

AN ANALYSIS OF FACTORS THAT INFLUENCE
EMPLOYEE PARTICIPATION IN
EDUCATION ASSISTANCE
PROGRAMS

By

LLOYD ALFRED PRINS
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Thesis Approved:

John L. Burt

Thesis Adviser
Roy L. Sanders

Garry A. Bie

Norman N. Durham

Dean of the Graduate College

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CHAPTER I

INTRODUCTION

For many years business and industry's attempt to maximize worker productivity through increased wages and benefits fell short in providing the performance gains they were intended to produce. As different techniques were introduced to increase worker performance and employee development, many organizations found a decrease in performance could be experienced if the technique used required little commitment or support from the worker.

Today, many organizations have adopted a self directed approach to employee growth and development. Tuition assistance, an employee benefit that provides aid to employees for the cost of continued education, is a tool that rewards both the employee, through new skills and abilities, and the employer, through a more experienced workforce. A study by the United States Department of Labor revealed that in 1980, 76% of private industries offered tuition assistance for all of its professional and administrative full-time employees, 66% offered assistance for all of its technical and clerical employees (1, p. 30).

Tuition assistance is a unique program that has the

potential of becoming a vital part in overall organization development. If the design of the program is to contribute to organizational growth, there should be deliberate and accurate program administration so as to identify the true needs of the organization and its employees. This can be accomplished by developing an awareness of the factors that influence employees into continued education and providing service to meet his needs.

Statement of the Need

Just as every organization is influenced differently by its community, workforce, and style of management, education assistance programs should be designed to address the unique needs of that organization. Programs developed without the awareness of influential factors, increase the opportunity for incongruity to exist between the employer, the employee, and their reasons for participation. The need of this study was that an analysis of the factors that influenced employees to participate in tuition assistance could provide the information necessary to increase congruity between all program participants.

Statement of the Problem

If business and industry are committed to an economic development whose growth is centered around new technology in the form of service and product, if they remain committed to replacing old worn out machines and factories with the latest

in technology, and if the United States resurgence as a leader in a global economy is to be realized, then there must be ongoing efforts to maximize the efficient use of programs that provide opportunities for increased worker performance and productivity.

As organizations introduce programs that encourage self directed employee development and adopt participative management principles, continued education should be viewed as a vehicle for introducing change and new ideas into the organization. For many companies, employee education assistance programs do not satisfy that need. They are provided as a benefit just as a retirement plan or good health care benefit and administered with the same enthusiasm. Consequently, fewer than 4% of eligible employees participate in such programs (2, p. 8).

Purpose

This descriptive study was conducted to analyze the factors that influenced employees to participate in a tuition assistance program. Given that all companies are different in character and climate, an analysis of program participants within an organization would provide information that could be used to increase congruency between the program and its participants. The factors analyzed were divided into the following categories: age, race, sex, marital status, handicapped status, amount of education, length of employment with participating organization, length of service in current

position, participants' annual income, length of time since last wage increase based on merit, job classification, and head of household status. The factors were determined by the investigator and by a related study (3).

Research Questions

Question 1. Is there a relationship among the rankings given by employees of different age groups to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Question 2. Is there a relationship among the rankings given by employees of different racial groups to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in tuition assistance?

Question 3. Is there a relationship among the rankings given by males and females to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Question 4. Is there a relationship among the rankings given by marital status to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Question 5. Is there a relationship among the rankings given by employees who are physically handicapped and those who are not to all of the factors listed relative

to the extent to which they influence the employee's decisions to participate in tuition assistance?

Question 6. Is there a relationship among the rankings given by employees' level of education to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Question 7. Is there a relationship among the rankings given by employee's length of employment with participating organization to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Question 8. Is there a relationship among the rankings given by employee's length of service in current position to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Question 9. Is there a relationship among the rankings given by employee's annual income to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Question 10. Is there a relationship among the rankings given by the length of time since employees' last wage increase based on merit to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Question 11. Is there a relationship among the rankings given by the employee's job classification to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Question 12. Is there a relationship among the rankings given by the employees' head of household status to all of the factors listed relative to the extent to which they influence the employees' decisions to participate in tuition assistance?

Scope and Limitations

Because of the unique character of the participating organization, the findings and their implications are applicable to the company under study. Similar organizations may make application of the findings but should review the implications with caution. The organization selected is in a community that is represented by three (3) area junior colleges, two (2) four-year institutions, and three (3) graduate facilities. The study was conducted within an organization that had facilities nationwide. Because of the factors that influence each branch location differently, this study was limited to the 1,000-1,200 Tulsa, Oklahoma employees. Branch locations outside of Tulsa should review the outcome of this study with caution as well.

Definitions

The following definitions have been employed in this study.

Tuition Assistance is assistance for educational course expenses incurred by employees when the course is related to the employee's current job or future career development (4).

Adult Education is organized learning to meet the unique needs of persons beyond compulsory school age who have terminated or interrupted their formal schooling (5).

Learning Project is a major, highly deliberate effort to gain certain knowledge or skill(s). A series of related episodes adding up to at least seven hours within a six month period (6).

Formal Career Development Program is a centralized system of policies and procedures which provides employees with the opportunity for career development activities such as counseling, evaluation, pathing, information, human resource planning and workshops (7).

CHAPTER II

REVIEW OF LITERATURE

The review of literature was developed in three parts. The first part was conducted to develop a knowledge of tuition assistance programs and why they are offered as an employee benefit. The second part was conducted to develop a knowledge of the characteristics of the employed learner. The third part was designed to develop an awareness of continuing education and its affect on organizational productivity and contribution to a global economy.

An Overview of Tuition Assistance Programs

The majority of private industry provide some type of education assistance to their workforce. Of the nation's Fortune 500 companies, 98% have some form of tuition assistance (4). Most assistance comes in the form of tuition reimbursement, usually at a rate of 75% - 100%, but many organizations develop their programs with institutions that accept company tuition waiver certificates redeemable back through the issuing organization. Regardless of the methods used, the objective is to provide employees a means of meeting the monetary requirements of continued education. Foulkes (4) presented reasons why employers offer tuition

assistance programs:

1. Educational assistance generally is highly visible, socially desirable, and relatively low cost (4, p. 28.3).

Many organizations attempt to present themselves as guardians of their workers. For many, the need to maintain worker moral in spite of what may be sub-standard wage is accomplished through special benefits and services. Since society views education so highly, employers have the opportunity to present themselves in the role of guardian by providing resources that enable workers to continue their education. Therefore, employee "X" can participate in a learning project that meets one night a week for 5 months. This activity is socially acceptable. If the cost of the class is \$120.00, "X" will exercise that \$120.00 at least 20 times. The cost to the employer is \$6.00 per night. this is economically acceptable.

2. Certain continuing education programs enable many employees to stay abreast of the knowledge explosion, enhance their professionalism, and add to their job skills and career development (p. 28.3).

The United States Department of Education (8) reported that the Business-Higher Education Forum report to the President concluded with three factors that will determine if the American economy can compete effectively in a global economy. Human resource development was the third factor listed. As technology changes, tuition assistance provides the American workforce with the means to continue its education and career development.

3. General educational enhancement improves the quality of the work force, enriches employees' lives, and is a powerful attraction to a powerful attraction to upwardly mobile new employees (4, p. 28.3).

Most studies have found that adults that participate in continued education activities have the characteristic of being upward mobile within his field of occupation. Usually he is employed and views the educational experiences as a means of developing his career. The literature does not infer that the adult is committed to a development that limits his growth with his present employer. Cross (9) presented the following characteristics:

young, affluent, upwardly mobile from their parents' level of education and jobs, and already employed in professional or managerial jobs . . . Their reason for continuing education was job advancement (p.71).

However, not all adults are of the same character. Each participating adult enters into the learning project for different reasons. Many adults strive for tangible rewards while others desire rewards that are intangible. Although literature supports the claim that adults participate in continued education activities for job advancement and/or more money, Knowles (10) characterized the adult learner as one who strives for advancement in job satisfaction, self-esteem, or quality of life.

4. Management development programs attract and prepare future company leaders (4, p. 28.3).

Wowk, Williams, and Halstead (7) suggest that organizations are not always able to accurately identify the career

developmental needs of their future leader. If organizations are to develop effective career development programs, they need to correlate their perceptions of what is most beneficial for employees with the type of activities employees in which employees participate. For many, tuition assistance can serve as the vehicle for career development.

Folkes (4) provided additional reasons why organizations offer tuition assistance: (1) tuition assistance can be used to provide workers coming up on retirement opportunities to develop skills to be used after they've left the organization, (2) since 1979, education assistance has been a tax exempt expense for the employer and not counted as additional income or compensation for the employee, (3) companies that carefully administer their tuition assistance can establish credibility with their employees by projecting a positive commitment to the overall success of its workforce (p. 6.3).

For whatever reason an employee elects to use tuition assistance, experience shows that once the decision is made to participate, over 90% satisfactorily complete the course they enrolled in (4, p. 28.5)

Characteristics of the Employed Learner

Twenty years ago the average American worker had 10.9 years of education. Today that number has increased to 12.7. Of the one hundred million employed, 60% are between the ages of 25 and 54 years, 44% of the 23 million who participate in

continued education have completed at least one year of college, and nearly one third of the total adult population with more than 5 years of college participate in continuing education. Of the total adult population with less than an eighth grade education only 2.2% participate in continuing education (8).

The National Center for Education Statistics (5) provided the following characteristics of the 21 million adults that participated in adult education activities in May, 1981.

Race/Ethnic Groups: the study conducted found that white non-hispanics made up the majority of the participants with 88% white, 6% black non-hispanic, other non-hispanics and Hispanics contributed 2.4% and 3.6% respectively.

Level of Education: The study found that the adult level of educational attainment was directly related to their rate of participation in adult education activities. At 1-3 years of college, 19.6% participated; 4 years of college, 26.1% participated; 5 years and over, 31.1% participated in some type of adult education.

Annual Family Income: Of the respondents making less than \$7,500, 6.3% participated; \$7,500 - 19,999, 32.2% participated; \$20,000 - 50,000, 33.4% participated; and those making more than \$50,000, 18.8% participated.

Occupation of Employed Participants; Of those that were employed, over 70% of those that participated in adult education were white collar workers, professional/technical

workers 31.9%, teachers 8.5%, health workers 5.8%, physicians/dentists 1.8%, and all others 15.6%. Of the nearly 30% blue collar workers, the highest contributors were craft and kindred with 10.3%, followed by service workers with 10.1%. Knowles (11) provided a ratio of participants to nonparticipants by occupation (See Appendix A).

Age and Sex: Nearly 54% of the adult education participants in May, 1981 were under 35 years old. The greatest concentration of participants was in the 25 - 34 age group (35% of all participants). In contrast, only 12% were 55 years old and over (5, p. 28). Women made up 56% of the participants. The trend for more women participating was consistent through each age span.

Continuing Education and the Workforce

There are many reasons why adults participate in learning projects. The U. S. Department of Education (8) reported that over 29 million adults participate in continuing education annually. Of the reasons given, most adults are in agreement with studies that reveal those education activities are linked directly to their jobs. Knowing this, postsecondary efforts should be concerned with developing curriculum that satisfies the educational needs of the nation's workforce.

Studies of adults that enter learning projects that are

vocational oriented reveal that they do so with the intent of getting a new job, good chance of job advancement, or to influence rate of pay. The report expressed a concern that there be "increased collaboration by educators and employers in determining the needs of the labor market and the preparation of workers to fill those needs" (8, p. 2).

Nash (12) said that today, education/training developed to influence worker productivity comes via two vehicles: (1) formal in-house training programs developed with a specific operation or objective in mind, and (2) formal educational activities in which the learner directs himself into participation, usually at a community college, vocational technical school, or four year institution (p. 97).

The objective of both types of manpower development has been to increase worker productivity, thus increasing the organization's return on investment. Nash (12) concluded that "companies are using a wide variety of techniques and programs to enhance productivity" (p. 5).

Nash's survey of employers found that training was the most popular type of program to increase productivity. Of the companies surveyed, 76% said training was the most popular technique to increase productivity. The study also revealed that 37% of the employees ranked training as the most important technique for increasing productivity (p. 97).

Zemke and Kramlinger (13) suggest that if an employee displays a performance discrepancy and is deficient in the skill necessary to satisfy the job requirements, the

organization should arrange formal training, arrange practice, or arrange feedback.

The ultimate goal of training and/or continuing education is to increase an organization's total productivity. As the organization begins to view its role as part of the big picture, or an influence on the nation's gross national product (GNP), it should realize the urgent need to maintain a competitive posture. For many organizations, competitiveness depends on the development and implementation of new technologies. Continued education should be a deliberate activity to insure that employee development keeps in step with technological change. The concern of the U. S. Department of Education's Commission on Higher Education and the Adult Learner (2), was that:

The United State urgently needs a more competent workforce . . . smarter workers working smarter. Yet the problem will not be solved by a one-time catch up worker competence, for the occupational context continues to change rapidly (p. 2).

Another expressed concern was that:

Adults are often unaware of the opportunities open to them, do not want to use them, or think education is only for the young. For example, fewer than 4% of employees eligible for employer-sponsored tuition assistance use those benefits (p. 8).

In an earlier report, the Department of Education's National Advisory Council on Continuing Education (8) concluded that post secondary education should be linked to training and retraining of the American workforce. This activity would improve the nation's economy, productivity and its ability to compete in a global economy.

Summary

Occupational literature provided standards that outline characteristics of tuition assistance programs. The most common form of assistance is tuition reimbursement. Companies usually reimburse at a rate of 75-100%. They may limit the employee's participation to a set dollar or by credit hour. An effective tuition assistance program is characterized by increased worker professionalism, development of future leader, high visibility within the organization, and improved quality of the workforce. The popularity of tuition assistance has increased to 98% of the nation's Fortune 500 companies.

The literature reviewed provided information that showed the greatest predictor of adults into continued education is the individual's educational attainment. Presently the average worker has received 12.7 years of education. Twenty years ago that figure was 10.9. In spite of the fact that there are more ethnic white participants in continued education, race or ethnic group is not a predictor of participation. Like race, income is another characteristic that cannot be used to accurately predict an adults involvement in continued education (8).

The literature provided insight to the character that drives the adult into continued education. Of the reasons given, job advancement and/or more money was the most popular. But not all participate for that reason. Many

regard continued education as a means to increase quality of life and job.

The literature generally agreed that if the United States is determined to be competitive in a global economy, if it continues to function in that economy with new technology in the form of product and machinery, and if its desires are to regain the lead in economic efficiency, then the need to maintain a current, well trained workforce is essential to effect those changes. Educational assistance programs may realize their greatest potential if they are used effectively to generate continued learning of the adult worker.

CHAPTER III

PROCEDURES

The purpose of this study was to identify the factors that influence employees to participate in tuition assistance programs offered as an employee benefit through their employer. This chapter provides the procedures employed to satisfy the purpose of the study.

The Population

Telex Computer Products, Tulsa, Oklahoma, the nation's largest supplier of computer hardware to the U.S. airline industry and manufacturer of PC compatibles, satisfied the requirements and was characteristic of an organization necessary to conduct this study. Although based in Oklahoma, the company's isolation from the the local economic climate has been demonstrated through dramatic growth during the last two years. The population under study was limited to the Tulsa based employees both salary and hourly that had participated in the company's tuition reimbursement program within the past year. Of the nearly 1,500 Tulsa employees, a population of 150 was selected. Not being represented by a labor union, authorization to conduct the study was provided by the Corporate Director of Human Resources.

The Questionnaire

The questionnaire was developed with two objectives. The first objective was to identify each respondent's inventory of personal data. This part of the questionnaire was developed by the investigator and by a related study (3). An adaptation of the questions was necessary to satisfy the purpose of this study.

The personal data was used to break the population into subgroups. The 12 categories were: (1) age, (2) race, (3) sex, (4) marital status, (5) physical handicapped status, (6) level of education, (7) time employed by organization under study, (8) time on present job with participating organization, (9) individual yearly income, (10) time since wage increased based on merit, (11) job classification, (12) head of household status.

The second part of the questionnaire was devoted to identifying factors that influenced the respondent's participation in tuition assistance. The 17 questions in part two were developed from a variety of literature that characterized the adult learner. The respondents had the opportunity to list other reasons why they chose to participate in tuition assistance. A five-point continuum scale was used to assign a numeric value of importance to each factor as an influence on respondent participation.

The questionnaire was pre-tested by a group of graduate students at the University Center At Tulsa, Tulsa, Ok.,

and was then tested for internal consistency with the Pearson Product-Moment correlation described by Popham (14, p. 73). The questionnaire was validated by the investigator's committee chairperson and authorized by the management of Telex Computer Products, Tulsa, Oklahoma.

The Kendall Coefficient of Concordance as described by Siegel, was the statistical tool used to analyze the data. The following formula was used to determine the relationships among the ranking of factors by subject categories within each subgroup (15, p. 231).

$$\frac{s}{\frac{1}{12}kN(N+1)} = k(N-1)W$$

$$\chi^2 = k(N-1)W \quad (9.15)$$

where

- s= sum of squares of the observed deviations from the mean of R_j .
- k= number of sets of rankings, e.g. the number of judges.
- N= number of entitites (objects or individuals) ranked.
- $\frac{1}{12}k(N - N)$ = maximum possible sum of the squared deviations, i.e., the sums which would occur with perfect agreement among k rankings.

Significance of W was determined by:

When N is larger than 7, the expression given in formula is approximately distributed as chi square with

$$df = N - 1$$

$$\chi^2 = \frac{s}{\frac{1}{12}kN(N+1)} \quad (9.17)$$

CHAPTER IV

RESULTS OF THE STUDY

Introduction

The purpose of this case study was to ascertain overall agreement among subgroups, the factors that influence employees to participate in tuition assistance programs offered them as a fringe benefit through their employer.

Telex Computer Products (TCP), Tulsa, Oklahoma, was selected as the participating organization and provided the population under study. Of the approximately 1,500 TCP employees in the Tulsa area, 150 were selected by TCP's Compensation and Benefits department to participate based on their participation in tuition assistance within the calendar year 1986. With 105 questionnaires returned, and after one questionnaire was disqualified because of non-completion, a total response of 69.3% was obtained.

The Findings

Part one of the study was developed to divide the population into 12 subgroups. The subgroups were (1) age, (2) race, (3) sex, (4) marital status, (5) physical handicapped status, (6) years of education, (7) length of

employment at TCP, (8) time in present job, (9) individual yearly income, (10) time since last wage increase based on merit, (11) job classification, and (12) head of household status. The second part of the questionnaire consisted of 17 factors that had been identified through the Review of Literature (Chapter II) as factors that influence adults to participate in continuing education. These factors were then presented to TCP employees to determine the level of importance each factor had on his decision to participate in tuition assistance. A consensual ordering of the 17 factors for the composite group was conducted to arrive at a ranking of factors that influence participation in tuition assistance. The findings of this part of the study are presented in Table I.

Part two of the study, to identify the ranking agreement among subgroups by subgroup categories, was conducted using the Kendall Coefficient of Concordance Method. The 17 factors were rank ordered within each subgroup by calculating the mean of the summed values by within each subgroup category. The calculated chi-square was used to test the significance of W where W = the Kendall Coefficient of Concordance. Significance was tested at the .01 level. Respondants were provided an opportunity to list other factors that had an influence on their decision. The product of this portion of the study is presented in the remainder of the chapter.

TABLE I

THE COMPOSITE GROUP CONSENSUAL ORDERING OF THE
SEVENTEEN FACTORS WHICH INFLUENCED THEIR
DECISION TO PARTICIPATE IN TELEX'S
TUITION ASSISTANCE PROGRAM

Factors Ranked in Descending Order of Importance	Consensus Index	Ranking
For a degree	1.65	1
New career with this company	1.84	2
Advancement in my current job	2.04	3
Job Security	2.13	4
Class relates to my job	2.38	5
Printed materials about tuition assistance	3.20	6
Location of the class	3.27	7
New career outside of this company	3.30	8
Work supervisor	3.53	9
Civic obligation (to be a better citizen)	3.92	10
Parents	4.04	11
Friends at work	4.23	12
Other relatives	4.27	13
Company career counseling	4.30	14
Printed material about the class	4.39	15
Good place to meet people (socialize)	4.53	16
Friends that took the same class	4.68	17

The composite group ranking of the 17 factors listed in the questionnaire.

Research Question Number One

Is there a relationship among rankings given by employees of different age groups to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number one on the questionnaire was divided into 6 categories, or subjects, by different age groups: 18 to 22, 23 to 27, 28 to 32, 33 to 37, 38 to 42, and over 42. A rank order was calculated from the numeric value of each factor within its respective subject category.

When the coefficient of concordance was computed for the 6 rankings, the value of W was .793, chi-square was 76.141, and was found to be significant at the .01 level. It was inferred that a strong agreement existed among categories and a significant relationship did exist among the six age groups as to the ranking of importance of the factors that influence their decision to participate in tuition assistance. Table II presents the ranking of the factors under study.

Research Question Number Two

Is there a relationship among rankings given by employees of different race groups to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number two was categorized into 5 different racial groups. The subjects were: American Indian, Black, White,

TABLE II

THE RANK ORDER OF FACTORS DETERMINED BY DIFFERENT AGE GROUPS AS INFLUENCING THE EMPLOYEE'S DECISION TO PARTICIPATE IN A TUITION ASSISTANCE PROGRAM

Factors	Rankings by Age Groups						Rj
	18-22 n= 7	23-27 n= 29	28-32 n= 33	33-37 n= 23	38-42 n= 6	over42 n= 6	
1. Supervisor	13	9	8.5	9	7	15.5	62
2. Company career counselor	11.5	15	13.5	12.5	14	11	76.5
3. Friend that took the same class	17	17	17	17	11	13.5	92.5
4. Friends at work	16	11.5	12	12.5	11	11	74
5. Parents	4.5	10	11	15	11	9	60.5
6. Other relatives	9	13	13.5	16	14	13.5	79
7. Class relates to my job	8	4	5	5	4	6	32
8. Advancement in my current job	7	3	2	1	2	6	21
9. New career within this company	2	1.5	3	3	1	3	13.5
10. New career outside of this company	10	6	8.5	8	5.5	4	42
11. Job security	3	5	4	4	5.5	1	22.5
12. Printed material about the class	14	12	15	11	2.5	15.5	55.5
13. Printed material about tuition assistance	6	8	6	6	8	6	40
14. Location of the class	4.5	7	7	7	14	8	47.5
15. Good place to meet people (socialize)	15	16	16	14	17	17	95
16. For a degree	1	1.5	1	2	3	2	10.5
17. Civic obligation (to be a better citizen)	11.5	11.5	10	10	9	11	63

Degrees of Freedom = 16
 Chi-Square = 76.141
 Coefficient of Concordance = .793

TABLE III

THE RANK ORDER OF FACTORS DETERMINED BY DIFFERENT
RACIAL GROUPS AS INFLUENCING THE EMPLOYEE'S
DECISION TO PARTICIPATE IN A TUITION
ASSISTANCE PROGRAM

Factors	Rankings by Racial Groups				Rj
	Am In n= 6	Black n= 10	White n= 86	Other n= 3	
1. Supervisor	7.5	9.5	9	8.5	34.5
2. Company career counselor	9.5	14.5	14	12	50
3. Friend that took the same course	15	14.5	14	12	55.5
4. Friends at work	9.5	11	13	12	45.5
5. Parents	11.5	13	11	15.5	51
6. Other relatives	6	12	15	15.5	48.5
7. Class relates to my job	5	1.5	5	5	16.5
8. Advancement in my current job	2.5	1.5	2.5	3	9.5
9. New career within this company	2.5	5	1	1	9.5
10. New career outside of this company	13	9.5	7	3	32.5
11. Job security	4	3.5	2.5	3	13
12. Printed material about the class	16	16	12	8.5	52.5
13. Printed material about tuition assistance	11.5	6	6	12	35.5
14. Location of the class	7.5	7	8	6	28.5
15. Good place to meet people (socialize)	17	17	15	8.5	57.5
16. For a degree	1	3.5	3	15.5	23
17. Civic obligation (to be a better citizen)	14	8	9	8.5	39.5
Degree of Freedom = 16		Coefficient of Concordance = .730			
Chi-Square = 46.695					

Hispanic, and Other. With 0 response in the Hispanic category, the rank order of the factors was computed for 4 categories and presented in Table III. The statistical test was then run for the represented categories.

When the coefficient of concordance was computed to determine the agreement among race groups, a W of .730 and a chi-square of 46.695 was found to be significant at the .01 level. There was moderate agreement among rankings by racial groups with regard to the factors that influence their decision to participate in a tuition assistance program.

Research Question Number Three

Is there a relationship among rankings given by males and females to all the of the factors listed relative to the extent to which they influenced the employee's decision to participate in a tuition assistance program?

Question number three was used to categorize respondents by males and females. With 43 males and 61 females participating, the 17 factors were rank ordered by their numeric value of importance. The results of that ranking is illustrated in Table IV.

When the coefficient of concordance was calculated for the two categories, the value of W was .849 and the value of chi-square was 27.179. At the .01 level of significance, it was determined that there was strong agreement among males and females on the rank order of the factors but the relationship was not significant between the two with

TABLE IV

THE RANK ORDER OF FACTORS DETERMINED BY DIFFERENT
SEXES AS INFLUENCING THE EMPLOYEE'S DECISION
TO PARTICIPATE IN A TUITION
ASSISTANCE PROGRAM

Factors	Rankings by Sex		Rj
	Male n= 43	Female n= 61	
1. Supervisor	9	9	18
2. Company career counselor	13	14	27
3. Friend that took the same course	15	17	32
4. Friends at work	12	13	25
5. Parents	13	10	23
6. Other relatives	14	11	25
7. Class relates to my job	5	5	10
8. Advancement in my current job	4	3	7
9. New career within this company	2	2	4
10. New career outside of this company	6	8	14
11. Job security	3	4	7
12. Printed material about the class	11	15	26
13. Printed material about tuition assistance	8	6	14
14. Location of the class	7	7	14
15. Good place to meet people (socialize)	13	16	29
16. For a degree	1	1	2
17. Civic obligation (to be a better citizen)	9	10	19
Degrees of Freedom = 16		Coefficient of Concordance = .849	
Chi-Square = 27.179			

regards to influencing their decision to participate in a tuition assistance program.

Research Question Number Four

Is there a relationship among rankings given by married and unmarried employees to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item four on the questionnaire was used to divide the respondents into 4 categories. They were asked to identify themselves as single, married, divorced, or widowed. With 21 respondents being single, 68 being married, 15 being divorced, and 0 respondents identified as widowed, the categories were decreased to three. The numeric weight of each factor within its category was computed to arrive at the rank order provided in Table V.

After calculating the coefficient of concordance, a W value of .743 was interpreted to infer there was strong agreement among marital status categories as to the ranking of factors that influenced their decision to participate in tuition assistance. With a chi-square value of 35.683, it was also determined that at the .01 level, there was a significant relationship among the rankings within each category.

Research Question Number Five

Is there a relationship among rankings given by employees by their physical handicapped

TABLE V

THE RANK ORDER OF FACTORS DETERMINED BY DIFFERENT
MARITAL STATUS AS INFLUENCING THE EMPLOYEE'S
DECISION TO PARTICIPATE IN A TUITION
ASSISTANCE PROGRAM

Factors	Ranking by Marital Status			RJ
	Single n= 21	Marid n= 68	Dvrcd n= 15	
1. Supervisor	8	9	8	25
2. Company career counselor	9	14	13	36
3. Friend that took the same course	13	16	16	45
4. Friends at work	12	12	14	38
5. Parents	8	11	10	29
6. Other relatives	9	14	12	35
7. Class relates to my job	4	5	5	14
8. Advancement in my current job	3	4	4	11
9. New career within this company	2	2	3	7
10. New career outside of this company	7	8	6	21
11. Job security	5	3	1	9
12. Printed material about the class	11	13	14	38
13. Printed material about tuition assistance	7	6	7	20
14. Location of the class	6	7	8	21
15. Good place to meet people (socialize)	13	15	15	43
16. For a degree	1	1	3	5
17. Civic obligation (to be a better citizen)	10	10	11	31
Degrees of Freedom = 16	Coefficient of Concordance = .743			
Chi-Square = 35.683				

status to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number five asked the respondent to identify his handicapped status. With the option of either yes or no, item five was represented by 2 categories. Two respondents were physically handicapped and 102 were not. The numeric value of each factor within the two categories was then used to determine the factor's rank order. Table VI presents the findings of questionnaire item number five.

When the coefficient of concordance was computed for the two categories of physical handicapped status, it was found that with a W value of .888 and a chi-square of 35.683, an agreement among respondents did exist among subject categories. It was inferred that a significant relationship among the two categories did exist with regard to the factors that influence their decision to participate in a tuition assistance program.

Research Question Number Six

Is there a relationship among rankings given by employees of level of education to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number six was developed to divide the respondents into 9 categories: 1 = <8 or less years, 2 = 9 years, 3 = 10 years, 4 = 11 years, 5 = 12 years, 6 = 13 years, 7 = 14 years,

TABLE VI

THE RANK ORDER OF FACTORS DETERMINED BY DIFFERENT
HANDICAPPED STATUS AS INFLUENCING THE
EMPLOYEE'S DECISION TO PARTICIPATE
IN A TUITION ASSISTANCE PROGRAM

Factors	Ranking by Handicapped Status		Rj
	Yes	No	
	n= 2	n=102	
1. Supervisor	11	9	20
2. Company career counselor	15.5	14	29.5
3. Friend that took the same course	15.5	17	32.5
4. Friends at work	11	12	23
5. Parents	15.5	11	26.5
6. Other relatives	15.5	13	28.5
7. Class relates to my job	7.5	5	12.5
8. Advancement in my current job	7.5	3	10.5
9. New career within this company	5	2	7
10. New career outside of this company	5	8	13
11. Job security	2.5	4	6.5
12. Printed material about the class	11	15	26
13. Printed material about tuition assistance	5	6	11
14. Location of the class	2.5	7	9.5
15. Good place to meet people (socialize)	11	16	27
16. For a degree	1	1	2
17. Civic obligation (to be a better citizen)	11	10	21
Degrees of Freedom = 16		Coefficient of Concordance = .888	
Chi-square = 28.431			

8 =15 years, and 9 =16 or more years. Of the 104 useable questionnaires, there was no responses for categories 1, 2, and 4. Removing these three, education was reduced to six categories, with the results reflected in Table VII. VII. The numeric weight of each factor within the different categories was used to rank the 17 item under study.

The coefficient of concordance was computed to determine the agreement among employees of different levels of education. With a W value of .883, it was determined that agreement did exist among different categories as to the ranking of the factors that influenced their decision to participate in a tuition assistance program. It was also determined that the computed chi-square value of 84.742, inferred a significant relationship existed among subject categories at the .01 level.

Research Question Number Seven

Is there a relationship among rankings given by employees with different lengths of employment within the participating organization to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number seven on the questionnaire asked the respondent to indicate his length of employment at TCP to divide the respondents into the following subject categories:

1 =<1 year, 2 =1 to 2 years, 3 =3 to 5 years, 4 =5 to 10 years, and 6 =16 or more years employed by TCP. All six

TABLE VII

THE RANK ORDER OF FACTORS DETERMINDE BY DIFFERENT
LEVEL OF EDUCATION AS INFLUENCING THE EMPLOYEE'S
DECISION TO PARTICIPATE IN A TUITION
ASSISTANCE PROGRAM

Factors	Ranking by Years Levels of Education						Rj
	10 n= 2	12 n=23	13 n=25	14 n=26	15 n=14	16 + n=14	
1. Supervisor	6	6	11	9	10	9	51
2. Company career counselor	16.5	12	12.5	15	15	15	86
3. Friend that took the same course	16.5	16	17	17	16.5	14	97
4. Friends at work	14.5	11	16	13	13	10.5	78
5. Parents	11	14	9	12	9	16	71
6. Other relatives	14.5	13	12.5	14	11	17	82
7. Class relates to my job	7.5	3	5.5	5	5	3	29
8. Advancement in my current job	3.5	1	4	2	4	2	16.5
9. New career within this company	3.5	5	2	3	2	1	16.5
10. New career outside of this company	12	8	7	8	7.5	6	48.5
11. Job security	1.5	4	3	4	3	4	19.5
12. Printed material about the class	12	15	14	11	13	12	77
13. Printed material about tuition assistance	9.5	9	5.5	6	7.5	8	45.5
14. Location of the class	5	7	8	7	6	7	40
15. Good place to meet people (socialize)	9.5	17	15	16	16	13	86.5
16. For a degree	1.5	2	1	1	1	5	11.5
17. Civic obligation (to be a better citizen)	7.5	10	10	10	13	10.5	61

Degrees of Freedom = 16
Chi-Square = 84.742

Coefficient of Concordance = .883

categories were represented by respondents, thus Table VIII provides the rank order of the 17 factors by the 6 subject categories. Again the numeric weight of each factor within its respective category was used to determine the ranks reported.

The calculated coefficient of concordance of .697 was significant with a chi-square of 66.942 at the .01 level. It was inferred that a relationship among TCP employees was in agreement with groups of different length of employment and that this agreement was significant in regards to the influence each factor had on their decision to participate in a tuition assistance program.

Research Question Number Eight

Is there a relationship among rankings given by employees of different time in their present job to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number eight of the questionnaire was similar to item seven except it was specific in identifying how long the respondent had been in his present TCP job. Like item seven, there were six subject categories using the same division scale of 1 through 6. The rank order was computed by the numeric value each factor received within its subject category. With 0 response for subject 6, Table IX provides data for 5 categories.

After calculating the coefficient of concordance for

TABLE VIII

THE RANK ORDER OF FACTORS DETERMINED BY LENGTH
OF TIME EMPLOYED AT TELEX AS INFLUENCING
THE EMPLOYEE'S DECISION TO PARTICIPATE
IN A TUITION ASSISTANCE PROGRAM

Factors	Ranking by Time Employed at Telex						Rj
	< 1yr n= 2	1-2yrs n= 45	3-5yrs n= 33	5-10yrs n= 21	10-15yrs n= 2	> 15yrs n= 1	
1. Supervisor	7.5	8	7	10	7	9	48.5
2. Company career counselor	15.5	13	12.5	13.5	11	14	79.5
3. Friend that took the same course	15.5	17	15	17	11	14	89.5
4. Friends at work	10	14	15	11.5	4.5	9	64
5. Parents	7.5	9	10	15	16.5	14	72
6. Other relatives	12.5	11	15	16	16.5	14	85
7. Class relates to my job	2.5	5	4	4	1.5	5.5	22.5
8. Advancement in my current job	2.5	4	2	3	1.5	5.5	18.5
9. New career within this company	1	2	1	2	3	5.5	14.5
10. New career outside of this company	15.5	10	5	6	11	5.5	53
11. Job security	5.5	3	3	5	7	2	25.5
12. Printed material about the class	12.5	15	11	11	11	14	74.5
13. Printed material about tuition assistance	5.5	7	6	7	14.5	8	48
14. Location of the class	10	6	9	8	7	2	42
15. Good place to meet people (socialize)	15.5	16	12.5	13.5	14.5	14	86
16. For a degree	4	1	1	1	4.5	2	13.5
17. Civic obligation (to be a better citizen)	10	12	8	9	11	14	64

Degrees of Freedom = 16
Chi-Square = 66.942

Coefficient of Concordance = .697

TABLE IX

THE RANK ORDER OF FACTORS DETERMINED BY LENGTH
OF TIME IN PRESENT JOB AS INFLUENCING
THE THEIR DECISION TO PARTICIPATE
IN A TUITION ASSISTANCE PROGRAM

Factors	Ranking by Time Spent In Present Job at Telex					Rj
	< 1yr n= 17	1-2yrs n= 60	3-5yrs n= 17	5-10yrs n= 9	10-15yrs n= 1	
1. Supervisor	6	8	9	10	4	37
2. Company career counselor	12	13.5	14	13.5	7.5	60.5
3. Friend that took the same course	15.5	16	15	16	13.5	76
4. Friends at work	14.5	11.5	10	11.5	4	51.5
5. Parents	9	10	14	13.5	13.5	60
6. Other relatives	8	11.5	16	15	13.5	64
7. Class relates to my job	4	4	4	4	1.5	17.5
8. Advancement in my current job	2	2	1	5	1.5	11.5
9. New career within this company	1	1	3	1	4	10
10. New career outside of this company	14.5	7	5	3	13.5	43
11. Job security	3	3	2	2	13.5	23.5
12. Printed material about the class	11	13.5	11	8	13.5	57
13. Printed material about tuition assistance	5	6	6	6.5	13.5	37
14. Location of the class	7	5	7	6.5	7.5	33
15. Good place to meet people (socialize)	15.5	15	12	11.5	13.5	67.5
16. For a degree	1	1	1	1	7.5	11.5
17. Civic obligation (to be a better citizen)	10	9	8	9	7.5	43.5

Degrees of Freedom = 16
Chi-Square = 58.678

Coefficient of Concordance = .733

the rankings of the 17 factors, it was determined that the coefficient of concordance of .733 reflected agreement that the subjects are applying essentially the same standard in ranking the factors as influence on their decision to participate. With a calculated chi-square of 58.678, it was inferred that a significant relationship existed among the subject categories in the ranking of influential factors.

Research Question Number Nine

Is there a relationship among rankings given by employees of different levels of yearly income to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number nine of the questionnaire asked the respondent to estimate his yearly income. The subject categories were divided by the following: 1 =<\$10,000, 2 =\$10,000 to \$15,000, 3 =\$15,001 to \$18,000, 4 =\$18,001 to \$21,000, 5 =\$21,001 to \$27,000. 6 = \$27,001 to \$32,000, and 7 =>\$32,000. With a response coming from each of the 7 categories, Table X lists the rank order for 7 subject categories with a ranking for each of the 17 factors under study. The numeric value of each factor within each group was used to arrive at the rankings for each category.

The calculated coefficient of concordance for item nine was .833 and the chi-square value was 93.262. The rank orders by level of income provided agreement among subject categories that a relationship existed in the ranking of

TABLE X

THE RANK ORDER OF FACTORS DETERMINED BY DIFFERENT
YEARLY INCOMES AS INFLUENCING THE EMPLOYEE'S
DECISION TO PARTICIPATE IN A TUITION
ASSISTANCE PROGRAM

Factors	Ranking by Level of Yearly Income (in thousands)							Rj
	< \$10 n= 1	\$10-15 n= 14	\$15-18 n= 17	\$18-21 n= 30	\$21-27 n= 15	\$27-32 n= 9	> \$ 32 n= 18	
1. Supervisor	14	11.5	8.5	6	7	9	8	64
2. Company career counselor	14	10	15.5	12	10.5	13.5	13	88.5
3. Friend that took the same course	14	14	17	15.5	15	11.5	16	105
4. Friends at work	14	14.5	12	11	13	10	11	88.5
5. Parents	3	7	10.5	10	12	17	15	74.5
6. Other relatives	9	8	13	13	14	15.5	14	86.5
7. Class relates to my job	9	5	5	3.5	4	5	3	34.5
8. Advancement in my current job	5.5	3	4	1	1	1	4	19.5
9. New career within this company	1.5	1	1	2	2	2	2.5	12
10. New career outside of this company	5.5	11.5	7	8	5	6	5	48
11. Job security	5.5	2	2	3.5	3	3.5	2.5	22
12. Printed material about the class	14	13	14	14	10.5	15.5	10	91
13. Printed material about tuition assistance	5.5	4	8.5	5	6	7	7	43
14. Location of the class	9	6	6	7	8	8	6	50
15. Good place to meet people (socialize)	14	14.5	15.5	15.5	16	13.5	12	101
16. For a degree	1.5	1	3	1	1	3.5	1	12
17. Civic obligation (to be a better citizen)	14	9	10.5	9	9	11.5	9	72

Degrees of Freedom = 16
Chi-Square = 93.262

Coefficient of Concordance = .833

factors. At the .01 level, it was inferred that a significant relationship did exist among employees of different income levels in regard to the factors that influenced their decision to participate in a tuition assistance program.

Research Question Number Ten

Is there a relationship among rankings given by employees that have received merit raises at different intervals to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number ten allowed the respondent to indicate the length of time since his last increase in wages based on merit. The respondent was asked to select from one of four categories that were divided as follows: 1 =<1 year, 2 =1 to 2 years, 3 =3 to 5 years, and 4 =>5 years. With 91 respondents selecting number 1, 11 selecting number 2, 2 selecting number 3, and 0 selecting number 4, the number of subject groups displayed on Table XI are three. The statistical test was performed on the rank orders of the 17 factors under study.

The coefficient of concordance produced a W value of .826. With a chi-square value of 42.422, it was concluded that at the .01 level, there is agreement among categories that the subjects ranked the factors by the same standard and therefore ranked the factors in a similar order. It was inferred that a significant relationship existed among the

TABLE XI

THE RANK ORDER OF FACTORS DETERMINED BY TIME
SINCE LAST MERIT RAISE AS INFLUENCING THE
EMPLOYEE'S DECISION TO PARTICIPATE
IN A TUITION ASSISTANCE PROGRAM

Factors	Rankings by Time Since Last Merit Wage Increase			Rj
	< 1 yr n= 91	1-2 yrs n= 11	3-5 yrs n= 2	
1. Supervisor	8	10	16.5	34.5
2. Company career counselor	12	12.5	14.5	39
3. Friend that took the same course	16	16	16.5	48.5
4. Friends at work	11	13.5	12.5	37
5. Parents	10	12.5	11	33.5
6. Other relatives	14	8	12.5	34.5
7. Class relates to my job	4	3.5	6	24.5
8. Advancement in my current job	2	2	3	7
9. New career within this company	1	1	3	5
10. New career outside of this company	5	9	7	21
11. Job security	3	3.5	3	9.5
12. Printed material about the class	13	11	9	33
13. Printed material about tuition assistance	6	6	3	15
14. Location of the class	7	5	9	21
15. Good place to meet people (socialize)	15	13.5	14.5	43
16. For a degree	1	1	3	5
17. Civic obligation (to be a better citizen)	9	7	9	25
Degrees of Freedom = 16		Coefficient of Concordance = .884		
Chi-Square = 42.422				

rankings by subject categories with regard to factors influencing their decision to participate in a tuition assistance program.

Research Question Number Eleven

Is there a relationship among rankings given by employees of different job classifications to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number eleven provided the respondent the opportunity to indicate his job classification. The categories were: technical, clerical, general specialist, sales, administrative (not management), management, and other. The numeric value for each factor within the 8 subject categories was calculated to determine a rank order within its respective category. Table XII illustrates these rankings.

When the coefficient of concordance was computed to determine the agreement among job classifications, it was concluded that with a W value of .851, agreement existed among employees of different job classifications. At the .01 level, a significant relationship existed among rankings by subject categories with regard to factors influencing their decision to participate in a tuition assistance program.

Research Question Number Twelve

Is there a relationship among rankings

TABLE XII

THE RANK ORDER OF FACTORS DETERMINED BY DIFFERENT
JOB CLASSIFICATION AS INFLUENCING THE EMPLOYEE'S
DECISION TO PARTICIPATE IN A TUITION
ASSISTANCE PROGRAM

Factors	Ranking by Job Classification							Rj
	Techn n= 38	Cleri n= 21	GenSp n= 18	Sales n= 1	Admin n= 12	Mangt n= 13	Other n= 1	
1. Supervisor	7.5	9	8	3.5	10	9	10	57
2. Company career counselor	14	13	11.5	13	12	12	13	88.5
3. Friend that took the same course	16	16	15	13	17	17	18	112
4. Friends at work	10	14	13	13	13	10	11	84
5. Parents	13	7	9	13	11	16	17	86
6. Other relatives	15	8	11.5	13	16	12	13	88.5
7. Class relates to my job	4	4	4	1	5	4	2.5	24.5
8. Advancement in my current job	2	3	2	3.5	4	2	3	19.5
9. New career within this company	2	2	1	3.5	1	3	4	16.5
10. New career outside of this company	5	10	6	7.5	6.5	7	2.5	44.5
11. Job security	3	2	3	3.5	2	5	2.5	21
12. Printed material about the class	11	11.5	14	7.5	14.5	14.5	15.5	88.5
13. Printed material about tuition assistance	6	5	7	7.5	8	8	9	50.5
14. Location of the class	7.5	6	5	13	6.5	6	7	51
15. Good place to meet people (socialize)	12	15	16	13	14.5	14.5	15.5	100.5
16. For a degree	1	1	2	1	3	1	2.5	11.5
17. Civic obligation (to be a better citizen)	9	11.5	10	7.5	9	12	13	72
Degrees of Freedom = 16		Coefficient of Concordance = .851						
Chi-Square = 95.354								

given by employees who are head of household and those who are not to all of the factors listed relative to the extent to which they influenced the employees' decision to participate in a tuition assistance program?

Item number twelve asked the respondent to identify his head of household status. With an option of either yes or no, the two subject categories contained 66 and 38 respectively. A ranking of the 17 factors was computed from the numeric value of each factor within its category. Table XIII provides the findings of the two subject categories with the ranking of each factor.

The calculated coefficient of concordance of .943 demonstrated an agreement among subject categories of the rankings of each of the factors. With a chi-square of 30.167, it is inferred that a relationship among rankings by the two subject categories has no significance at the .01 level with regard to the employees' decision to participate in a tuition assistance program.

Summary

The purpose of this chapter was to analyze the data gathered from TCP employees that had participated in its tuition assistance program. The Kendall Coefficient of Concordance was used to measure the extent of association among subject categories rankings of the 17 factors identified to influence an employee's decision to participate in a tuition assistance program. The data was sorted to

TABLE XIII

THE RANK ORDER OF FACTORS DETERMINED BY DIFFERENT
 HEAD OF HOUSEHOLD STATUS AS INFLUENCING THE
 EMPLOYEE'S DECISION TO PARTICIPATE IN
 A TUITION ASSISTANCE PROGRAM

Factors	Rankings by Head of Household Status		Rj
	Yes n= 66	No n= 38	
1. Supervisor	9	8.5	17.5
2. Company career counselor	13	14	27
3. Friend that took the same course	17	16	33
4. Friends at work	14	12	26
5. Parents	12	8.5	20.5
6. Other relatives	15.5	11	26.5
7. Class relates to my job	5	4	9
8. Advancement in my current job	4	3	7
9. New career within this company	2	2	4
10. New career outside of this company	6	10	16
11. Job security	3	5	8
12. Printed material about the class	11	15	26
13. Printed material about tuition assistance	7	6.5	13.5
14. Location of the class	8	6.5	14.5
15. Good place to meet people (socialize)	15.5	17	32.5
16. For a degree	1	1	2
17. Civic obligation (to be a better citizen)	9	12	21
Degrees of Freedom = 16		Coefficient of Concordance = .943	
Chi-Square = 30.167			

answer the 12 research questions and then tested for significance at the .01 level. The findings of this chapter support the conclusions and recommendations presented in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to identify the importance certain factors had on employees of Telex Computer Products (TCP) to participate in its tuition assistance program. Data was gathered through the use of a questionnaire that was designed in two parts. The product of the first part was an inventory of personal data for each respondent. The second part asked the respondent to assign a level of importance to 17 items that had been identified as factors that influence employees to participate in tuition assistance programs.

The inventory of personal data was designed to divide the data into the following 12 subgroups: age, race, sex, marital status, physical handicapped status, level of education, time employed at TCP, length of time present job at TCP, individual's yearly income, time since the last wage increase based on merit, job classification, and head of household status. These characteristics were then used to develop the 12 research questions under study. Respondents were then provided a list of influential factors and asked to rate the level of importance each factor had on influencing

them to participate in a tuition assistance program. The investigator then employed a five-point continuum scale and assigned a numeric value to the responses given. Those factors identified as extremely important (EI) received a value of 1. A numeric value of 5 was assigned to those factors that were rated as not important (NI). A consensus index was computed for each factor by averaging the sum of the numeric value of each factor. The index was then used in producing a consensual ordering for the composite group.

A rank ordering by subject categories for the 17 factors was calculated for each subgroup. The Kendall Coefficient of Concordance was computed for each ranking to determine agreement among categories within each subgroup. It was determined from the consensual ordering and the degrees of agreement among subgroups that some factors do have a greater level of importance as an influence on employees decision to participate in a tuition assistance program. Those items that were most important, in descending order were: For a degree, New career within this company, Advancement in my present job, Job security, and Class relates to my job. Those items that were least important, in ascending order, were: Friends that took the same course, Good place to meet people (socialize), Printed material about the class, Company career counseling, and Other relatives.

In addressing the 12 research questions, a statistical analysis of the data specific to each subgroup identified the significance of the relationships among each subgroup with

regards to the factors influencing employees' decisions to participate in a tuition assistance program. Significance was tested at the .01 level.

Conclusions

Evidence was introduced in Chapter II that supported the claim that an ongoing development of the human resource within an organization is a critical factor in production performance and efficiency. Literature was then introduced that identified factors that influence adults to participate in education activities. When those factors were applied as influences on adult employees to participate in adult education activities through a tuition assistance program, it was found that some factors do influence their decision more than others.

The significance of this finding is that as an organization looks for ways to stay abreast of the knowledge explosion enhanced by the introduction of new technologies, tuition assistance programs should be developed to address specific organizational needs.

The findings were in agreement with literature that identified the primary reasons why adults participate in continuing education were for career advancement opportunities. Advancement in present job, advancement within the organization in a different career, and for a different career outside of the organization were most influential. Of particular interest to the investigator was

the overwhelming desire of employees to obtain a degree. Nearly all subgroups were in agreement that the influence of earning a degree was the most important factor influencing their decision to participate in the tuition assistance program.

When the respondents were provided the opportunity to list other reasons why they chose to participate in continuing activities, most elected not to respond. Of the reasons given, the most popular write-ins were "for more money", "to make more money", or a response related to self improvement.

Recommendations

An organization is not always able to identify the training or developmental needs of its workforce. For some employees, the vehicle for acquiring the type of specialized training, he feels is necessary, is a local college or vocational technical school. The investigator is concerned that what the employee thinks is necessary for the job and what the organization expects are two different things. An awareness of how and when tuition dollars are being spent can go a long ways in designing an effective tuition assistance program.

Since this study was undertaken, Telex Computer Products adopted new requirements for approving assistance of an employee's learning activity. Tuition assistance, an item that is an expense against a department's annual budget, now

requires input from the manager in how tuition dollars are being spent. An incentive exists for the manager to guide employees into learning projects that can provide increased benefits for both the learner and the organization. As more people become active in the decision process, the potential for tuition assistance to be an influence on organizational development increases.

The study identified the factors that most influenced employees to participate in tuition assistance were career related. However, company career counseling was ranked fourteen out of a possible seventeen. This finding infers that at the time of this study, respondents elected to rely on some other influence for career development rather than counseling from the organization in which they desire to develop. It should be noted that just prior to this study, Telex installed a career development program that maintains career guidance information on a computer. The system allows the user to research areas of career interest, help in setting goals, and allows for documentation of progress in career development.

It is the investigators belief that the findings of this study should be used by Telex to redefine the purpose of its tuition assistance program so that it better addresses the need of the company. Tuition assistance should not be viewed as another employee fringe benefit but as a tool that can contribute longterm rewards for organizational development.

Additional studies should be done after the new tuition

assistance program and the new career development programs have had time to influence the workforce.

Employee participation in tuition assistance is a self directed activity. If an organization has determined that education assistance is a vital part in organizational development, efforts should be made to identify the factors that influence employees not to participate in the tuition assistance programs. Such a study could identify barriers to continued employee education that may be overcome to increase program participation and/or efficiency.

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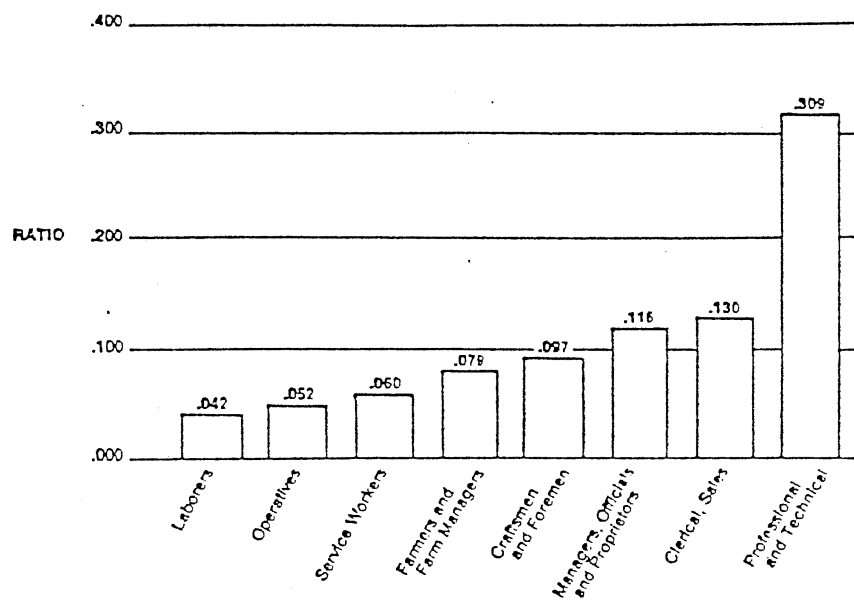
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APPENDIXES

APPENDIX A

BAR GRAPH

Exhibit 11

**RATIO OF PARTICIPANTS TO NONPARTICIPANTS
IN ADULT EDUCATION BY OCCUPATION¹⁵**

APPENDIX B

QUESTIONNAIRE

Please place an (X) in the appropriate space

1. Age: 18-22 23-27 28-32
 33-37 38-42 over 42
2. Race: Indian Black White
 Hispanic
 Other (please specify)

3. Sex: Male Female
4. Marital Status single married
 divorced widowed
5. Are you physically handicapped?
 yes no
6. How many years of school have you completed?
 8 or less 9 10 11 12
 13 14 15 16 or more
7. How long have you been an employee here?
 < 1 yr 1-2 yrs 3-5 yrs
 5-10 yrs 10-15 yrs > 15 yrs
8. How long have you been in your present job?
 < 1 yr 1-2 yrs 3-5 yrs
 5-10 yrs 10-15 yrs > 15 yrs
9. Please estimate your yearly income?
 \$ < 10,000 \$ 10,001-15,000
 15,001-18,000 18,001-21,000
 21,001-27,000 27,001-32,000
 > 32,001
10. How long has it been since your last increase
 in wages based on merit?
 < 1 yr 1-2 yrs 3-5 yrs
 > 5 yrs
11. My job is classified as:
 Technical a.
 Clerical b.
 Gen. Specialist c. (Material Handler, Inventory Auditor, . . .)
 Sales d.
 Administrative e. (Not Management)
 Management f.
 Other g.

12. Are you the head of your household YES NO

Please rank by placing an "X" in the appropriate space to indicate the importance the following had on your decision to participate in a part-time education activity.

Extremely Important= EI
 Very Important= VI
 Moderately Important= MI
 Little Important= LI
 Not Important= NI

EXAMPLE

	EI	VI	MI	LI	NI
Financial Counselor		/	/	/	X

The X indicates that the financial counselor was Not Important in the decision to participate

	EI	VI	MI	LI	NI
1. Work supervisor		/	/	/	/
2. Company Career Counseling		/	/	/	/
3. Friend that took the same course		/	/	/	/
4. Friends at work		/	/	/	/
5. Parents		/	/	/	/
6. Other relatives		/	/	/	/
7. Class relates to my job		/	/	/	/
8. Advancement in my current job		/	/	/	/
9. New career within this company		/	/	/	/

	EI	VI	MI	LI	NI
10. New career outside of this Co.	/	/	/	/	/
11. Job security	/	/	/	/	/
12. Printed material about the class	/	/	/	/	/
13. Printed materials about Tuition Assistance	/	/	/	/	/
14. Location of class	/	/	/	/	/
15. Good place to meet people (socialize)	/	/	/	/	/
16. For a Degree	/	/	/	/	/
17. Civic Obligation (to be a better citizen)	/	/	/	/	/
18. Please list other reasons why you chose to participate in continuing education					
	/	/	/	/	/
	/	/	/	/	/

This completes your portion of the study. Thank you for your cooperation and participation. Again, every response will remain confidential and used only to satisfy the purpose of this study.

APPENDIX C

COVER LETTER TO STUDY PARTICIPANTS

Study For Continuing Education
723 W. University
Stillwater, Oklahoma
74074

March 6, 1987

Dear Telex Employee;

Because of your commitment to personal development and continued education, you were selected to participate in a study of Adults and Continuing Education.

In the following questionnaire, you will be asked to answer questions about yourself and about your education activities. Before you begin, you are encouraged to pre-read the the questionnaire in its entirety. You will recognize some questions are quite general while others are very specific. Please note that the success of this study will be determined by you through:

1. Your support and accurate response to each question
2. An understanding how every question is dependent on the other
3. Setting time aside to complete the questionnaire without interruption
4. Completing the questionnaire and returning it in the self addressed envelop before March 14, 1987.

As a participant in Telex's Tuition Assistance, you have demonstrated the desire to continue your development and achievements. Literature tells us that for many organizations, less than 1% of its workforce take advantage of Tuition Assistance. There are many answers as to why employees don't participate but few hard facts that tell us why people like you have chosen to be in the minority.

As you begin, please be assured that your response will remain totally anonymous. The study has been developed to generate data only. There is no incorrect answer, and no risk of destroying your anonymity.

Again, the success of this study relies on your support. Should you have any question, you may consult you manager or Department of Benefits and Compensation. Thanks!

VITA 2

Lloyd Alfred Prins

Candidate for the Degree of

Master of Science

Thesis: A CASE STUDY OF FACTORS THAT INFLUENCE EMPLOYEE
PARTICIPATION IN EDUCATION ASSISTANCE PROGRAMS

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in San Diego, California, April
23, 1955, the son of Robert Eugene and Norma Mary
Garcia Prins. Married to Marilyn Gayle Hoover
April 25, 1987.

Education: Graduated from Webb City High School, Webb
City, Missouri in May, 1973; received Bachelor of
Science degree in Management Technology from
Missouri Southern State College, Joplin, Missouri,
May, 1984; completed the requirements for the
Master of Science degree at Oklahoma State
University in July, 1987.

Professional Experience: Parts Operations Manager,
Gilkey Chevrolet, Lamar, Missouri, from 1978 to
1984. Manager of Credit, Jim Norton Buick, Tulsa,
Oklahoma, from 1985 to 1986; Management Information
Systems Specialist (contract), Telex Computer
Products, Tulsa, Oklahoma from 1986 to present.