION COEFFICIFYTS RDM 1 701 2 1.600000004+00 2 5.026231324=01 1 -2.202466064=01 4 4.374263618=01 5 5.045851368=01 RDM 2 RDM 2 1.73 1.00000004+00 3 -3.014539744=01 A 3.626412552=01 5 3.866801214=01 RDM 3 1.73 1.00000004+00 4 -1.513337652=01 5 1.536801168=01 RDM 4 7.75 1.00000004+00 5 5.014607363=01 RDM 4 5.75 1.00000004+00 7.75 1.000000004+00 7.75 1.000000004+00 7.75 1.00000004+00 7.75 1.000000004+00 7.75 1.00000004+00 7.75 1.000000004+00 7.75 1.0000000004+00 7.75 1.000000004+00 7.75 1.000000004+00 7.75 1.000000004+00 7.75 1.000000004+00 7.75 1.000000004+00 7.75 1.000000004+00 7.75 1.0000000000004+00 7.75 1.000000000000000000000000000000000000	-			4 2.21397878	e=92		
INALYSIC OF JARJANCE FOR THE HULTIPLE INEAR REGRESSION         Source of Variation       D.F.         Source of Variation       A         DEVIATION andult of catestin       A         DEVIATION construction       A         DEPENDENT Variable NO.       1         CORRELATION construction       Construction         A       1.5202046000000000000000000000000000000000	TTVALUE OF REGRESSION CONFFICIE	****	10 MW	<u>-</u> .			
FOR THE HULTION ELINEAR REGRESSION SOURCE OF VARIATION D.F. SUN DF YEAN F SOURCE OF VARIATION D.F. SUN DF YEAN F SOURCE OF VARIATION D.F. SUN DF YEAN F SOURCE OF VARIATION D.F. SUN DF YEAN F SOURCES SOURCES RATIO DUE TO REGRESSION A 155075260+03 2.730480294+02 3.30305489#+02 DEVIATION AND/1 PERFESSION 1557 2.15204/3/P+03 DEPENDENT VARIABLE ND. 1 CORRELATION CREFFICIENTS ROW 1 701 1 .0000000004+00 Z 5.026231324=01 3 = 2.202466064=01 4 4.374263610=01 5 5.045851360=01 TO Z 1.000000004+00 Z 5.026231324=01 3 = 2.202466064=01 4 4.374263610=01 5 5.045851360=01 TO Z 1.000000004+00 Z 5.026231324=01 3 = 2.202466064=01 4 4.374263610=01 5 5.045851360=01 TO Z 1.000000004+00 Z 5.026231324=01 3 = 2.202466064=01 4 4.374263610=01 5 5.045851360=01 TO Z 1.000000004+00 Z 5.026231324=01 3 = 2.202466064=01 4 4.374263610=01 5 5.045851360=01 TO Z 1.000000004+00 Z 5.026231324=01 3 = 2.202466064=01 4 4.374263610=01 5 5.045851360=01 ROW 2 TO Z 1.000000004+00 Z 5.026231324=01 3 = 2.202466064=01 4 4.374263610=01 5 5.045851360=01 ROW 2 ROW 3 L/2.3 1.000000004+00 Z 5.026231324=01 5 1.5385801160=01 ROW 4 ROW 4 L/2.3 1.000000004+00 5 5.016807360=01 5 1.5385801160=01 ROW 4 ROW 4 ROW 4 ROW 4 ROW 4 ROW 4 ROW 5 	1 1.493383344+11 2 8.5874	178829+00 1	1-740866769+31	4 1.57268531	e+01 ····		
DUE TA REGRESSIAN       4       1x-05072114+03       2x/3040240+92       3x303054099+02         DEVIATION ARDULT PERHESSIUN       1557       2x0507526403       dx094526491       3x303054099+02         DEVIATION ARDULT PERHESSIUN       1557       2x0507526403       dx094526491       3x303054099+02         DEVIATION ARDULT PERHESSIUN       1557       2x0507526403       dx094526491       3x303054099+02         DEPENDENT VARIABLE NU.       1       1557       2x05204/3/0+03       1         DEPENDENT VARIABLE NU.       1       1       1         CORRELATION CHEFFICIFNTS       0       0       1         ROW 1       1       1x-0x00000004+00       2       5x026231324=01       1       -2x2020660040=01       4       4x374263610=01       5       5x045051360=01       0         ROW 2       7x02       1x000000004+00       3       3x014530724=01       A       3x026412550=01       5x060012140=01       01       01         ROW 2       7x02       1x000000004+0       4       -1x513337650=01       5x060012140=01       01       01       01         ROW 3       1x0000000004+00       5       5x014007300=01       5x06001160=01       01       01         ROW 5       1x000000000000000000000000	F.3F			104	• •		
DUE TA REGRESSIAN 4 195072112+03 2.730680280+02 3.303654890+02 DEVIATION ARDUT PERFESSIUN 1951 1.25607526003 0.093452268+01 TOTAL 1557 2.35244/3/0+03 DEPENDENT VARIABLE NU. 1 CORRELATION CREFFICIFNTS ROM 1 7'3 1 1.000000000+00 2 5.026231320=01 1 -2.202466060=01 4 4.374263610=01 5 5.045851360=01 POW 2 TOW 2 1.0000000000+00 3 -3.01453924=01 A 3.026412550=01 5 3.06801214=01 ROW 3 LV 3 1.000000004+00 4 -1.513337650=01 5 1.530501160=01 ROW 4 CORDENDONO0004+00 5 5.016807300=01 ROW 5 X -5 1.000000000+00	SOURCE OF VARIATION						
DEPENDENT VARIABLE ND. 1 $CORRELATION CHEFFICIFNTS$ $ROW 1$ $V = 1 + 1 + 000000009+00 = 2 + 0.026231324 = 01 + 2.202466068 = 01 + 4.374263618 = 01 + 5.045851368 = 01 + 9.045851368 = 0.045851868 = 0.04585851868 = 0.045851868 = 0.0458585858585$	DEVIATION AROUT PERPESSIUN	4 17	547211#+n3 2 697526#+03 d	./30680290+92			
$\begin{array}{c} \text{CORRELATION CHEFFICIFNTS} \\ \hline \text{ROW 1} \\ \text{I'i 1 1} 00000000^{9} + 00 2 5.02623132^{9} - 01 1 - 2.202466068 - 01 4 4.374263618 - 01 5 5.045851368 - 01 \\ \hline \text{VOH 2} \\ \hline \text{VOH 2} \\ \text{FU 2 1} 000000004 + 00 3 - 3.01453924 - 01 A 3.82641255 - 01 5 3.86801214 - 01 \\ \hline \text{ROW 3} \\ \text{I/X 3 1} 000000004 + 10 4 - 1.51333763 - 01 5 1.536801168 - 01 \\ \hline \text{ROW 4} \\ \hline \text{ROW 4} \\ \hline \text{CI 4 1} 00000004 + 10 5 5.016807368 - 01 \\ \hline \text{ROW 5} \\ \hline \text{KOO000008 + 00} \end{array}$	TOTAL	1557 2.15	244/3/#+03		<b>.</b>		
$\begin{array}{c} \text{CORRELATION CREFFICIFWIS} \\ \hline \text{ROW 1} \\ \text{7'1 1 1.000000004+00 2 5.026231324=01 3 = 2.202466068=01 4 4.374263618=01 5 5.045851368=01 \\ \text{90M 2} \\ \text{90M 2} \\ \text{7.0 2 1.000000004+00 3 = 3.014539244=01 A 3.826412554=01 5 3.86801214=01 \\ \text{ROW 3} \\ \text{1.0000000004+00 4 = 1.513337653=01 5 1.536801168=01 \\ \text{ROW 4} \\ \text{CL 4 1.00000004+00 5 5.016807368=01 \\ \text{ROW 5} \\ \text{K} = 5 1.00000008+00 \end{array}$				#			
$\begin{array}{c} R_{0W} & 1 \\ T^{'1} & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 2 \\ T^{'1} & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ T^{'1} & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0$		- And	DEPENDENT VAR	TABLE NO. 1	March and the second second	14 FAMARE	
$\frac{751}{7} \frac{1}{5} \frac{1}{1} \cdot 00000000^{4}00 = 2 - 5 \cdot 02623132^{4} - 01 - 1 - 2 \cdot 20246606^{4} - 01 - 4 - 4 \cdot 37426361^{4} - 01 - 5 - 5 \cdot 04585136^{4} - 01 - 906 - 20 - 2066606^{4} - 2066606^{4} - 206666666^{4} - 206666666^{4} - 206666666^{4} - 2066666666^{4} - 2066666666^{4} - 20666666666^{4} - 20666666666^{4} - 206666666666^{4} - 206666666666666^{4} - 2066666666666666666666666666666666666$	CORRELATION CREFFICIFUTS						
PD#       2         PD#       2         T_D       2         T_D       2         PD#       2         T_D       2         PD#       3         T_D       2         PD#       3				4 0 27426361		5 015851360-01	
Rηw       3         1/2       3 <td>40M 2</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>· · ·</td>	40M 2			-			· · ·
Rŋw a ∽t 4 1.00000004400 5 5.015007389=01 Rŋw 5 √ -5 1.000000004400 N	RAW 3				e-01	with the second	
/с. 4 1+ладлаото?+?ла 5 5+л1500738#=31 Яли 5 у-5 1+алодлова+ла у		37659-01 5	1,535901168-01		- ···	***************************************	
x -5 1.00000000+00	- 🚓 4 1.0000000000000 5 5.0160	\$0738 <b>₩</b> =91			•		
	×-5 1.00000000++00				. Rift for the state of the second second		
PARTIAL CURRELATION COLFECTIVIS	PARTIAL CORRELATION COEFFICIENT	rs					
1 3.543572523 1 2 2.129145578 01 3 4.056338078 01 4 3.706511068 01	1 3.543522523" at 2 2.1291	14857 -01 3	4 . 050 3 38 07 ** 01	4 3+7 0651106	e= 01 -		

	<b>e.</b>		IN NE DAT	4.11 <b>1 1 0 1 6</b>			
	SALARIED CROSS-VI	EMPLOYNESS ALLOATION BAMPLE	BCHERAL I		N ANU CURRELATION ANA	I. AGE	
•				THESIS SALARY/U MALES (	TE RANHAT2=737X	2. Pay	S. JOB LOVEL
	SAMPLE SIZE	1558 NUENT VARIAULES	4	T INCODE	- Cy	3. TEN	
	NO. OF DEPENDE	NI VARIADLES	s I			PEFENDE	NT VARIAGLE:
							INPACTIONS (DIF SCORE
	NEANS OF ENDEPI	ENDENT AND DEPEN	DENT VANIABL	ES			
	1 6.6297817	74+00 2 3+7105	52632P+00	3 4+692434556+00	a a+58472401#+00	5 2:917201540+0	0 6 5+693838250+00
	VARIANCES OF I	NIEPENDENT AND DE	CPENDENT VAR	TAULES			••
	1 1+0246/99	8H+00 2 1+5108	38463#+00	3 8+3/3/20510+00	4 9.61025325#-01	5 1+37207386#+	00 6 2.100809748+00
				DEPENDENT VAR		,	
	• -=						-
							,
1		and the second second		• P.• P.• • • • • •	n par anna an s		
	REGRESSION CUE					· •,	
	THE CUNSTANT T	ERH IS 5.46832	2114#+00				
•		04-02 4 <u></u> 213333	5391H-01	3 -1.84/611996-05	4 -1.289852558-01	2 241044335144-	ν «
4	.THE ERROR SUN	SQUARE IS 3.13	35429308+03				
S	THE ENROR MEAN	SQUARE 15. 2.02	20250840+00				
•		REAL STIMATE.	.15	355280+00			
	THE COREFICIEN	I DE DETERMINATIO	IN TS	n . La 3a7A1 38=02			,
1	THE MULTIPLE C	URRELATION CUEFFI	CIENT IS	2.035553528-01			
۱	STANDADD DEVIA	TIONS OF THE REGA			an and a substantiant and a state of a second state		and the second
G		• • • • • • • •				···· · ··· · · · · · · · · · · · · · ·	
ł	1 4.63742824	49-02 2 4.0090	29798-02	3 1+544355008-02	4 4.231428498-02	5 3.765907530*	02
	T VALUE OF REGI	RESSION COEFFICIE	NTS				
1	1 9.39352859	YA-01 2 6.3704	20120+00	3 -1-196364630+00	4 -3-046267398+00	5 -1+286418268+	00
			ANALYSI	S OF VARIANCE	2		
•		FOH	THE HULTIP	LE LINEAR REGRESS	ION		·····
·		F. VARIATIUN				F	
,	DUE TO REGRESS	10N	5 1.	SQUARES / 3553154/8+02 2,		RATIO 1729900+01	
		TREGRESSION	1552 3.1	[3542930#+03 2,	020250840+00		
			. 1231 3.0	270960858+03			
·						· · · · · · · · · · · · · · · · · · ·	
·				DEPENDENT VAR	TABLE NO. 1.		
	CORRELATION CON	EFFICLENIS	. •				
	1 1-00000000	V₽+OU 2 5.0458	51369-01	5.026231320-01	4 -2.202466060-01	5 4.37426361#-	01 6 1.232603150-01
	RDW 2	• •	-	•	·· · · · · · · · · · · · · · · · · · ·		angenerations - the same a stress
	2 1.0000000	0848.E E 10490	12148-01	1.586801168-01	5 5:016807388-01	6 I,84185810P-	
	RDW 3 3 1.00000000	u#+0u4 =3+0145	39249-01	3.826412558-01	6 7.349917258-02		
	RON 4 4 4 4 1.0000000	0#+00 5 =1.5133	37652-01	5 -4.252835728-02			
	R04 5						
	RD# 6	u#+0u 6 8.1902					
		ue+ou					
	PARTIAL CORRELA	ATIUN CULFFICIENT	5				
	1 2.3837432/	/@-02 2 1.5963	1160#-01	3 -3,035411250-02	4 -7.714557180-02	5 -3,26366008#-	02

	Come Mar . Summe	GENERAL MUL	TIPLE REGRESSION	N AND CURRELATION	ANALYSIS	INDEPENDENT VARIABLES	
	CROSS-VALIDATION SAMPLE		THESIS HUURLY/S			2. TENURE 4. Tog	JENEL
	SAMPLE SIZE 2253 NO. OF INDEPENDENT VARIATETS NO. OF DEPENDENT VARIABLES	4 1	111/1040			DEPENDENT VARIABLE	
	MEANS OF INDEPENDENT AND DEPENDE	NT VARIABLES	<b>F</b>				
	1 2.144252118+00 2 4.92853	19726+00 3	2.46959609#+00	4 1.68397692#	+00 5	5.70439414#+00	
	VARIANCES OF INDEPENDENT AND DEP	PENDENT VARIA	BLES				
	I 1.2679298/#+00 2 9.01576	1508+00 3	1.212774130+00 DEPENDENT VAR		+00 -5	2.004052628+00	
	REGRESSION COEFFICIENTS						
	THE CUNSTANT TERM IS 3.678169	/130+00 19420-01 3	I.93293224#*01	4_ 2+22288903#	-01		
	THE ERROR SUN SQUARE IS 3.472	2692358+03					
	THE ERROR MEAN SQUARE IS	1791970+00				-	
						• • • • • • • • • • • • • • • • • • • •	
	THE SIANDARD ERROR OF ESTIMATE I						
	THE COEFFICIENT OF DETERMINATION					an an hang de geste geste men de state de sense	
• • •	THE HULTIPLE CORRELATION COEFFIC	IENT IS 4.	80140727#=01	• • • • • •			
	STANDARD DEVIATIONS OF THE REGRE	SSION COEFFI	CIENTS	· · · · · · · · · · · · · · · · · · ·			• · · ••••
	I 3.12817906#=02 2 1.15572	20468-02 3-	2.484315278-02	4" 2.646147978	-02		
	T VALUE OF REGRESSION COEFFICIEN			·····			· · · · · · · · · · · · · · · · · · ·
	1 3;809405368+00 2 3;61344		7.779916948400	. a s. 600471348	+00		
			DF VARIANCE Linear Regress				
	SOURCE OF VANIATION	D.F.	SUM OF	MEAN	F		
	OUE TO REGRESSION DEVIATION ABOUT REGRESSION TUTAL	4 I.04 2248 3.47	043415#+03 2	544791978+00	RATID 1,6A37771	10+02	· · · · · · · · · · · · · · · · · · ·
•			DEPENDENT VAR	ARLE ND. 1			-,
	CORRELATION COEFFICIENTS						
					_ ·		1997 90 Page 10 - Andrew 19
	RD# 1 I I,00000000000000 2 0,51426	9068-01 3	~\$*450358108-01	4 .19140043546	-02 2	3.140275258-01	
	I I.000000000+00 2" 0.51426 R04 2			5 4.17071663#		3.140275258-01	
	Î Î.000000000+00 "2" 0,51426 RNM 2 2 Î.000000000+03 3 "1,"7314 RNM 3	530P-01 4		5 4+17071683#	-01		
	Î Î.000000000+00 2 0.51426 RN4 2 7 Ι.000000000+00 3 *1, 7314 RN4 3 1.0000000000+00 4 1.60920 PN4 4	5308-01 4 01278-01 5		5 4+17071683#	-01-		
	Î Î.000000000+00 2° 0.51426 RN4 2 2 I.000000000+03 3 *1, 7314 RN4 3 3 I.000000000+60 4 1.60920 PO4 4 4 I.00000000+00 5 1.17950 RN4 5	5308-01 4 01278-01 5		5 4+17071683#	-01	······································	
	Î     Î.000000000000000000000000000000000000	530 <b>0-01</b> 4 5 01274-01 5 02499-01	₩7.46209257##02 8.28148667#=02	5 4+17071683#	•01	· · · · · · · · · · · · · · · ·	
	Î Î.000000000+00 2° 0.51426 RN4 2 2 I.000000000+03 3 *1, 7314 RN4 3 3 I.000000000+60 4 1.60920 PO4 4 4 I.00000000+00 5 1.17950 RN4 5	1530 <b>8-01</b> 4 5 01278-01 5 02898-01 	-7.46209257#*02 5.2814866/#*02	5 4.17071663#	~01	· · · · · · · · · · · · · · · · · · ·	

.....

ł,

l

HOURLY EMPLOYEES CROES-VALIDATION SAMPLE			CORRELATION ANALY	SIS INDEPENDER	4. EDUCATION
SAMPLE STZE 2253 NO. OF INOFPENDENT VARIABLES NO. OF DEPENDENT VARIABLES	THES 5 1	IS HOURLYZDIF HA MALES ONLY	NHAT 32700X .	2. PAY 3. Tenuar <u>Dependent</u>	S. JOA LEVEL
NEANS OF INTEPENTENT AND DEFEN	UENT VARIABLES				,
		853972=+00 4	2.489596094+00	5 1+68347692#+00	5 3+29693742#+00
				• • • • • • • • • • • • • • • • • • • •	
VARIANCES OF INDEPENDENT AND D					
1 1.24292987#+00 2 2.004		5761508+00 4 PENDENT VARIABLE		5 1.01642610P+00	6 2.36072330#+00
··· ·	·· •			- ···	
REGRESSION COEFFICIENTS					
THE CONSTANT TERM 15 4.3903	5524#+00 71150#=01 3 =7.64	15869978-02 8	6+48977597#=02	5 3+52590388#=02	
, THE ERROR SUN SQUARE TS 5.2	0682830#+03		-	. ,	
THE ERROR MEAN SOMARE IS 2.3	1723556#+00				
THE STANDARD ERROR OF ESTIMATE	IS 1+52224688#4	00			
THE COEFFICIENT OF DETERMINATI	ON IS 2,06007	1170-02	-		
THE MULTIPLE CORRELATION COEFF	ICIENT IS 1,43529	480#-01			
STANDARO DEVIATIONS OF THE REG	RESSION CHEFFICTENT	5			
1 3.843606730*02 2 2.583	16375#*02 3 1.49	5189388-02 4	3+083621728-02	5 3+291364448+02 "	
"	ENTS				
1 3,56005268p+00 2 4,098	507120+00 3 -1,76	9588538400 4	2+104595368+00	5 1+071259030+00**	
Pari come e cara ante e constante constante constante e constante e constante e constante	ANALYSIS OF VA				
SOURCE OF VARIATION	D.F. SIIN D Squar			F T 10	
DUE TO REGRESSION Deviation about regression total	5 1.0952057 2247 5.2068283 2252 5.3163488	00+02 2:19041 100+03 2:3172		9203#+00	
······					• • • • • • • • • • • • • • • • • • •
···· ···· · · · · · ·	DEP	ENDENT VARIABLE	ND. 1	···· ····· ···· ··· •···	
CORRELATION COEFFICIENTS	•				
ROW 1 1 1+000000000+00 2 3+140	21,254=01 316+51	4269068-01 4	2.420529784-01	5 -1.148049240-02	6 8.330765688+02
ROW 2 	71683#*01 A 8.28	1486678-02 5	1.47950289#=01	6 1.146847238-01	
	14530=01 5 -8,46	209257#=02 6	4,396838780-02	<ul> <li>a service million of the service management.</li> </ul>	
	201278-01 6 4,32	5957788-02			
	956948-02		•		
6 I,00000000+00					
. PARTIAL CORRELATION CREFFICIEN	15			<u></u>	
1 7.489167310-02 8.814	U3993P=02 3 =3,73	40511228-02 4	4.435467998-02	5 2.259342578=02	
			- American		1771 BB - 16

SALARIED ENPLoyees

ORIGINAL SAMPLE

•

GENERAL HILTIPLE REGRESSION AND CURRELATION ANALYSIS

	TUESTS	/SAL HAUMATONILAY	DEPENDENT VA	RIAGLE : 4. INCOME		
	THESIS SALARY/SAL RANN WITH FEMALES			INDEPENDENT VARIABLES :		
SAMPLE SIJE 1604 NO. OF INSEPENDENT VARIABLES 5			I. SEX	4. EDUCATION		
ND. DF DEPENDENT VARIABLES 1			2. AGE	5. JOB LEVEL		
			3. TENURE			
NEANS OF INDEPENDENT AND DEPENDENT VARIABLE	5					
1 1+027431420+00 2 2+189526180+00 3	4,72568579#+	00 4 4.58728180#+00	5 2.911471320.00	6 3+665835410+00		
VARIANCES OF INDEPENDENT AND DEPENDENT VART	ABLES		<b>.</b>			
		00 4 9.73662226#=01	5 1.424472198+00	6 1.536424079+00		
	••••••••					
Ч <u>аналага стала</u> стала	DEPENDENT V	ARIABLE ND. 1	***** *			
REGRESSION COEFFICIENTS						
	8.03521239#*	02 4 4.005480830-01	5 3.119477698-01			
THE ERROR SUN SQUARE 15 1.341810469+03		, . ,				
THE ERROR MEAN SQUARE IS 6.396811400-01						
THE STANDARD ERROR OF ESTIMATE IS 9.1634	11709-01		ana managana ang ang ang ang ang ang ang ang	tis canadana ang kangkanan ng kanan kangka kangkana kanana sa sa sa		
THE COEFFICIENT OF DETERMINATION IS A	.55186145P-01					
THE HULTIPLE CORPELATION COEFFICIENT IS 6	,74676 <b>3</b> 26 <b>#</b> #01	· · · · · · · · · · · · · · · · · · ·				
STANDARD NEVIATIONS OF THE REGRESSION COEFF	ICIENTS					
1 1.405708459-01 2 2.865984649-02 3	9.577728940-	03 4 2.442031100-02	5 2.222089630-02			
T VALUE OF REGRESSION COEFFICIENTS			· ·			
	8,13467594#+	00 4 1+64022315#+01	5 1.40384860#+01			
	OF VARIANCE E LINEAR REGRE	SSION	· · · · ·	· ········		
SQUECE OF VARIATION D.F.	SUM OF	MEAN		n an ta an		
DEVIATION ABOUT REGRESSION 1598 1.3	SOUARES 21077320+03 41810460+03	\$9UARE\$ 2.24215464p+02 2.67 8.39681140p=01	RATIO 0245330+02			
TOTAL 1603 2.4	6258776#+03	արագարություն է ուշ է աշտահանհերին անհական շրանն անու	n a se an	1999 1999 1914		
·		···	,			
	OEPENDENT V	ARIABLE NO, 1				
CORRELATION COEFFICIENTS						
Nga 1922 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199 - 199			•			
FON 1 1.00000000000 2 =3.269330230=02 3	3,332941920-	02 4 =5,355391610=02	5 =3,350617100-04	6 -1.426073188-01		
ROM 2				-		
	-2,16517051	01 5 4.427286228-01				
	4,355323710-	01 6 3,930642770-01	· •			
	1,46271675#-	01	¢10 <sup>m</sup> transara nagin			
5 1.0000000**00 6 4.81369262**01				***		
, RDW 6 6 1.00n000000+00		~	·.	•••••		
PARTIAL CHRRELATION CHEFFICIENTS		r •	• • • • • •			
" 1 =1+60471274P=01 2 3,56025607P=01 3	1,99407288#-	01 4 3,79601020#-01	5 3,313435170-01	•• ••		

.

Saladied Employees	GENERAL MOLTIPLE REGRESSIU	A AND CONKCENTION ANAL		NT VARINGLES:
Original Sample	THESIS SALARY/D	IF HANMATZESIÓX	1. SEA	4. TENURE
SAMPLE STOF 1604	WITH FO	MALES	1. Acē	S. EDUCATION
ND. OF INSEPENDENT VARIABLES ND. OF DESENDENT VARIABLES	б 1		3. PAY	6. JOB LEVEL
			DEPENDENT	_
VARIANCES OF INDEPENDENT AND OU	PENDENT VARTARIES			
1 2.660558179-02 2 9.4846		9 4 8.24/8400/e+00	5 9+/3602226#-01	6 1.424472194400
_	(())) 01 3 11330424()#-00		5	
7 2.04n447528+00				
	DEPENDENT VAR	INDE NO. I	•	
REGRESSION COFFFICIENTS			-	
THE CONSTANT TERM IS 4.74468 1 5.287975598-01 2 1.2310	6184+00 50358-01 3 7.96566452#=01	4 -1.614180850-02	5 -6.683350538-02	6 -5+01CZ4ZUU#+02
THE ERROR SUN SQUARE IS 3.15	28/774#+93			
THE ERROR MEAN SOULARE IS 1.97	\$25031#+00	<b></b>	10 mm = 11	
THE STANDARD FROM OF ESTIMATE	is i.405080188+00			
THE COEFFICIENT OF DETERMINATIO	N 15 3,795000758-07		••	
THE MULTINEE CORPELATION COEFFIC	CIENT IS 1.948076170-01			
STANDARD DEVIATIONS OF THE REGRU				
1 2.183756389-01 2 4.702/3	24338-02 3 3,83>79616e-02	4 1.545652468-02	5 4.047462260-02	6 3.611261408-02
T VALUE OF REGRESSION COLFFICIE	NTS			
1 2.421504369+00 2 2.617/5	59988+00 3 5,12452810#+00	4 -1+044336210+00	5 -1+651244688+00	6 -1+38/39389#+00
			· · · · · · · · · · · · · · · · · · ·	
FOR	ANALYSTS OF VARIANCE THE MULTIPLE LINEAR REGRESS	IUN		
SOUDCE OF VARIATION	D+F+ SIM OF	MEAN	F	
DUE TO REGRESSION	SOUARES		AT10 94824++01	
DEVIATION AROUT PEGPESSION		.97425031#+00		
	1002 2:11:24+20#+03	n ha w vrai mar		
		1601 E ND 4		
	DEPENDENT VAR	TARLE NO. 1		
CORRELATION CREEFICIENTS				
ROW 1.			· · · · · · · · · · · · · · · · · · ·	
-				
1 1.nan0a000+na 2 *3.26933	0238-02 3 -1.426073184-01	4 3+332941920-02	5 -5.355391618-02	6 #3+35001/108=04
7 3.478704958-02	,	<b></b> .	······································	····· ·
RDH 2 2 1+00-000000+00 3 5+06225	0398-01 4 5.12414316s-01	5 -2.1651/0518-01	6- 4.427280228-01	- 7 1+42993809#=0\$
RDW 3			• • • • • • • • • • • • • • • • • • • •	<b></b>
3 1+00000000+00 4 3+93064 ROM 4			1.646108999-01	-
4 1+00/00/00/4+00 5 *2+99957 RDH 5		-	a and an	
5 I.DONNOONO++00 6 =1.62940 ROM A	900P-01 7 -2,60485405e-02			·
6 I.000000000000 7 7.07023 ROW 7	1314#*02			•••••••
7 1+00n0000#+00		· ··· ···· · ·····		· · · ·
PARTIAL COPRELATION COEFFICIENTS	<b>i</b>			
1 6.04435064+-02 2 6.53653	4968-02 3 1.271919818-01	4 -2.612399750-02	5 -4.128464448-02	6 -3+46965065#-02

, hburne	Employees	GENERAL	NIN TIPLE REGRESSION	AND CORRELATION ANAL	L Y S 1 5	
	L SAMPLE					VARIABLES:
ORIGINAL	LJAMPLE		THESIS HOURLY/SA	L RANNAT3=227X		
	178 2779		WITH . Fel	IALLES	1. Sex	5. Joa Level
	NHEPENDENT V EPENDENT VAR				2 AGÉ	
					3. TENURE	
					4. EDUCATION	
MEANS OF	INDEPENDENT	AND DEPENDENT VARIA	BLES		DEPENDENT	VARIABLE: INCOME
1 1.1	7462147#+00	2 2.112495428+00	3 4,89666545#+00	4 2.536826688+00	5 1.76328325#+00	
"VARIANCE	S OF INDEPEN	DENT AND DEPENDENT V	ARTABLES		•	
1 1.4	5479637#=01	2 1+18558648#+00	3 9.17773448s+00	4 1+17762057#+00	5 8.926249938-01	6 2+253414858+00
				-		
		• • • • •	DEPENDENT VARI	ABLE NU, 1	••••	
REGRESSI	NN COEFFICIE	NTS	·	••••		
	T4NT TERM IS 03685210+00	5.360468720.00 2 1.411463290=01	3 1.83528010#=0I	4 1.62505001#+01	5 1.977345370-01	and an an an an an an
					· · · · · · · · · · · · · · · · · · ·	
	R SUN SOHARE					
		E 15 1,459048938+0	•			
THE STAN	DARD ERROR D	F ESTIMATE IS 1.2	07910988+00			alle op de slake slave an er segner sjonen fit ander e van fin
THE COEF	FICIENT OF D	ETERMINATION IS	3,537086878=01			
THE HULT	IPLE CORPELA	TION COEFFICIENT IS	5,947341310-01			
STANDARD	DEVIATIONS	OF THE REGRESSION CO	EFFICIENTS			
1 6.1	11629198-02	2 2.91702689#=02	3 1.04531092#-02	4 2.219107178-02	5 2,513552208-02	
					· · ·	
	23989724+01			4 7.32299023#+00	5 7.866/36828.00	
1 2.0	2430315-401					
			SIS OF VARIANCE IPLE LINEAR REGRESSI	ON		
\$0	UNCE OF VARIA	ATION 0.F.	SUM DE		F	
DUE TO R				348754608+02 2.980	RATIO D540628+02	
DEVIATIO	N ABOUT REGRI		3.97299023#+03 1. 6.14736753#+03	45904893#+00		
· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·				••••••••••••••••••••••••••••••••••
		• ##				
			DEPENDENT VARI	ABLE NU, 1		1997 M M M 10 100 M M M M M M M M M M M M M
CORRELAT	TAN COEFFICI	ENTS				
		-	, .	-		
F				· · · · · · ·		
ROW 1					h 1.018/10148-01	4 83-872640718801
1 1.0	000000000000	2 -2.576055910-02	3 5+14+000548-03	4 7.461383908-02	5 1+048/40468-01	6 -3.472010714-01
RDH 2 2 1.0	04000000+00	3 6.787664298-01	a =2.05053937a=01	5 -4.282252490-02	6 3.349095254-01	•
. RON 3	00000000000	4 -1.704446138-01	5 -9.78153325#-02		· · · · · · · ·	
, ROM A			A 2.63627900m-02			
RON S	0n00000#+n0	5 1.883458130-01	4 44034%/ADOm.A%			
. ROW 6	00000000000000	6 6,32241318#=02				••
	01000000+100				en 4	
PARTIAL	CHRRELATION	COEFFICIENTS				a analysis of some of the
······ 1 -4.4	92492418-01	2 9.233072050-02	3 3.18893340#*01	4 1.38972781#=01	5 1+490/02380-01	

	ourly Ehploybes Nginal Sample	GENERAL	MULTIPLE REGRESSI	ON AND CORRELATED	IN ANALYSIS		T VARIABLES:
			THESIS HOURLYZ	915 2484413#2274		1. Sex	1. TENURE
				FUMALES			-
	PLE SIZE 2729 OF INDEPENDENT VARIABLES	6				2. ALE	S, EBUCATION
NO.	OF DEPENDENT VARIABLES	1				3. Pay	6. JOB LEVEL
						DEPENDENT	VARIABLE :
V Å R	TAYERS OF INDEPENMENT AND	DEPENDENT N	ARTABLES			7. SATIN	ACTION (DIF SCORE
1	1.454796379-31 2 1.18	8536488+00	3 2+253433852+0	0 4 9.17773435	1#+00 5	1+177620574+00	6 8.424249930-01
,	2+445037133+33						
	_		DEPENDENT VA	REARLE NO. 1			
R€G	RESSION COFFFICIENTS				•		
		539479+00 3504440-01	3 1.00791774#=0	1 4 -2.43545264	18-02 5	4.566751848-92	6 3,03961587#=02
							······
THE	ERRUR SUM SQUARE *5 6.	368560769+0	3				
THE	EHROR MEAN SQUARE 15 2.	339662299+0	0		manungan er brannan tades		
THE	STANDARD ENROP OF ESTIMAT	E 15 1.5	29595474+00			•	
	CHEFFICIENT OF DEFERMINAT	TON IS	4.561190518-02	• •	~~.		
	HULTIPLE CUPRELATEUN COEF		2,135694399-01				
1 1 1	HULTIPLE TORRELATION COEF	ricitar ta	21133014379 01				
· · STA	NOARD DEVIATIONS THE RE	GRESSION CO	FFFTCTENTS				****
· ·· · · •	a.6626261/#=02 2 3.70	9720598-02	3 2.426709778-0	2 4 1.39660874	19-02 ·5	2:#37623####02	6- 3.218914378-02
			STS OF VARIANCE " TPLF LINEAR REGRES	510N	manifes , ay data	ng an annan a' agus a' an	The set of
	SOURCE OF VARIATION	0.F.	SUM OF	YEAN	F		n Merina and proposition of a district of the second data in the second second second second second second sec
DUE	TO REGRESSION	6	SOUARES 3.043649500+02	59048FS 5+072/47499+01	RATIO 2.1481537		n an
	TO TRUMESSION TATION ABOUL REGRESSION TOTAL	2722 2728	6.368560769+03 6.672925619+03	2.31966229++00			
			DEPENDENT VA	RTABLE ND. 1			
	Delation of contract the chief	· ## "	· · · · · · · · · · · · · · · · ·			ան ուսացին նախանգերում են որ որորը անցանները։ Սստեսի հանցաններին է ստեսի հանցաններին։ Սստեսի հանցաններին է ստես	n - Tanin gala gala da a la gala da yang na pagangan sara sang na paga
	RELATION CREFFICIENTS						*******
804		** • • • • • • •	e - contractor para ta contracto		• ••• ••• • • • • • • • • • • • • • •		***************************************
		6018018-33	7 -2 873413710-0	1 4 2.79400624	1 - 0 2 5	7.461383908-03	·· 6 - 1.044740468-01
		605891=-32	3 31015620116-0			11411103708 12	A TERAJIARAGE AL
	1.102883314-31					An 19 at 1-	
		9895258-01	4 6,78766429#**0	1 5 -2+05053937	9-01 6 -	4,28225249#=02	7 8.09422/230-02
	3	-	5 5 42457040000				**
3 R04		625257#=01	5 2.636279000-0	2 6 6.32241318	<b>94-</b> 02 (	3.071146808-02	. ·
4 R04		444613#=01	6 +9.78153375#=0	2 / 4.86532084	14-02	**************************************	en angelienen er er erstellen at der
5	1.00000036#490 6 1.68	3458136-01	7 4.26041005#*0	7	-	··	··· ·· ·
R04 5		3887948-02					
R04 7	7 1.9990000000		• •				
	-	NTC	***			- ware - 12 - while have been been at a	an an herenden den die son en herenden den sons
	TIAL CONNELATION CHEFFICIE				- · · -		
1	1.435149440-01 2 6.90	17455749+92	3 7.89669004=*0	2 4 = 3+ 34055347	×-02 2	3-1506500102	6 1.809647958-02

.

	GENER GENER	AL MULTIPLE REGRESSI	UN AND CURRELATION AND	ALYSIS		
	SALAQUES EMPLOYEES	THESIS SALARY/	SAL RAHMAT2=316X		INDEPENDENT	VARIABLES:
	CROSS-VALIDATION SAMPLE		FENRLES		. I. Sex	4. EDUCATION
	SAMPLE STOE 1674 ND+ OF INNEPENDENT VARIABLES 5		6		2. Ace	S. Too Lever
	NO. OF DEPENDENT VARIABLES				3. TENURE	
				•	DEPENDENT VAN	100. JC 1
		· · · ·				
1	NEANS OF THOEPENMENT AND DEPENDENT VAR				C. ACTUAL	•
٠	1 1.n27925198+0n 2 2.21321696#+0		0 4 4+610972578+00	5 2	2+951995010+00	6 3+72319202#+00
• • • • • •	VARIANCES OF INDEPENDENT AND DEPENDENT	VARTABLES			And a second	
- P	1 2.901777980-02 2 9.726012488-0	1 3 4.19417574a+0	0 4 8.978458410-01	5 1		6 1+549U31358+00
17		DEPENDENT VA	RIABLE NO. 1.			
1	REGRESSION COEFFICIENTS					
¥	THE CONSTANT TERM IS 6.879715810-01 1 -1.095878310+00 2 4.450409120-0	1 3 5.62418530#-0	2 4 4.339792298-01	5 3	3+334295528-01	
13	THE ERROR SUN SQUARE IS 1.404118954	+03				
э	THE ERROR YEAN SOMADE IS 8.786726828	-01				
	THE STANDARD ERROR OF ESTIMATE IS 9		··· ····			
P						
	THE COEFFICIENT OF DETERMINATION IS	A.34529219#-01				
	THE MULTTULE CORPELATION CHEFFICIENT I	S 4.591983038-01				
	STANDARD DEVIATIONS OF THE REGRESSION	COFFETETENTS				
				5 2	. 107646168-02	
	1. 1+39202/50#=01. 2 2+924/51018=0	2 3 9.039304428-0	2			
Ч	T. VALUE. DF REGRESSION COLFFICIENTS		·····			
" <u> </u>	1.+7+86714155#+00. 2 1+57163661#+0	1 3 5,71592334#+0	04_ 1:667152670+01		+448027628+01	un un anna an
		LYSIS OF VARIANCE LITIPLE LINEAR REGRES	51UN -			
•	SOUNCE OF VARIATION D.F.	SUM DE	MEAN	ŧ	- 16 - 7 - 16 - 7 - 21 - 21 - 21 - 21 - 21 - 21 - 21	
	DUE IN REGRESSION 5 DEVIATION ABOUT REGRESSION 1598		59UARE5 2+15795662#+02 2+4 5+78672682#=01	. KA110 5592775	5++02	
	TUTAL 1503	2.483097268+03				
			ana ini yara ala malatsi na malatsi kana a			an a
		DEPENDENT VA	RIABLE NO. 1			
	CORRELATION COEFFICIENTS	· ····································				
						*****
1 v	- <u></u>	·····				
	R04 1 1 1.000003004+00 2 = 3.798442658=0	2 3 6.655763318-0	2 4 -1.171477720-01	5 5	5.732914398-02	6 -1.756104568-01
				., -		
	eow 2 2 1.00000000000 3 5.0°4172/14-0	1 a -2.26275312+-0	1 5 4.440663408-01	64	.882502070-01	
	RD# 3 3 1+00000000+00 4 -2+577477510-0	1 5 3,66406355#*0	1 0 3.347482978-01			
	R0# 4 4 1+00000008+00 5 -2+174283418+0	1 6 1,66771041=0	1		• •••	
\$	RDN 5		· · · · · · · · · · · · · · · · · · ·			
	5 1,00^00000000 8 4,394817548=0 R0# 5	•	-		-	
	6 I.ggn000009+00					1. II. I. I
	PARTIAL CORRELATION COEFFECTENTS				/	
	1 -1.931449434-01 2 1.557461480-0	1 1.41547798#=0	4 3.849159638-01	53	3+405/7/418-01	
*1					• •	

•••

Const -Valestriss Subject       THESIS SELENT/ULT HARVAT7+SIGN       I. See, 4. Thruse         SAMPLE VI-T, ING       NIN ECHANCE       NIN ECHANCE       3. PAY         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       2. Add 5. ECHANTON         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       3. PAY         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       4. Sec 2. Add 5. ECHANTON         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       5. Sec 4. Thruse         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       5. Sec 4. Thruse         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       5. Sec 4. Thruse         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       5. Sec 4. Thruse         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       5. Sec 4. Thruse         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       5. Sec 4. Thruse         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       5. Sec 4. Thruse         SAMPLE VI-T, ING       NIN ECHANCE       3. PAY       5. Sec 4. Thruse         SALANDARD FRAME DEFENDENT VARIALES       1. Sec 4. Thruse       5. Sec 4. Thruse         Yalashan And Yalashan DEFENDENT VARIALES       1. Sec 4. Thruse       5. Sec 7. Se		GENERAL HULTIPLE REGRESSI			104 NT VARIABLES
Martin Litz - 1200         S. Pay         C. 300 Conc           Martin Litz - 1200         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         S. Pay         C. 300 Conc           Martin Litz - 2000         S. Pay         S. Pay         S. Pay         S. Pay           Martin Litz - 2000         S. Pay         S. Pay         S. Pay         S. Pay           Martin Litz - 2000         S. Pay         S. Pay         S. Pay         S. Pay           Martin Litz - 2000         S. Pay         S. Pay         S. Pay         S. Pay <th>CROSS-VALIDATION SAMPLE</th> <th>THESIS SALANY</th> <th>/UIF HANMAT2=316X</th> <th></th> <th></th>	CROSS-VALIDATION SAMPLE	THESIS SALANY	/UIF HANMAT2=316X		
B0. ET 11-0702100107 (additional)       3. PAY       6. 300 Long         B0. ET 10-07001001 (additional)       3. PAY       6. 300 Long         B0. ET 10-07001001 (additional)       3. PAY       6. 300 Long         B0. ET 10-070010001 (additional)       3. PAY       6. 300 Long         B0. ET 10-070010001 (additional)       3. PAY       6. 300 Long         B0. ET 10-070010001 (additional)       3. PAY       6. 300 Long         B0. ET 10-070010001 (additional)       3. PAY       6. 300 Long         B0. ET 10-07001001 (additional)       3. PAY       6. 300 Long         B0. ET 10-07001001 (additional)       3. PAY       6. 300 Long         B0. ET 10-07001001 (additional)       3. PAY       6. 300 Long         B0. ET 10-07001001 (additional)       3. PAY       6. 300 Long         B0. ET 10-07001001 (additional)       3. PAY       6. 300 Long         B0. ET 10-07001001 (additional)       3. PAY       6. 100 PAY         B0. ET 10-07001001 (additional)       3. PAY       6. 100 PAY         B0. ET 10-07001001 (additional)       3. 100 PAY       6. 100 PAY         B0. ET 100 (additional)       3. 100 PAY       6. 100 PAY         B0. ET 100 (additional)       3. 100 PAY       6. 100 PAY         B0. ET 100 (additional)       3. 100 PAY <t< th=""><th>444015 81-5 1434</th><th>WITH F</th><th>CHALES</th><th>2. AGE</th><th>S. EDULATION</th></t<>	444015 81-5 1434	WITH F	CHALES	2. AGE	S. EDULATION
1       7. Savitraction         1       1.02-073198.00       2.2213218398.00       3.1/22192020.00       4.4635469787.00       5.4.10972219.00       4.2.03199218.00         7       1.02-073198.00       2.2213218398.00       3.1/22192020.00       4.4635469787.00       5.4.10972219.00       4.2.03199218.00         7       1.010-073198.00       2.2.13218398.00       3.1/22192020.00       4.463546978.00       5.4.10972219.00       6.2.033997801         7       1.010-073708.00       2.4.7700012968.00       0.1       5.6.9778938818.01       6.1.364773397801         7       1.010-073708.01       2.1.77882488.00       0.1       0.1       0.1         0.01000111128       5.077824688.00       0.1       0.110001111111111111111111111111111111	NO. OF IN-EPENDENT VARIABLES			3. PAY	C. JOB LEVEL
1       7. SATIFACTION (DEF         1       1.02-073140.00       2.213216404.00       3.1.723152000.00       4.4.0150000000000       5.4.010072210.00       5.2.010072310.00       7.5.01072310.00       5.2.01072310.00       5.2.01072310.00       5.2.01072310.00       5.2.01072310.00       5.2.01072310.00       5.2.01072310.00       5.2.01072310.00       5.2.0172310.00				DEPENDENT	VARIABLE :
MAXS DF FAMPLEYAND DUPFORT AND DUPFORT VARIALIS         1.723107074400         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         4.405105744.00         5.4778456414-00         5.4778456414-00         5.4778456414-00         5.4778456414-00         5.4778456414-00         5.4778456414-00         5.4778456414-00         5.4778456444.00         5.47784576400         5.47784576400         5.47784576400         5.47784576400         5.47784576400         5.47784576400         5.47784576400         5.47784576400         5.47784576400         5.47784576470         6.483000000000           TWE CONSTANT TEW TS         1.0377845754400         3.2774705764-00         6.2.577235966-00         7.4186407234-02         5.411550000         6.4630000000000           TWE CONSTANT TS         1.0377846755440         1.357846755440         5.411000000000         6.41100000000000000000000000000000000000					· · · · ·
7 1.,0.1.64314-00 VRELAUCES NE THOSEGUARNE AND DEFENDENT VIETLALES 1 2.00,77768-07 2 4.75001240+03 1 1.34V83154+00 4 8.15017574+00 3 8.478050814+01 6 1.3547397401 7 1.00077768-07 2 4.75001240+03 1 1.34V83154+00 4 8.15017574+700 3 8.478050814+01 6 1.3547397401 1 1.000777617454-03 2 1.57648814+03 1 2.2747692550+02 5 41.578487058+01 6 4-4830000220+0 144 Company 1100 15 3.022246614+03 144 Company 1100 15 1.024755354+00 144 Company 1100 15 1.0377647554+00 144 Company 1100 15 1.03776475534+00 144 Company 1100 15 1.03776475454 1 3.2409400 -5401120000+02 3 4.165766074+00 4 +1.725230384+00 5 -3.609201998400 -6 -1.3810171844 1 3.2409401 -700 1240 -1.020010000 - 1.020010000 - 1.0200100000 - 4.1000000000 - 4.107340111400 - 1.000000000 - 4.10734011400 - 1.0000000000 - 4.10734011400 - 1.0000000000 - 4.10734011400 - 1.0000000000 - 4.10734011400 - 1.0000000000 - 4.10734011400 - 1.0000000000 - 4.10734011400 - 1.0000000000 - 4.10734011400 - 1.00000000000 - 4.10734011400 - 1.000000000000 - 4.10734011400 - 1.00000000000000 - 4.10734011400 - 1.00000000000 - 4.10734011400 - 4.00000000000000 - 4.107340114000 - 4.00000000000000000000000000003.072070402704000 - 4.000000000000000000000000000000					•••••••••••••••
VARIANCEX NF YNT DEWNENT WARIARES         1 2.00,7774002 2 4.72001208-01 3 1.34703114:00 4 8.10017578:00 5 8.476859414-01 6 1.347759778         7 1.00077740-02 2 4.72001208-01 3 1.34703114:00 4 8.10017578:00 5 8.476859414-01 6 1.347759778         DEFENDENT VARIABLE ND. 1         #ESRESSION COFFF/F1FYTS         THE CONSTANT ICE 15 5.07467440:00 1 3.22746015:00 3 7.27470450:00 1 4.72.579725382-00 5 -1.57937105:01 6 4.4830002224-1         THE CONSTANT ICE 15 5.07467440:00 3 7.27470450:00 1 4.72.579725382-00 5 -1.57937105:01 6 4.4830002224-1         THE CONSTANT ICE 15 5.07467440:00 3 7.27470478:00         HE CONSTANT ICE 15 5.07474740:00 3 7.27470478:00         HE CONSTANT ICE 15 5.07474740:00 3 7.27470478:00         HE CONSTANT OF THE METHONE 10 3.7477320078:00         HE CONSTANT OF THE METHONE 10 3.7477320078:00         HE CONSTANT OF THE METHONE 10 3.7477320078:00 4 -1.76523080:00 5 -3.609281948:00 6 -1.34001389.890         THE METHONE THE HEAR HEARENES         1 3.2400100 -40014100 1 5 3.14071320070:00 4 -1.76523088:00 5 -3.609281948:00 6 -1.34001389.890         THE METHONE OFFFICIENTS         1 3.2400100 -40014:00 1 -0.0000000 -0.00 4 -1.7652308:00 5 -3.609281948:00 6 -1.34001389.890         DEFENDENT VARIABLE ND. 1         DEF	1 1+02-925198+00 2 2+213	216968+30 3 3.72319202+0	0 4 4.68540898#+00	5 4.610972578.00	6 2+951995010+0
1 2.00.77784.007 2 4.77601244.013 1.234951154.00 4 8.19417574.00 5 8.479459812.01 6 1.345753974.0 T 1.054772754.00 DEFENDENT VARIALE NJ. 1 SECRESSION COFFFICIENTS THE CONSTANT TED 1 5 5.0748248.000 1 4.7077074.01 2 1.07000010000 1 4.707074.01 2 1.07000010000 THE EXEMP KAR SOLAR TS 3.032294014-03 THE EXEMP KAR SOLAR TS 3.047739401-02 THE EXEMP KAR SOLAR TS 3.047730074-02 THE EXEMP KAR SOLAR TS 3.040152530-02 THE EXEMP KAR SOLAR TO CONTENT TO THE SOLAR TS 3.047730074-02 THE EXEMP KAR SOLAR TO THE SOLAR TS 3.047730074-02 THE SOLAR TS 3.040167530-02 THE SOLAR TS 3.040152530-02 THE SOLAR TS 3.04015250-02 THE SOL	7 5.63-663349+10		· · · · · ·		
7       1,056772754+00         DEFENDENT VARIABLE ND. 1         REGAESSIN- COFFT/FFNYS         THE CONST-VIT TEAT IS 5.077822480+00         1       0.777272727212         1       0.777272727212         1       0.777272727212         1       0.77727272727212         1       0.77727272727272         1       0.77727272727272         1       0.77727272727272         1       0.77727272727272727272727272727272727272	VARIANCES OF INDEPENDENT AND D	EPENDENT VARIABLES			,
DEPENDENT VARIABLE NJ. 1         #EGRESSIN- CDFFFFFFFS         THE CONSTANT IEET 5 2.07482480.00 1 0.0753701-01 5 2.07482480.00 1 0.0753701-01 5 2.07482480.00 1 0.0753701-01 5 2.07482480.00 THE ERAND SUM SOLARE TS 3.022296012403         THE ERAND SUM SOLARE TS 3.022296012403         THE ERAND SUM SOLARE TS 3.022296012403         THE ERAND STREAM TES 1.09970524400         THE ERAND STREAM TES 1.09970524400         THE ERAND STREAM TES 1.0977040754400         THE ERENT AT ELECTOR TELEVITIES 1.15713004-00         1.45012070-02 5 4.1104005712154115 1.155131040-00         1.45012070-02 5 4.11040005712154115 1.55131040-00         STANDARD SEVENTING OFFFICIENTS         1.22.054451730-01 2 4.400352320-02 3 3.677320074-02 4 1.4561120704-02 5 4.110049238-02 6 3.060013899490         TWEUE DF REARESSION CONFFICIENTS         1.32.0-716414+00 00FFFICIENTS         THE ERENTSTON CONFFICIENTS         SUBJECT OF VIRTATION 0.7 STREAM REARESSION         SUBJECT O	1 2.901777959-12 2 9.726	U1248H=31 3 1.54403135#+0	0 4 8.194175749+00	5 8.478458412-01	6 1.3477539/#+0
REGRESSION COTFFICIENTS THE GENERALY TENTS DIGTERGASGENED 1 0.7773707/07/07/07/07/07/07/07/07/07/07/07/07/	7 1.95+772754+10		•	n na mana na m Na mana na mana n Na mana na mana	•
THE CONSTANTION       5:07482444.00         1 0.177350717.01       2:1570448114703       3:7,27470450+001       4:2,579725500+02       5:1,579347050+01       6:4.830008250+01         THE ERROW SUNA SOURCE TS       3:02220614403       7HE ERROW SEAM SOURCE TS       3:02723500+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,579347050+02       5:1,5193430+00       5:1,5193430+02       5:1,5193430+02       5:1,5193430+02       5:1,5193430+02       5:1,5193450+02       5:1,5193430+02		DEPENDENT VA	RIABLE NO. L	La 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 19	
1 4.77.37077-01 2 1.37044811403 3 3.274704504-01 4 -2.379725508-02 5 -1.379347058-01 6 -4.630008206-0 THE ERENA SUN SOULDE TES 3.032240618+03 THE ERENA SUN SOULET IS 3.032240618+03 THE ERENA SUN SOULET IS 1.37704470575+00 THE OBJECTEVENT OF ESTIMATE IS 1.3770470575+00 THE OBJECTEVENT OF ESTIMATE IS 1.37704975+00 THE OBJECTEVENT OF ESTIMATE IS 1.477320070-02 4 1.401[2000-02 5 4.1860492]=-02 6 3.40013893=-0 T VALUE OF RECRETEINM OBJECTEVENTS 1 3.204716414739-01 2 2.341012708-02 3 4.185766974+00 4 -1.765230384+00 5 -3.607281948400 SUBJECE OF VARIATION OBJECTEVENTS 1 3.20471641470 2 2.341012708-02 3 4.185766974+00 4 -1.765230384+00 5 -3.607281948400 SUBJECE OF VARIATION OF SUBJECTEVENTS 1 3.204716414144 HELETICE LIEGA HERESSIUN SUBJECE OF VARIATION OF SUBJECTEVENTS 1 3.7247716414-00 DEFENDENT VARIABLE NO. I CDEFENDENT VA	REGRESSION COFFETCIENTS				
THE ERROR WEAN SONANE IS       1.047745534+00         THE STAND-RD FRENC OF ESTIMATE IS       1.37704975+00         THE COEFFFCIENT OF SETEMATE IS       3.477359064+02         STANDARD REVIATION COEFFICIENT IS       1.55131004+01         STANDARD REVIATION COEFFICIENT IS       1.55131004+01         STANDARD REVIATION COEFFICIENTS       1.240646(73+01         1 2.06446(73+01       2.440035233+02       3.47732007402         YALUE OF REGRESSION COEFFICIENTS       1.32132007402       4.140112000+02       5.4418004723+02       6.3400013074+02         YALUE OF REGRESSION COEFFICIENTS       1.3240716414+02       2.34101720+02       3.4416576074+00       4.1.75523038+00       5.3.6007891948+00       6.1.34101710+02         STON-FE OF VIRIATION       0.F.       SUM OF       SUM OF       SUM OF       SUM OF         DEF TO AF-DESSION       1.177161118+02       1.70400166401       9.44624644+00       5.10010         DEFENDENT VARIABLE NO. I       DEFENDENT VARIABLE NO. I       0.44624644+00       5.11114/1772P+01       6.5.73291439+40         TITL THE WEAK REGRESSION       DEFENDENT VARIABLE NO. I       0.4.44624644+00       5.17.777414-00       6.5.73291439+01       7.5.73291439+00         TITL THE WEAK REGRESSION       DEFENDENT VARIABLE NO. I       0.4.44624644+00       5.73291439+00       7.5.73291439+00			1 4 =2.579925588+02	-1.579347058-01	6 -4.830008258-0
1       1.377040750+00         1       1.377040750+00         1       1.5513130+01         1       2.400400-EVIATION COEFFICIENTS         1       2.400406173+01       2.4.00052530+02         1       2.2.00446173+01       2.4.00052530+02       3.1.07732007+02       4.1.40112590+02       5.4.160080230+02       6.3.40013894+02         1       2.2.00446173+01       2.4.00052530+02       3.1.07732007+02       4.1.40112590+02       5.4.160080230+02       6.3.40013894+02         1       2.2.01446173+01       2.2.341012500+02       3.4.165766074+00       4.1.755320380+00       5.3.609281948+00       6.3.40013894+02         1       3.24071661+00       2.2.341012500+02       3.4.165766974+00       4.1.75531078       9.4.100013894+00       5.3.609281948+00       6.3.40013894+00         1       3.24071661+01       0.4.165766974+00       4.1.75551178       9.4.10000000       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.609281948+00       5.3.60	THE ERROR SUN SQUARE TS 3.0	\$224661#+03			
IHE COEFFFCIENT OF DETERMINATION IS       3,477359464+02         THE MULTI-LE COMPELATION COEFFICIENT IS       1,551313044+01         STANDARD -EVIATION COEFFICIENT IS       1,551313044+01         STANDARD -EVIATION COEFFICIENT IS       1,351730074-02         STANDARD -EVIATION COEFFICIENT IS       1,361730074-02         STANDARD -EVIATION COEFFICIENTS       1,2008461738-01         Standard - Eviation Coefficients       1,35766074-00         Standard - Eviation Coefficients       1,3210716614-00         Standard - Eviation Coefficients       1,35766074-00         Standard - Eviation Coefficients       1,465766074-00         Standard - Eviation Coefficients       1,75714600         Standard - Eviation Coefficients       1,7571412-00         Standard - Eviation Coefficients       1,72501040-00     <	THE ERROR MEAN SOMARE IS 1.8	V874553#+00			
THE #ULTITLE CODEFLATION COEFFICIENTS         STANDARD -EVIATIONS OF THE REGRESSION COEFFICIENTS         1. 2:004401739-01       2.4.00052539+02       3.67/32007*02       4.1.461126909+02       5.4.146049238-02       6.3.600138938+02         T VALUE OF REFRESSION COEFFICIENTS       1.3.20074002       4.1.461126909+02       5.4.146049238-02       6.3.600138938+02         T VALUE OF REFRESSION COEFFICIENTS       1.3.20074002       4.1.765230388+00       5.3.609281948+00       6.3.600138938+02         SDUFFE OF VIRTATION       0.F.       SIN UF       MALTSIS OF VANIANCE       MALTSIS OF VANIANCE         FOM THE WILTITLE ELTARA REGRESSION       1.75704427094618+03       1.79304475       MAIL         DEFINETION       0.F.       SIN UF       MALTSIS OF VANIANCE       MAIL         DUE TO REFRESSION       1.75704427094618+03       1.79304475       MAIL         DEFENDENT VARIABLE NO. 1       1.003       3.139012728+03       9.46226649+00         TOTAL       1003       3.139012728+03       1.400743533+00       9.46226649+00         TOTAL       1003       3.139012728+03       1.400743318+02       9.1.1714/7728+01       6.5.732914998+00         2       1.001000000000000       1.30740427090-02       31.756196560-01       4.655763318+02       5.1.1714/7728+01       6.5.732914999     <	THE STAND AND ERROR OF ESTEMATE	15 1+37794975#+00			•••••
STANDADD -EVIATIONS OF THE REGRESSION COEFFICIENTS 1. 2-084861739-01 2. 4-600352539-02 3 3,67/320070-02 4 1.461120900-02 5 4-186044230-02 6 3-600138930-0 T VALUE OF REGRESSION COEFFICIENTS 1. 3-287216614440 2 2-341012560-02 3 4.185766974400 4 -1.765230380+00 5 -3.800281948600 6 -1.341617180+0 ARALYSIS OF VARIANCE FID HE HUNITIEL LIKER REGRESSION SOU-FE OF VARIATION 0.F. SIN DF MEAN F DUE TO RE-RESSION DEFENDENT VARIATION 0.F. SIN DF MEAN F DUE TO RE-RESSION DEFENDENT VARIATION 0.F. SIN DF MEAN F DUE TO RE-RESSION DEFENDENT VARIATION 0.F. SIN DF MEAN F DEFENDENT VARIATION 0.F. SIN DF MEAN F TOTAL 1003 3.119912720+03 1.000765000 9.400260000000000000000000000000000000000	THE COEFFICIENT OF DETERMINATIO	UN IS 3,427359968-07	• • • • • • • • • • • • • • • • • • • •		······································
STANDARD -EVIATIONS OF THE REGRESSION COEFFICIENTS         1 2:00*46173*-1 2 4.00035253*-02 3 3.07/32007*-02 4 1.001120*0*-02 5 4.14004423*-02 6 3.00013893***         Y VALUE OF REGRESSION COEFFICIENTS         1 3:24721661***       2 2.34101250****         AMALYSIS OF VARIANCE FOM THE MULTIPLE LINEAR REGRESSION         SOURCE OF VIRIATION       0.4         SOURCE OF VIRIATION       0.4         OUE TO BF-RESSION DEVIATION ADDIT OF OR TASSIUN 1003 3.13204220***       4 4 -1.76523038***       5 -3.80728194***         DUE TO BF-RESSION DEVIATION ADDIT OF OF VIRIATION       0.4       1.071611****       RAIU         000 TO BF-RESSION DEVIATION ADDIT OF OR TASSIUN 1003 3.1320461***       1.000745553****       RAIU         000 FO BF-RESSION DEPENDENT VARIABLE NO. I       1       CORRELATION COEFFICIENTS         001 FO BF-RESSION 2 1.0000000****       3 -1.75519456****       4 4.005370331*****       5 -1.1718/772***********************************	THE MULTINLE CORPELATION COEFF	ICIENT TS 1.851313040-01			
FOR THE HULTIPLE LINEAR REGEESSION         SOU-FE OF VIRTATION       0-F.         SUM OF       SUM OF         DEFINIT       A 1.075461114-02         1.79360164+03       1.498745534+00         POM I       1014         1.003       3.13991272#+03         DEPENDENT VARIABLE NO.       I         c0RRELATION COEFFICIENTS         POM I       I         1.00000000+00       I -3.799442059P02         3.1.777A114-02       S.0/4172714-01         2.1.00000000+03       4.480063400+01         3.1.000-00000+03       3.347482V7P-01         3.1.000-00000+03       3.347482V7P-01         3.1.000-00000+03       5.2.57747753+01         3.1.000-00000+03       5.2.57747753+01         3.1.000-00000+03       5.3392/340+02 <t< th=""><th></th><th></th><th>2 4 1.461126908-02</th><th>4.146044238+02</th><th>6 3.600138939-0</th></t<>			2 4 1.461126908-02	4.146044238+02	6 3.600138939-0
SUNATES       SQUARES       FAITU         DEVIATION       AGDIATES       IA7936U1664-01       9.446246644+00         DEVIATION       AGDIATES       IA79360164-03       1.490745534+00         DEVIATION       AGDIATES       IA79360164-03       1.490745534+00         DEVIATION       AGDIATES       IA79360164-03       1.490745534+00         DEVIATION       AGDIATES       DEPENDENT       VARIABLE NO.       I         CORRELATION       CDEFFICIENTS       IODONODONO       IODONODONO       IODONODONO       IODONODONO       IODONODONO         RDM       IODONODONO+00       IODONODONO+00	T VALUE DE REGRESSION COLFFICI	NTS 912568=02 3 4.185766974+0			······································
DUE Tŋ R-sessiny       6       1,77416111+ac2       1,79401068+01       9,446246648+00         DEVIATINN ABRUM PERSIS       1597       3,13991272#+03       1,496745538+00         DEVIATINN ABRUM PERSIS       1603       3,13991272#+03         DEVIATINN ABRUM PERSIS       1603       3,13991272#+03         DEPENDENT VARIABLE ND.       1         CORRELATINH CREFFICIENTS       DEPENDENT VARIABLE ND.       1         CORRELATINH CREFFICIENTS       2       -1,756104568=01       4       6,655763318=02       5       -1,1714/7728=01       6       5.732914398=0         7       5,37-778418=n2       7       7.5,37-778418=n2       7       7.5,37-778418=n2       7       7.5,37-778418=n2       7       7.5,90571468=01       4       4.440063408=01       7       7.590571468=01         R0M 3       3       1.00-0000008+00       3       4.37482978=01       5       1.667710418=01       6       4.394811238=01       7       7.590571468=01         R0M 3       3       1.00-000008+00       3       3.347482978=01       5       1.667710418=01       6       4.394811238=01       7       7.590571468=02         R0M 4       4       1.00-000008+00       5       =2.577477518=01       6       4.3048063558=02       7	T VALUE DE REGRESSION COLFFICI 1 3.247718614400 2 2.3410	NTS 912568-02 3 4.185766974+0 ANALYSTS OF VARIANCE	0 4 •1.76523038#+00 !		······································
DEPENDENT VARIABLE ND. I CORRELATION CDEFFICIENTS POW 1 1 1.00000000000000000000000000000000000	T VALUE DE REGRESSION COLFFICI 1 3.247718614400 2 2.3410 FOI	NTS 912368-02 3 4.185766974+0 ANALYSI'S OF VARIANCE 7 THE MULTIPLE LINEAR REGRES 0.F. SUN OF	10 4 -1.765230388+00 1	5 - 3,809281948+90 -	6 -1.341617188+0
CORRELATION CREFFICIENTS POW 1 1 1.00000000000000000000000000000000000	T VALUE DE REGRESSION COLFFICIA 1 3.247218614+00 2 2.3410 FOI SOURCE OF VIRIATION DUE TO REARESSION DEVIATION ABOUT PEGRESSION	NTS 212568=02 3 4.185766974+0 ANALYSIS OF VARIANCE 4 THE MULTIPLE LINEAR REGRES 0.F. SUM OF SOLARES 6 1.076161112+02 1597 3.032296618+03	00 4 -1.765230388+00 1 510N MEAN SQUARES RA 1.793601068+01 9.4462	5 - 3, 80928194 <b>F</b> +00 -	6 -1.341617188+0
R0H       1       1.000000000000000000000000000000000000	T VALUE DE REGRESSION COEFFICI 1 3.249218614400 2 2.3410 FOU SOURCE OF VIRTATION DUE TO REPRESSION DEVIATION ABOUT PEGRESSION TOTAL	ANALYSI'S OF VARIANCE ANALYSI'S OF VARIANCE THE HULTIPLE LINEAR REGRES O.F. SUN OF SUNARES 6 1.076161119+02 1597 3.03296619+03 1603 3.139912729+03	00 4 -1.765230388+00 1 510N MEAN SQUARES RA 1.793601068+01 9.4462	5 - 3, 80928194 <b>F</b> +00 -	6 -1.341617188+0
1 1.00000000000000000000000000000000000	T VALUE DE REGRESSION COEFFICI 1 3.249218614400 2 2.3410 FOU SOURCE OF VIRTATION DUE TO REPRESSION DEVIATION ABOUT PEGRESSION TOTAL	ENTS 912568=02 3 4.185766974+0 ANALYSI'S OF VARIANCE 4 THE HULTIPLE LINEAR REGES 0.F. SUN OF SOUARES 6 1.07616114402 1597 3.013296614+03 1603 3.139912728+03	0 4 -1.765230388+00 SIUN MEAN SQUARES RA 1.793601668+01 9.4462 1.890745538+00	5 - 3, 80928194 <b>F</b> +00 -	6 -1.341617188+0
RD# 2       2       1.00100000+00       3       4.50202070-01       4       5.0/417271a-01       5       -2.26275312+01       6       4.44006340#-01       7       7.59057146#-0         RD# 3       1.0010000+00       4       3.34748297#-01       5       1.66771041#-01       6       4.39481723#-01       7       7.59057146#-0         RD# 3       1.0010000+0       4       3.44006340#-01       7       7.59057146#-0       7       1.34941723#-01       7       7.59057146#-0         RD# 4       1.0010000+0       5       -2.57747751#-01       6       3.88406355#-01       7       3.27361949#=02	T VALUE DE REGRESSION COLFFICIA 1 3.247218614400 2 2.3410 FOI SOURCE OF VIRTATION DUE TO REPRESSION DEVIATION ABOUT PEGRESSION TOTAL	ENTS D12568=02 3 4.185766974+0 ANALYSIS OF VARIANCE THE MULTIPLE LINEAR REGRES D.F. SUM OF SOLARES 6 1.076161119+02 1597 3.0 32296618+03 1603 3.139912728+03 DEPENDENT VA	NO 4 -1.765230388+00 SIUN MEAN SQUARES RA 1.793601868+01 1.890745538+00 RIABLE NO. I	5 - 3, 80928194 <b>F</b> +00 -	6 -1.341617188+0
2 1.001000000000 3 4.802502070-01 4 5.0/4172712-01 5 -2.262753120-01 6 4.440063400-01 7 7.590571460-0 R0H 3 3 1.001000000+00 4 3.347482970-01 5 1.667710418-01 6 4.39481/540-01 f 1.349411230-01 R0H 4 4 1.000000000+00 5 -2.577477510-01 6 3.884063558-01 7 3.273619498-02 R0H 5 5 1.000000000+00 6 -2.174283418-01 7 -6.066839628-02 R0H 6 6 1.000000008+00 7 5.639874348-02 R0H 7 f 1.000000008+00 7 5.639874348-02 R0H 7 f 1.000000008+00 7 5.639874348-02 R0H 7	T VALUE DE REGRESSION COEFFICIA         1       3.247718614400       2       2.3410         FOI         SOURCE OF VIRTATION         DUE TO RFAGESSION         DEVIATION ABOUT OFGRESSION         TOTAL         CORRELATION COEFFICIENTS         ROW 1	ENTS 912568-02 3 4.185766974+0 ANALYSI'S OF VARIANCE 4 THE HULTIPLE LINEAR REGRES 0.F. SUN OF SOUARES 6 1.07616114#+02 1597 3.01272661#+03 1603 3.13991272#+03 DEPENDENT VA	0 4 -1.765230388+00 SIUN MEAN SQUARES 1.793601060+01 1.490745530+00 RIABLE NO. I	5 - 3.80928194F+00 -	6 -1.3416[7]88+0
3 1.00~000000+00 4 3.347482970=01 5 1.66771041=01 6 4.39481/540=01 / 1.349411230=01 RU# 4 4 1.00000000+00 5 =2.57747751==01 A 3.88406355==01 7 3.27361949==02 RU# 5 5 1.00000000+00 6 =2.17428341==01 7 =4.06683962==02 RU# 6 6 1.00000000+00 7 5.63987434==02 RU# 7 / 1.00000000+00 *PARTIAL CORRELATION CONFFICIENTS	T VALUE DE REGRESSION COEFFICIO         1 3.247210614400       2 2.3410         FOI         SOURCE OF VIRIATION         DUE TO RF-RESSION         DEVIATION AGOUT PEGRESSIUN         TOTAL         CORRELATION COEFFICIENTS         ROM 1         1 1.00000000000         7 5.3707761100	ENTS 912568-02 3 4.185766974+0 ANALYSI'S OF VARIANCE 4 THE HULTIPLE LINEAR REGRES 0.F. SUN OF SOUARES 6 1.07616114#+02 1597 3.012720+03 1603 3.139912720+03 DEPENDENT VA DEPENDENT VA	1 4 6.655763318-02	5 - 3.80928194F+00 -	6 -1.3416[7]88+0
4 1.000000000000000000000000000000000000	T VALUE DE REGRESSION COEFFICIA         1 3.247210614400       2 2.3410         FOI         SOUPCE OF VIRTATION         DUE TO REARESSION         DEVIATION ABOUT PEGRESSIUN         TOTAL         CORRELATION COEFFICIENTS         ROW 1         1 1.0000000000000         7 5.37-778114-02         ROW 2         2 1.00000000000       3 4.8025	ENTS D12568=02 3 4.185766974+0 ANALYSIS OF VARIANCE THE HULTIPLE LINEAR REGRES D.F. SHU OF SULARES 6 1.07616114+02 1597 3.012796614+03 1403 3.139912728+03 DEPENDENT VA DEPENDENT VA	10 4 =1.765230388+00 SIUN MEAN SQUARES 1.79360166#01 9.4462 1.49074553#+00 RIABLE NO. I 1 4 6.655763318=02	5 - 3.80928194#+00 10 664#+00 - 1.1714/772#-01 4.44066340#-01	6 -1.3416[7]88+0
5 1.00n000009+00 6 "2.17428341#=01 7 =4.06683962a=02 ROM 6 6 1.00n000008+00 7 5.63987434#=02 ROM 7 / 1.00n000000#+00 * PARTIAL CORRELATION CONFFICIENTS	T VALUE DE REGRESSION COEFFICIA 1 3.247218614+00 2 2.3410 FOU SOUTCE OF VIRIATION DUE TO REPRESSION DEVIATION ABOUT PEGRESSION TOTAL CORRELATION COEFFICIENTS ROM 1 1 1.00000000+00 = -3.7984 7 5.37-778114-02 ROM 2 2 1.0000000+00 3 4.8025 ROM 3 3 1.0000000+00 4 3.3474	ENTS 912568=02 3 4.185766974+0 ANALYSI'S OF VARIANCE 4 THE HULTIPLE LINEAR REGES 0.F. SUN OF 5004RES 6 1.07616114#+02 1597 3.012728+03 1603 3.139912728+03 DEPENDENT VA DEPENDENT VA 942558=02 3 =1.756104568=0 902078=01 4 5.074172712=0	1 4 6.655763318-02 1 5 -2.26275312+-01	5 - 3.809281948.00 10 10 10 10 10 10 10 10 10	6 -1.3416[7]88+0
6 1:00-00000#+00 7 5:63987434#=02 RD# 7 7 1:00-00000#+00 * PARTIAL CORRELATION CONFETCIENTS	T       VALUE       De       REGRESSION       COEFFICIA         1       3.247210614400       2       2.3410         FOU         SOURTE OF VIRIATION         DUE       TO RF=RESSION         DEVIATION       ABOUT PEGRESSION         DEVIATION       ABOUT PEGRESSION         DEVIATION       ABOUT PEGRESSION         DEVIATION       ABOUT PEGRESSION         DEVIATION       COEFFICIENTS         ROW 1       1         1       1.000000000000000000000000000000000000	ENTS 912568=02 3 4.185766974+0 ANALYSIS OF VARIANCE 4 THE HULTIPLE LINEAR REGRES 0.F. SUN OF SUM OF SUM F SUM F S	10       4       -1.765230388+00         SIUN       MEAN       RA         SQUARES       RA         1.793601668+01       9.4462         1.896745538+00       9.4462         1.896745538+00       9.4462         1.4665763318-02       9.4462         1       4       6.655763318-02         1       5       -2.26275312-01       1         1       6       4.39481/548-01       1	5 - 3.80928194#+00 10 10 10 10 10 10 10 10 10	6 -1.3416[7]88+0
/ 1+00000000+00 "PARTIAL CORRELATION COTFFICIENIS	T       VALUE       De       REGRESSION       COEFFICIE         1       3.247218614400       2       2.3410         FOR         SOUTCE OF VIRIATION         DUE       TO REARESSION         DEVIATION       ABOUL PEARLESIUN         DEVIATION       ABOUL PEARLESIUN         TOTAL       TOTAL         CORRELATION COEFFICIENTS         ROW       1         1       1.000000000000000000000000000000000000	ENTS D12568=02 3 4.185766974+0 ANALYSTS OF VARIANCE THE HULTIPLE LINEAR REGRES D.F. SHA OF 5914RES 6 1.07616114+02 1597 3.012296614+03 1403 3.139912728+03 DEPENDENT VA DEPENDENT VA DEPENDENT VA 42458=02 3 =1.756104568=0 002078=01 4 5.07417271a=0 082978=01 5 1.667710414=0 077518=01 6 3.884063558=0	MEAN MEAN SQUARES 1.793601060+01 1.690745530+00 RIABLE NO. I 1 4 6.65576331P-02 1 5 -2.26275312+01 1 6 4.39481/540-01 1 7 3.273619490+02	5 - 3.809281948.00 10 10 10 10 10 10 10 10 10	6 -1.3416[7]88+0
"PARTIAL CORRELATION CONFFICIENTS	T VALUE DE REGRESSION COEFFICIA 1 3.247210614400 2 2.3410 SOUTCE OF VIRTATION DUE TO RE-RESSION DEVIATION AGOUT PEGRESSIUN TOTAL CORRELATION COEFFICIENTS PON 1 1 1.0000000400 = -3.7994 7 5.37-778114-02 ROM 2 2 1.0000000400 3 4.6022 ROM 3 3 1.0000000400 4 3.3474 4 1.0000000400 4 3.3474 ROM 5 5 1.0000000400 6 2.1744 ROM 5	ENTS 912568=02 3 4.185766974+0 ANALYSIS OF VARIANCE 7 THE HULTIPLE LINEAR REGRES 0.F. SUM OF SUMARES 6 1.076161114+02 1597 3.012296618+03 1603 3.139912728+03 DEPENDENT VA DEPENDENT VA 902078-02 3 -1.756104568-0 902078-01 5 1.667710418-0 977519-01 5 1.667710418-0 977519-01 7 -4.066839628-0	MEAN MEAN SQUARES RA 1.793601060+01 1.09b745530+00 RIABLE NO. I 1 4 6.655763310-02 1 5 -2.26275312+01 1 6 4.39481/540-01 1 7 3.273619492-02 2	5 - 3.80928194#+00 110 100 100 100 100 100 100	6
	T VALUE DE REGRESSION COEFFICIA 1 3.247218614+00 2 2.3410 SOUTCE OF VIRIATION DUE TO RF-RESSION DEVIATION ABOUT PEGRESSIUN TOTAL CORRELATION COEFFICIENTS ROW 1 1 1.00000000+00 = -3.7984 7 5.37-778114-02 ROW 2 2 1.00000000+00 3 4.8025 ROW 3 3 1.00000000+00 4 3.3474 ROW 5 5 1.00000000+00 6 "2.1742 ROW 5 5 1.00000000+00 6 "2.1742 ROW 5 5 1.00000000+00 7 5.6398 ROM 7	ENTS 912568=02 3 4.185766974+0 ANALYSIS OF VARIANCE 7 THE HULTIPLE LINEAR REGRES 0.F. SUM OF SUMARES 6 1.076161114+02 1597 3.012296618+03 1603 3.139912728+03 DEPENDENT VA DEPENDENT VA 902078-02 3 -1.756104568-0 902078-01 5 1.667710418-0 977519-01 5 1.667710418-0 977519-01 7 -4.066839628-0	MEAN MEAN SQUARES RA 1.793601060+01 1.09b745530+00 RIABLE NO. I 1 4 6.655763310-02 1 5 -2.26275312+01 1 6 4.39481/540-01 1 7 3.273619492-02 2	5 - 3.80928194#+00 110 100 100 100 100 100 100	6
	T VALUE DE REGRESSION COEFFICIO         1 3.247210614400       2 2.3410         FOI         SOURCE OF VIRTATION         DUE TO RF-RESSION       DEVIATION ABOUT PEGRESSIUN         TOTAL         CORRELATION ABOUT PEGRESSIUN         TOTAL         CORRELATION COEFFICIENTS         ROW 1         1 + 00 + 000000+00         T S.37 + 774114 - 02         ROW 3         3 + 00 + 000000+00         T S.37 + 774114 - 02         ROW 3         3 + 00 + 000000+00         T S.37 + 774114 - 02         ROW 3         3 + 00 + 000000+00         S - 2.5774         ROW 3         3 + 00 + 000000+00         S - 2.5774         ROW 5         1 + 00 + 000000+00         S - 2.5774         ROW 5         1 + 00 + 000000+00         S - 5.5774         ROW 5         1 + 00 + 000000+00          5 - 5.5774 </td <td>ENTS 912568-02 3 4.185766074+0 ANALYSIS OF VARJANCE 4 THE MULTIPLE LINEAR REGRES 0.F. SUM OF 570ARES 6 1.076161149+02 1597 3.0127296618+03 1403 3.139912728+03 DEPENDENT VA DEPENDENT VA 902078-02 3 -1.756104568-0 902078-01 5 1.667710414-0 177519-01 5 1.667710414-0 177519-01 6 3.884063558-0 183418-01 7 -4.066839628-0</td> <td>10       4       +1.765230388+00         SIUN       NEAN       RA         SQUARES       RA         1.793601060+01       9.4462         1.793601060+01       9.4462         1.49b745530+00       9.4462         1.49b745530+00       9.4462         1.49b745530+00       9.4462         1.4       6.655763318-02         1       5       -2.262753120-01         1       5       -2.262753120-01         1       5       -2.262753120-01         1       5       -2.262753120-01         2      </td> <td>5 - 3.80928194#+00 10 10 10 10 10 10 10 10 10</td> <td>6 -1.3416[7]88+0 6 -5.7329[4398-0 7 7.59057140#-0</td>	ENTS 912568-02 3 4.185766074+0 ANALYSIS OF VARJANCE 4 THE MULTIPLE LINEAR REGRES 0.F. SUM OF 570ARES 6 1.076161149+02 1597 3.0127296618+03 1403 3.139912728+03 DEPENDENT VA DEPENDENT VA 902078-02 3 -1.756104568-0 902078-01 5 1.667710414-0 177519-01 5 1.667710414-0 177519-01 6 3.884063558-0 183418-01 7 -4.066839628-0	10       4       +1.765230388+00         SIUN       NEAN       RA         SQUARES       RA         1.793601060+01       9.4462         1.793601060+01       9.4462         1.49b745530+00       9.4462         1.49b745530+00       9.4462         1.49b745530+00       9.4462         1.4       6.655763318-02         1       5       -2.262753120-01         1       5       -2.262753120-01         1       5       -2.262753120-01         1       5       -2.262753120-01         2	5 - 3.80928194#+00 10 10 10 10 10 10 10 10 10	6 -1.3416[7]88+0 6 -5.7329[4398-0 7 7.59057140#-0

	HOURLY EMPLOYEES CROSS-VALIDATION SAMPLE		TPLE REGRESSION HESIS HOURLY/SAL WITH FEP		AL Y 5 1 5	INDEPENDENT 1. SEX 2. AGE	VARIABLES; 4. EDUCATION 5. JOB LEVEL
		5		•		J. TOWRE	
	NO. OF DEPENDENT VARIABLES	1				DEPENDENT	VAUNOLE :
			<b>_</b>			6. ACTUAL	INCOME
•.	WEANS OF INDEPENDENT AND DEPENDE	NT VARIABLES					
-	, 1 1+177274768+00 2 2+15536	877#+00 3	4,909857090+00	4 2.504946878+00	5 1.7	29571278+00 6	5.447416640+00
	VARIANCES OF THOPPENDENT AND DEP	FNDENT VARTAR	LES	<b>.</b>			
	1 1.47×153720-01 7 1.24931	776#+00 3	A.98893873e+00	4 1+138630210+00	5 8.7	4788/099-01 6	2+33090333#+00
,			DEPENDENT VARIA	ULE NO. 1		•	
.,	REGRESSION COEFFICIENTS						
	THE CONSTANT TERM IS 5.330595 1 -1.554243534+00 2 4.31600	04#+00 664#=02 3	2.10064738=-01	4 1.593149368-01	5 2.4	14626219-01	
' <del>•</del> -	THE ERROR SUM SQUARE TS 4.191	37562#+03					
•••	THE ERROR MEAN SOMARE IS 1.539	249220+00		*******			
•••	THE STANDARD FHRDA OF ESTIMATE I	5 1.240454	830+00				
	THE COEFFICIENT OF OFTERMINATION	TS 7.4	08443888-01				
1 1	THE MULTIPLE CORPELATION COEFFIC	IENT IS 5.8	3818/970-01				
r		SSION COEFFIC	IENTS				······································
::	1	9030-02 3	1.027019979-02	4 2-310151700-02	5 2+5	9788007 - 02	
P		15				***	•
	1-2.457797143+01 2.1.54800		2.045391249+01	4 6,895297698+00	5 9.2	9460233#+00	
	F.OR	ANALYSIS D THE MULTIPLE	F VARIANCE Linear Regressiu	IN			
<u>.</u>	SOUNCE OF VARIATION		UM CF	MEAN			
 N_		5 2.167 2723 4.191		59UARES 134657340+02 2+0 139249220+00	RATIO 1608546#+	02	
•	···· •· ···		•···· •••				······
			DEPENDENT VARIA	9'F NO. 1			
	CORRELATION CREFFICIENTS						
÷			-				
۰.	RAM 1 1 1.00000000000 2 -2.60730			4 1+698795738+02		90/61700-01 6	
	ели 2			5 <b>5</b> 5 4 4 4 4 4 4 5 5 4 4		07683930	···· ·· ·· ·· ··
	2 1.00000000+00 3 6.32937 #0# 3			5 5.8423d223a+u3		97483228+01	<b></b>
	3 I+00000000+00 4 ~1.53398 PDW 4		5,83/08575#*02	6 4.0850/5688-01	۰.		
1	4 1+00000004+00 5 1+54175 RDW 5		5.815610099-02			ε το αγοίο 40 Βανιβιαλία, του αγοίο	
	5 1.000/000004+00 6 9.96529 RDM 6 6 1.00000000+00	4434-92				• • • • •	
	PARTIAL CORPELATION COEFFICIENTS						
	1 -4.26101618#=01 2 2.94522		1.64735003**01	4 1.31018402#-01	5 147	5357694#-01	
	· ·					···· ,	

\_\_\_\_

HOURLY EMPLOYEES	N MULTIPLE REGRESSION AND CURRELATION ANALYSIS	INDUPENDENT VARIABLES!
CROIS-VALIDATION SAMME	THESIS HOURLY/DIF RAMMATJ=227X WITH FEMALES	1. SEX D. EDUCATION 2 AGE 6. TOO LEVEL 3. PAY
SAMPLE SIZE 2729 NO. UF INDEPENDENT VARIAULES 6		4. TENURE
NO, OF OLPENVENT VARIABLES I		DEPENDENENT VARIABLE: 7. SATISFACTION (DIF SCORE)
MEANS OF INDEPENDENT AND DEPENDENT VAN	AHLES	
1 1.172224208+00 2 2.155368278+00	3 5+447416648+00 4 4+909057098+00 5	2+50494687#+00 6 1+72957127#+00
7 5.3715696a#+0v		
VARIANCES OF INDEPENDENT AND DEPENDENT	VARIABLES	
1 1+426153228=01 2 1+244312268+0( 7 2+410276168+00	3 2 <b>.3</b> 3090333#+00 <b>4</b> 8.98673873#+00 5	I+ 3863021#+00 6 8 <b>,7478670¥₽=01</b>
	DEPENDENT VARIABLE NU. 1	
REGRESSIUN CULFFICIENTS		
THE CUNSTANT IERM IS 3.484032838400 1 0.658/01410-01 2 5.61/051210-02	3 1,159038740-01 4 -2.041584230-02 5	5,08724094#-02 6 5,121>9854#-02
THE ENROR SUM SQUARE IS 6.2810543344	د ٥	
THE ERROR MEAN SQUARE IS 2.3075144584	οu	
THE STANDARD ENROR OF ESTIMATE IS	519050510+00	
THE CUEFFICIENT OF DETERMINATION IS	4.474047828=02	
THE MULTIPLE CURRELATION COEFFICIENT IS	2.115194518-01	
STANUARD DEVIALIUNS OF THE REGRESSION (	OLFFICIENTS	
1 8,56977584#-02 2 3,415916828-02	3 2,346356090-02 4 1,350614970-02 5	2,853107394-02 6 3,230866468-02
T VALUE OF HEGRESSION COEFFICIENTS		
I 1+010383650+01 2 1+702925310+00	3 4.939739308+00 4 =1.511599748+00 5	1.78305274#+00 6 1.58520898#+0U
	YSIS UF VARIANCE TIPLE LINEAR REGRESSION	
SOURCE OF VARIATION D.F.	SUM OF MEAN F Squares suuakes ratiu	
DUE TO REGRESSION 6 DEVIAISON ABUUT NEGRESSIUN 2722 TUTAL 2728	2.941790674+02 4.90298479#+u1 2.1247985 6.281054338+03 2.30751445#+00 6.57523342#+03	0#+01
· · ·	DEPENDENT VARIABLE NO. 1	
CORRELATION COEFFICIENTS		
ROW 1 1 1.000000000+00 2 -2.60/30814P-02	3 -3.695729170-01 4 -4.413716460-03 5	L+696795738-02 6 1.0¥0761708-01
7 1.715407150-01 RDx 2 2 1.000000000+00 3 2.79/483220+01	a 6.329376190-01 5 -2.142507190-01 6 -	5.842382230=03 7 3.600012300=02
ROW 3		
3 1.0000000004+00 4 4.08507568#=01 ROW 4	5 5.81561010#-02 6 9.90529483P-02 /	3.68569789#-02
4 1.000000000000 5 =1.5339820/9-01 ROW 5	6 -5.837085750-02 7 2.554791360-02	
5 1.0000000000 6 1.5817503 01 ROM 6	7 4.712/847/0=02	
6 1,0000000000 7 7.32639108+-02 ROM /		
7 1.000000000000		
PARTIAL CONHELATION COEFFICIENTS		

1 1,901285068=01 2 3,202273138=02 3 9,425883184=02 4 =2,896079928=02 > 3,415597218=02 6 3,036981118=02

- Adams, J. S. Toward an understanding of inequity. Journal of Abnormal and Social Psychology, 1963, <u>67</u>, 422-436.
- Andrews, I. R. and Henry, Mildred M. Management attitudes toward pay. Industrial Relations, 1963, 3, 29-39.
- Ash, P. The SRA employee inventory: A statistical analysis. Personnel Psychology, 1954, 1, 337-364.
- Atkinson, J. W. and Reitman, W. R. Performance as a function of motive strength and expectancy of goal attainment. Journal of Abnormal and Social Psychology, 1956, 53, 361-366.
- Brayfield, A. H. and Crockett, W. H. Employee attitudes and employee performance. <u>Psychological Bulletin</u>, 1955, <u>52</u>, 396-424.
- Brown, J. A. C. <u>The social psychology of industry</u>. Baltimore: Penguin, 1954.
- Brown, J. S. The motivation of behavior. New York: McGraw-Hill, 1961.
- Centers, R. and Cantril, H. Income satisfaction and income aspiration. Journal of Abnormal and Social Psychology, 1946, <u>51</u>, 64-69.
- Chandler, H. R., Foster, K. and McCormack, R. L. Age and experience as salary predictors. <u>Personnel Journal</u>, 1963, 42, 502-504.
- Clark, C. L. <u>A general multiple regression and correlation</u> <u>analysis program for the Burroughs 5500 computer</u>. Detroit: Burrough Corporation, 1964.
- Dabas, Z. B. The dimensions of morale: An item factorization of SRA, Personnel Psychology, 1958, 11, 217-234.
- Darlington, R. B. Multiple regression in psychological research and practice. <u>Psychological Bulletin</u>, 1968, 69, 161-182.
- Dollard, J., and Miller, N. E. <u>Personality and psycho-therapy</u>. New York: McGraw-Hill, 1950.

- England, G. W. and Stein, C. I. The occupational reference group--a neglected concept in employee attitude studies. <u>Personnel Psychology</u>, 1961, <u>14</u>, 299-304.
- English, H. B. and English, A. V. <u>A comprehensive dictionary</u> of psychological and psycho-analytical terms. New York: Longmans, Green and Company, 1958.
- Evens, C. E. and Laseau, L. N. My job contest. Employee Relations Publication. <u>Personnel Psychology</u>, Monograph No. 1, 1950.
- Ewen, R. B. Some determinants of job satisfaction: A study of the generality of the Herzberg theory. Journal of Applied Psychology, 1964, 48, 161-163.
- Ezekiel, M. <u>Methods of correlational analysis</u>. New York: Wiley, 1962.
- Ferguson, G. A. <u>Statistical analysis in psychology and educa-</u> tion. New York: McGraw-Hill, 1959.
- Ganguli, Harish Chandra. A discussion of some variables affecting attitude of industrial workers. Indian Journal of Psychology, 1957a, 32, 133-150.
- Ganguli, H. C. Some factors influencing income aspiration. Journal of Applied Psychology, 1957b, 41, 32-36.
- Georgopoulos, B. S., Mahoney, G. M., and Jones, M. W., Jr. A path-goal approach to productivity. <u>Journal of</u> <u>Applied Psychology</u>, 1957, 41, 345-353.
- Goodwin, L. Occupational goals and satisfactions of the American work force. <u>Personnel Psychology</u>, 1969, <u>22</u>, 313-325.
- Gordon, O. J. A factor analysis of human needs and industrial morale. <u>Personnel Psychology</u>, 1955, <u>9</u>, 1-18.
- Grigsby, O. R. and Burns, W. C. Salary surveys--The deluge. Personnel Journal, 1962, 41, 274-280.
- Gulliksen, H. and Wilks, S. S. Regression tests for several samples. Psychometrica, 1950, June, 91-114.
- Haire, M., Ghiselli, E. E. and Porter, L. W. Psychological research on pay: An overview. <u>Industrial Relations</u>, 1963, <u>3</u>, 3-8.

- Harrison, R. Cumulative cluster analysis of workers' job attitudes. Journal of Applied Psychology, 1961, 45, 123-125.
- Herzberg, F., Mausner, B., Peterson, R. O. and Capwell, D. F. Job attitudes: Review of research and opinion. Pittsburgh: Psychological Service of Pittsburgh, 1957.
- Herzberg, F., Mausner, B. and Snyderman, B. The motivation to work. (2nd edition) New York: Wiley, 1959.
- Hilton, T. L. and Dill, W. R. Salary growth as a criterion of career progress. Journal of Applied Psychology, 1962, <u>46</u>, 153-158.
- Hulin, C. L. and Locke, E. A. Cornell studies of job satisfaction. Unpublished Manuscript, 1963.
- Kahn, R. L. Productivity and job satisfaction. <u>Personnel</u> <u>Psychology</u>, 1960, <u>13</u>, 275-287,
- Kaufmann, H. Task performance, expected performance, and responses to failure as functions of imbalance in the self-concept. <u>Dissertation Abstracts</u>, 1963.
- Kling, D. C. A multiplant factor analysis of employees' attitudes toward their company. Journal of Applied Psychology, 1960, 44, 241-243.
- Klein, S. M. and Maher, J. R. Education level and satisfaction with pay. <u>Personnel Psychology</u>, 1966, 19 (2), 195-208.
- Lawler, E. E. Managers' job performance and their attitudes toward their pay. <u>Dissertation Abstracts</u>, 1964.
- Lawler, E. E., and Hackman, J. Impact of employee participation in the development of pay incentive plans: A field experiment. Journal of Applied Psychology, 1969, 53 (6), 467-471.
- Lawler, E. E. and Porter, L. W. Perceptions regarding management compensation. Industrial Relations, 1963, 3, 41-49.
- Lawler, E. E. and Porter, L. W. Predicting manager's pay and their satisfaction with their pay. <u>Personnel Psychology</u>, 1966, 19, 363-373.
- Loveland, E. H., Ronan, W. W., and York, C. M. <u>A study of</u> <u>operations effectiveness</u>. Atlanta: Georgia Institute of Technology, School of Psychology, 1968.

- Malvinovsky, M. R. and Barry, J. R. Determinants of work attitudes. Journal of Applied Psychology, 1965, 49, 446-451.
- Maslow, A. H. A theory of human motivation. <u>Psychological</u> <u>Review</u>, 1943, <u>50</u>, 370-396.
- Mayo, E. The social problems of an industrial civilization. Cambridge, Massachusetts: Harvard University Press, 1945.
- Myers, M. S. Who are your motivated workers? <u>Harvard Business</u> <u>Review</u>, 1964, <u>42</u> (1), 73-88.
- Opsahl, R. L., and Dunnette, M. D. The role of financial compensation in industrial motivation. <u>Psychological</u> <u>Bulletin</u>, 1966, <u>66</u>, 94-118.
- Parker, T. C. Relationships among measures of supervisory behavior, group behavior, and situational characteristics. Personnel Psychology, 1963, 16, 319-334.
- Patchen, M. The choice of wage comparisons. Englewood Cliffs, New Jersey: Prentice-Hall, 1961.
- Patton, A. Annual report on executive compensation. <u>Harvard</u> <u>Business Review</u>, 1957, <u>35</u> (5), 125-136.
- Penzer, W. N. Education level and satisfaction with pay: an attempted replication. <u>Personnel Psychology</u>, 1969, <u>22</u>, 185-199.
- Phelan, J. G. Job satisfaction: A study of perceived need satisfaction as a function of job level. <u>Experimental</u> <u>Publication System</u>, 1969, 2, 046A.
- Porter, L. W. A study of perceived need satisfactions in bottom and middle management jobs. Journal of Applied Psychology, 1961, 45, 1-10.
- Porter, L. W. Job attitudes in management: I. Perceived deficiencies in need fulfillment as a function of job level. Journal of Applied Psychology, 1962, 46, 375-384.
- Porter, L. W. and Lawler, E. E. <u>Managerial attitudes and</u> <u>performance</u>. Homewood, Illinois: Richard Irwin, Inc. 1968.
- Raube, S. A. Factors affecting employee morale. <u>National</u> <u>Industrial Conference Board</u>, (Studies in Personnel policy, No. 85), 1947, 5-20.

- Rettig, S. Status and job satisfaction of the professional: A factor analysis. <u>Psychological Reports</u>, 1960, <u>6</u>, 411-413.
- Richardson, R. C. and Blocker, C. E. Note on the application of factor analysis to the study of faculty morale. Journal of Educational Psychology, 1963, 54, 208-212.
- Ronan, W. W. A study of and some concepts concerning labor turnover. <u>Occupational Psychology</u>. 1967, 41, 193-202.
- Ronan, W. W. Individual and situational variables relating to job satisfaction. Journal of Applied Psychology Monograph, No. 1, 1970, <u>54</u> (2).
- Ronan, W. W. The relative importance of job characteristics. Journal of Applied Psychology. (In Press).
- Rothe, H. F. Does higher pay bring higher productivity. <u>Per-</u> sonnel, 1960, 37 (4), 20-28.
- Scollay, Robert W. Validation of personal history items against a salary increase criterion. Personnel Psychology, 1956, 9, 325-335.
- Stockford, L. O. and Kunze, K. R. Psychology and the paycheck. Personnel, 1950, 27, 129-143.
- Strong, E. K. Satisfaction and interests. <u>American Psychol-ogist</u>, 1958, 13, 449-456.
- Vroom, V. H. Work and motivation. New York: Wiley, 1964.
- Weick, K. E. The concept of equity in the perception of pay. <u>Paper read at Midwestern Psychological Association</u>, April, 1965.
- Wherry, R. J. Factor analysis of morale data: Reliability and validity. <u>Personnel Psychology</u>, 1958, 11, 78-89.
- Whyte, W. F. The impact of money. In Gellerman, S. W. <u>Motivation and productivity</u>. American Management Association, Inc. 1963.
- Wilkins, L. T. Incentives and the young worker. <u>Occupational</u> <u>Psychology</u>, 1949, <u>23</u>, 235-247.
- Will, F. E. and King, D. C. A factor analytic approach to the construct and content validation of a job attitude questionnaire. Personnel Psychology, 1965, 18, 81-90.

Williams, F. J. and Harrell, T. W. Predicting success in business. Journal of Applied Psychology, 1964, 48, 164-167.

Winer, B. J. <u>Statistical principles in experimental design</u>. New York: McGraw-Hill, 1962.