Order Number 8719230

A study to profile the features of physical educators in higher education by institutional level

Scott, Marvin Wayne, Ed.D.

The University of North Carolina at Greensboro, 1986

U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark ✓.

1. Glossy photographs or pages _____
2. Colored illustrations, paper or print _____
3. Photographs with dark background _____
4. Illustrations are poor copy _____
5. Pages with black marks, not original copy _____
6. Print shows through as there is text on both sides of page _____
7. Indistinct, broken or small print on several pages ✓
8. Print exceeds margin requirements _____
9. Tightly bound copy with print lost in spine _____
10. Computer printout pages with indistinct print _____
11. Page(s) _____ lacking when material received, and not available from school or author.
12. Page(s) _____ seem to be missing in numbering only as text follows.
13. Two pages numbered _____. Text follows.
14. Curling and wrinkled pages _____
15. Dissertation contains pages with print at a slant, filmed as received ✓
16. Other _____

_____

_____

University
Microfilms
International

A STUDY TO PROFILE THE FEATURES OF PHYSICAL EDUCATORS IN HIGHER EDUCATION BY INSTITUTIONAL LEVEL

by

Marvin Wayne Scott

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Greensboro

1986

Approved by

Sarah M. Robinson

Dissertation Adviser

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

Dissertation Advisor Sarah M. Robinson

Committee Members

Rosemary McGee

October 30, 1986

Date of Acceptance by Committee

October 30, 1986

Date of Final Oral Exam

SCOTT, MARVIN WAYNE, Ed.D. A Study to Profile the Features of Physical Educators in Higher Education by Institutional Level. (1986) Directed by Dr. Sarah Robinson. 227 pp.

The purpose of this research was to profile the personal and professional features of physical educators who are employed at different institutional levels. The sample included one hundred and eighty-one full-time physical educators employed at institutions located in the midwest and southern regions of the country.

An instrument titled, Scott's Faculty Profile Survey was utilized to obtain data upon which profiles were developed to reflect perceptions of the academic work environment. Frequency distributions and chi-square statistics were computed for each of the 57 items which comprised the instrument.

Findings suggested that physical educators possess many personal and professional characteristics that are similar to those prevalent among educators throughout higher education; however, physical educators were found to possess some of the following specific professional orientations: (1) physical educators allot their professional time differently in regards to teaching (less), research (less), and service to students (more), (2) the majority of physical educators were found to be satisfied with their profession as well as their careers,

(3) significant differences, in profile features, were found to occur among physical educators with different institutional affiliations, and (4) physical educators were found to exhibit almost total agreement on some current issues and widespread disagreement on other current issues in higher education.

The following conclusions were drawn: (1) the patterns of responses indicate that the faculty in physical education have enough positive personal and professional characteristics in place to serve as a foundation for the future growth and development of the profession, however, issues exist that have the potential to threatened the vitality and continued evolution of the profession, (2) physical educators possess personal and professional characteristics comparable to those found throughout higher education.

Acknowledgements

I wish to acknowledge those individuals who inspired and guided me through the development and completion of this study.

Sincere appreciation is extended to the members of my committee for their dedication, interest and support of this research effort. Special thanks is extended to Dr. Sarah Robinson for the patience and guidance she has provided me throughout my graduate training. I would like to thank the members of my committee, Dr. Thomas Martinek, Dr. Rosemary McGee and Dr. Donald Reichard, for their willingness to share their insights and expertise with me on this research effort.

I am obliged to thank Dr. John Stecklein for granting me permission to utilize a modified version of his instrument to collect data for the study.

Ginny Novack, Susan Radcliff and Gaye Holcomb provided valuable computer programming and data analysis assistance for which I am grateful.

Finally, I must acknowledge that this research effort would not have been possible without the support, love, and encouragement of my family who has been my source of inspiration throughout the endeavor.

DEDICATION

To my wife, Marcia

TABLE OF CONTENTS

PAGE

APPROVAL PAGE.....ii

ACKNOWLEDGMENTS.....iii

LIST OF TABLES.....vii

CHAPTER

I. INTRODUCTION.....1

Statement of the Problem.....6
Significance of the Problem.....7
Definition of Terms.....7
Assumptions of the Study.....9
Scope of the Study.....10

II. REVIEW OF THE LITERATURE.....12

Faculty Demographic Characteristics.....12
Gender.....14
Age.....16
Rank.....18
Race.....19
Summary.....22
Intrinsic Dimensions of the Academic Work Environment.....23
Time Devoted to Specific Activities.....24
Productivity.....26
Academic Freedom.....28
Career Satisfaction.....31
Summary.....34
Extrinsic Dimensions of the Academic Work Environment.....35
Workload.....35
Remuneration.....36
Opportunity Structure.....37
Summary.....41
Research on Faculty in Physical Education.....41
Summary.....45

III. PROCEDURES.....46

Development of the Questionnaire.....47
Adaptation of the CTAAC.....50
Administration of Pilot Study.....57
Selection of Subjects.....57
Collection of Data.....60
Anonymity of Respondents.....61
Treatment of the Data.....62

IV. DATA ANALYSIS AND DISCUSSION.....65

Allocation of Time to Professional Activities.....67
Summary.....103
Attitude Toward Profession and Career.....106
Summary.....122
Attitude Toward Current Issues in Higher Education.....124
Summary.....144
Personal and Professional Characteristics....147
Summary.....187

V. CONCLUSIONS.....190

Findings.....191
Implications.....194
Conclusions.....202
Recommendations.....203

BIBLIOGRAPHY.....204

APPENDIX A Instrument Use Approval.....212

APPENDIX B Participation Rates.....214

APPENDIX C Letter and Instrument.....216

Appendix D Follow-up Letter.....226

LIST OF TABLES

Table		Page
1	Allocation of Time to Teaching Activities	69
2	Allocation of Time to Counseling	71
3	Allocation of Time to Other Services to Students	73
4	Allocation of Time to Research and Scholarly Writing	75
5	Allocation of Time to Committee and Administrative Duties	77
6	Allocation of Time to Off-campus Services	79
7	Activity Prefer to Give More Time	81
8	Activity Prefer to Give Less Time	83
9	Teaching Load in Semester Credit Hours	85
10	Teaching Load in Contact Hours	86
11	Number of Professional Meetings Attended 1984-85	88
12	Number of Articles Published in Career	90
13	Number of Books Published in Career	92
14	Currently Doing Research Expected to Lead to Publication	94
15	Have Applied for Research Funds From an External Agency	96
16	Contact With Public School Teachers	98
17	Number of Sabbatical Leaves Taken During Career	100

18 Preferred Retirement Age.....102

19 Attitude Toward College Teaching as a Career.....108

20 Attitude Toward Outlook for Advancement Within the Profession.....110

21 Attitude Toward Base Salary.....112

22 Attitude Toward Outlook for Advancement Within the Institution.....113

23 Attitude Toward Available Teaching Resources.....115

24 Would choose to Work in H.E. if Given a Second Chance.....117

25 Use of Funds to Finance or Change Career.....119

26 Would Choose a Career in P.E. if Given a Second Chance.....121

27 Attitude Toward Collective Bargaining for College Faculty.....126

28 Should Mandatory Retirement be Enforced Against College Teachers.....128

29 Attitude Toward Affirmative Action.....129

30 Attitude Toward the use of Computers in the Instructional Process.....131

31 Attitude Toward Faculty Specialization.....133

32 Attitude Toward the use of Computers for Educational Management.....134

33 Attitude Toward Relaxing Academic Standards for Minority Students.....136

34 Attitude Toward Practice of Academic Freedom.....138

35 Attitude Toward Promotional Process.....140

36 Attitude Toward Quality of Students Majoring in P.E.....142

37 Attitude Toward Quality of Professional Preparation in P.E.....143

38 Age as of December 31, 1985.....149

39 Sex.....150

40 Race or Ethnic Group.....152

41 Marital Status.....154

42 Number of Dependent Children.....156

43 Present Academic Rank.....158

44 Type of Appointment.....160

45 Length of Appointment.....162

46 Full-time Gross Salary.....164

47 Spouse's Education.....167

48 Mother's Education.....169

49 Father's Education.....171

50 Financial Support of Undergraduate Education.....173

51 Financial Support of Graduate Education.....175

52 Years of Higher Education Experience.....177

53 Years at Present Institution.....179

54 Have Held a Job in an Occupational Field Other than Teaching.....181

55 Working on Another Degree or Certification.....183

56 Number of Years Required to Complete Terminal Degree.....185

57 First Thought Seriously About Becoming a College Teacher.....186

CHAPTER ONE

INTRODUCTION

The changing demography of higher education faculty has become a popular area of inquiry in recent years. A growing national trend toward accountability has contributed to the increased attention focused on higher education (Naisbitt, 1984). The accountability trend coupled with an extended period of limited resources has tempered governmental and public support of higher education. Faculty, the foundation of the higher education system and the recipients of a major portion of higher education resources, have received the bulk of this recent attention.

Recent studies on the professoriate have focused on the impact that changes in the academic environment had on faculty. In an effort to assess recent changes within academic ranks, investigators have studied a variety of factors; among these are: faculty career development (Blackburn, 1979, 1981; Trumble, 1980), the social structure of institutions (DeVries, 1975; Leslie et al., 1977; Cameron & Blackburn, 1981; Blackburn, 1985), the academic workplace (Ladd & Lipset, 1975; Ladd, 1979; Pearson & Seiler, 1983; Yuker, 1974, 1984) and the changing

perceptions of faculty (Eckert & Williams, 1972; Ladd & Lipset, 1975, 1976; Boyer & Lewis, 1985; Jacobson, 1985). The results from these studies suggest that changes in faculty demographics are a phenomenon which cannot be attributed to any single factor.

Since researchers have not been able to pinpoint the major causes of change in faculty demographics, a variety of approaches have been utilized to study the topic. Schuster and Bowen (1985), suggest that the composition and performance of faculty are affected by a variety of factors that are intrinsic to higher education. They contend that several variables have influenced faculty demographics including: a shift in values triggered by changing reward systems, a change in values attributed to a dispirited faculty, a lack of focus on liberal arts faculty and a decline in appeal of the academic career to prospective recruits. They also suggest that higher education institutions could do a better job of assisting faculty with the transitions necessitated by changes in the academic workplace. This point is made clearly in their statement:

> It is our contention that an unfortunate paradox exists: on the one hand colleges and universities are unquestionably the leading repositories of knowledge about enlightened human relations. Yet we find that many colleges and universities do a relatively poor job in paying attention to the human needs of the instructional staff. (p. 21)

In an effort to understand changing faculty demographics, the ability of external forces to affect institutional policy and procedures have also been studied. These studies have focused on state, federal and public support of higher education (Bowen, 1982; Austin & Gamson, 1983). The results imply that external forces are equally as culpable as intrinsic forces in the restructuring of the academic work environment. The ability of forces external to an institution to change significantly the academic workplace has restricted the ability of educational institutions to determine their own fate (Austin & Gamson, 1983). One research report identified the influence of external factors on higher education institutions as being a major threat to an institution's vitality (Carnegie Foundation for the Advancement of Teaching, 1982). This intrusion was condemned in the statement:

> The most serious problem encountered by higher education is the cumulative impact of governmental intervention. Taken by itself, any single action may not be unbearably intrusive, but the combined impact of many actions can nearly suffocate an institution. (Carnegie Foundation for the Advancement of Teaching, 1982, p. 65)

The most prevalent approach to the study of changing faculty demographics has been the accumulation of data on personal and professional characteristics. Data collected from these studies enable researchers to make comparisons on measured attributes. These research efforts provide a

baseline of information which allows shifts in faculty demographics to be identified and charted over a period of time.

The appeal of demographic research as a tool to study college faculty is illustrated in a review of recent research efforts which have utilized this approach. The Carnegie Foundation for the Advancement of Teaching has been at the forefront of educational organizations conducting demographic research on college faculty. They have originated and sponsored numerous studies which have provided data upon which longitudinal comparisons were subsequently made (Carnegie Foundation for the Advancement of Teaching, 1969, 1975, 1985). Other educational organizations which have sponsored or conducted similar types of research include the American Council on Education (1979), the Association for the Study of Higher Education (1983, 1984, 1985) and the National Education Association (1979). In addition, a variety of research efforts were conducted on this topic by scholars who studied faculty demographics (Harris, 1972; Eckert & Williams, 1972; Baldridge et al., 1978; Willie & Stecklein, 1982) These organizations and individuals have studied various attributes of college faculty in attempts to identify trends and decisions that have influenced faculty demographics. However, the value of their findings have

been diminished because of wide disparities in the methodology and research designs utilized to study faculty demographics.

Major sources of criticism include allegations that the studies are unstandardized, that available data may be outdated, and that definitional categories are poorly designed and may vary among researchers (Bowen & Schuster, 1986). However, the major shortcomings of demographic research appear to stem from situations in which research findings have been generalized to populations outside the parameters of the sample group (Finkelstein, 1984). Within their proper context, the findings of demographic studies provide a valuable source of information on faculty as these data exist within the identified parameters.

Little systematically gathered information is known about the demographics of those who teach physical education at higher education institutions. Few studies in the physical education literature have focused exclusively on college faculty. Related research has centered on investigations of departmental prestige and career mobility patterns of graduates from various doctoral granting institutions (Baker, 1980; Massengale & Sage, 1982; Sage & Massengale, 1985). In another study, the employment practices of administrators of physical education programs in Big Ten Universities were investigated to assess hiring

practices, resource development and career advancement opportunities (Luck, 1970). Other than identifying the ratio of male to female graduates from different programs, these studies did little to reveal how physical educators, as a group, compare to their peers in higher education.

Statement of the Problem

The purpose of this study was to collect data to profile the professional features of a representative sample of physical educators in higher education who are employed at different institutional levels. The instrument utilized was a modified version of a questionnaire developed by Willie and Stecklein (1982). The study was structured to provide answers to the following questions:

1. What are the personal and professional characteristics of some of the people who form the physical education profession?

2. How much time do physical educators devote to various professional activities?

3. What are the attitudes of physical educators toward current issues in higher education?

4. How satisfied are physical educators with their profession and their careers?

5. Do the profile of physical educators in higher education vary by institutional level?

SIGNIFICANCE OF THE PROBLEM

The knowledge revealed by the present study may be useful in understanding the career development process of physical education faculty in higher education. It is the intent of this study to acquire data which will show how physical educators employed at different institutional levels compare on various demographic characteristics. In addition, levels of satisfaction, time management, and attitudes toward current issues in higher education will be assessed through the analysis of collected data. The obtained data on the personal and professional characteristics of physical educators will be compared to similar data collected on educators in other disciplines. The different sets of data will be contrasted and conclusions offered on the implications of the findings. This analysis is expected to reveal information that will enable present and future physical educators to develop a proactive approach to career development and provide insight into the vitality of the profession.

Definition of Terms

The following terms have been defined as they will be used in the study.

Profile Features: generic qualities, which include personal and professional characteristics, professional

activities, attitudes, and levels of satisfaction that serve to profile faculty.

Personal and Professional Characteristics: descriptive features which serve to portray the individual differences among faculty (e.g. age, sex, academic rank).

Professional Activities: a depiction of how faculty allocate their time for various academic activities (e.g. counseling, teaching, committee and administrative duties).

Attitudes Toward Current Issues: individual responses to issues confronting educators in higher education (e.g. collective bargaining, mandatory retirement).

Faculty Satisfactions and Dissatisfactions: overall impressions of faculty's feelings about their profession and college teaching as a career (e.g. career alternatives, teaching resources, salary).

Intrinsic Dimensions of the Academic Workplace: the nature of academic work, how it is done and how it affects the employee.

Extrinsic Dimensions of the Academic Workplace: the environmental conditions under which academic work is done.

Research Universities: the leading institutions in terms of federal support and doctoral graduates as identified by the Carnegie Council on Policy Studies in Higher Education (1976).

Doctoral Granting Institutions: institutions which have a smaller proportion of doctoral graduates and limited federal support as identified by the Carnegie Council for Policy Studies in Higher Education (1976).

Comprehensive Universities and Colleges: institutions that offer a liberal arts program and at least one professional or occupational program as identified by the Carnegie Council on Policy Studies in Higher Education (1976).

Liberal Arts Colleges: institutions which offer a strong liberal arts tradition and have a limited student enrollment as identified by the Carnegie Council on Policy Studies in Higher Education (1976).

Assumptions of the Study

The assumptions made with regard to this study were:

1. That physical educators in higher education possess characteristics that can be defined as descriptive features; and, that differences among the profiles of these features may be evident among the different institutional levels.

2. That the development of profiles on features of physical educators is an appropriate means by which to study the vitality of the profession.

3. That insights into the features of physical educators are adequately obtained through the use of a self-report inquiry.

Scope of the Study

The intent and focus of the study necessitated certain limitations on its scope. Limitations were imposed on the selection of subjects because of logistical considerations tied to the purpose of the study. Therefore, any generalizations made in reference to the results of this study will be limited to this sample population.

The selection of subjects was limited to faculty who taught full-time at a four year institution that offered a major degree program in physical education. Subject participation was limited to faculty employed in the Midwest and Southern geographical regions of the American Alliance for Health, Physical Education, Recreation and Dance. Targeted institutions were classified into a condensed version of the Carnegie Council on Policy Studies in Higher Education's (1976) classification of institutions, which included the following categories: research universities, doctoral granting universities, comprehensive universities and colleges, and liberal arts colleges. In addition, subject participation was limited to

faculty whose name appears in the Directory of Higher Education Faculty in Physical Education (1982).

A major concern in the selection of an instrument for use in the study was the need to obtain an instrument that obtained data on the personal as well as the professional characteristics of college faculty. Also, a desire to have recent data available for comparative purposes was a determining factor in the selection of an instrument. Based on these criteria, a modified version of an instrument designed by Willie and Stecklein (1982) was selected for utilization in the study.

CHAPTER II

REVIEW OF LITERATURE

The increased attention focused on college faculty, as a research topic, has resulted in a parallel increase in the amount of literature being generated on the topic. Topics of study have included research on such areas as staffing policies and practices, faculty consulting and supplemental income, academic freedom, faculty evaluation, improving instruction, and effects of retrenchment on faculty. For the purpose of this study, the review of literature was limited to the areas of faculty demographics and to the academic work environment. The review focused on the following four areas: (a) faculty demographic characteristics, (b) intrinsic dimensions of the academic work environment, (c) extrinsic dimensions of the academic work environment, and (d) research on college faculty in physical education.

Faculty Demographic Characteristics

The professoriate is composed of heterogeneous individuals who work in a variety of institutional settings. The diversity among individuals and groupings has

made it difficult to develop a portrait of the typical college professor. However, the difficulty of the task has not deterred its undertaking. One early effort utilized a poem to portray the college professor in the following manner:

> Here he sits droning
> On some forgotten truth;
> Heedless of Springtime
> Intolerant of youth
> Here he sits dryly
> Talking all day;
> Woodenly sober
> And slim as his pay (Rudolph, 1962, p. 395).

The poem portrays the college professor of the time as a male engrossed in his subject matter, who is unindulgent of the follies of youth, and who is sustaining on a meager existence. At the time, the accuracy of this description was unable to be proved or disproved because of the lack of information on college faculty. Ladd and Lipset's (1973) study of the professoriate provided the first piece of modern data which enabled a portrait of college faculty to be generated. More recent research has allowed investigators to describe the typical college professor as a 46-year-old married, white male, who holds a tenured position and the rank of associate or full professor at a public, four year comprehensive institution and makes nearly $29,000 a year (Jacobson, 1985). Such a faculty portrait is facilitated by the use of median figures which were obtained from a demographic study. Demographic data

provide important insights into changes that have occurred among college faculty. This review will focus on research on the following demographic characteristics of college faculty: (a) gender, (b) age, (c) rank, and (d) race.

Gender

A review of the literature on college faculty revealed that higher education is a male dominated profession. In a recent study, males accounted for 73 percent of college faculty while females constituted only 27 percent of the membership (Jacobson, 1985). Although these figures represent a seven percent increase in female faculty in recent years, they also represented a decline of almost two percent in female faculty over the past half century (Finkelstein, 1984).

Major differences exist between men and women regarding their work environment and the institutional role they fulfill. Women were found disproportionately at less research oriented institutions (Exum et al., 1984; Finkelstein, 1984; Mengus & Exum, 1983). When compared to men, female faculty were concentrated in lower ranks and at the lower end of the salary scale (Bowen & Schuster, 1986; Mengus & Exum, 1983). Also, male faculty members were more likely to hold tenure, as well as, committee positions, and to be involved in institutional governance when compared to women (Bowen & Schuster, 1986; Finkelstein, 1984). Other

studies have shown that women have had a stronger propensity toward teaching, and were more likely to teach undergraduate students (Bowen & Schuster, 1986; Finkelstein, 1984; Ladd & Lipset, 1976). Researchers have identified additional differences between the work experiences of male and female faculty which include: (1) men were promoted at faster rates than women; (2) men were more likely to be married; (3) men were more satisfied with their careers; and, (4) men had fewer role conflicts as a result of their job (Bowen & Schuster, 1986; Finkelstein, 1984).

The disparities between the work experiences of male and female faculty have been attributed to different factors. One explanation centered on the disciplines in which female faculty were more likely to cluster. Blackburn and Behymer (1976) suggested that female faculty received a less productive orientation toward their academic roles which the authors asserted was related to their disciplines. Women were more likely to be clustered in the humanities than in science oriented disciplines (Finkelstein, 1984). And, since faculty in humanities disciplines, have been found to have a stronger orientation toward teaching rather than research, within this context, female faculty were socialized into acquiring a different

set of work values than the majority of their male counterparts (Finkelstein, 1984; Yuker, 1984).

Cameron and Blackburn (1981) have focused on ascriptive characteristics, or status traits, to explain differences in career development. Characteristics which have been identified as having a bearing on career advancement include age, sex, socio-economic status, place of schooling, and sponsorship. According to this research effort, individuals who possess certain ascriptive traits will be more successful in their academic careers than those individuals who do not possess such traits. Also, derived from this research effort was the finding that those faculty who possess similar ascriptive traits were more likely to work in more prestigious institutions - upper level research oriented institutions - than faculty who do not possess these traits. They contended that female faculty lack the ascriptive traits that have been linked with successful career development. The authors cited that female faculty acquired advance degrees from less prestigious institutions, attained entry level positions at less prestigious institutions and were less likely to be included in established networks. Thus, the pattern of status traits could help to explain the current relative position of females in the professoriate.

Age

The implications of a changing age structure among college faculty is hard to determine. Low turnover rates and limited opportunities outside of education, have limited the number of young faculty hired in recent years (Finkelstein, 1984). Consequently, the average age of faculty has been increasing for the last two decades (Finkelstein, 1984). These conditions have led to what one researcher has called, the "graying of the acdemic profession" (Oromaner, 1981). Finkelstein (1984) has projected that the bulk of college faculty will be replaced over the next 25 years, due to the aging of college faculty. Researchers have expressed concern about the ability within higher education to replace aging faculty with effective academic leaders, and about the impact of aging on faculty job performance (Oromaner, 1981).

However, the effects of age on faculty productivity appears to be negligible. It appeared rather, that certain conditions were more important to faculty at different stages of their academic careers (Baldwin, 1979; Fulton & Trow, 1974). Ladd and Lipset (1976) found that young faculty were more inclined to conduct research and were less satisfied with their present institution. Fulton and Trow (1974) revealed supportive findings that productivity of faculty tended to follow a saddle shape curve. Faculty

were found to be highly productive early in their careers, to experience a decline in productivity during mid-career, and to show an increase in productivity toward the end of their careers. Other research has shown that as faculty increased in age they were more likely to hold tenure, were more satisfied with their careers and eventually became dissatisfied with their fringe benefits (Austin & Gamson, 1983).

Rank

The hierarchical structure of college positions may account for some of the differences that are evident in the academic work environment. Faculty have been fairly equally distributed across ranks in the past (Schuster & Bowen, 1986). According to Schuster and Bowen, during the 1974-75 school year the distribution of faculty by rank occurred in the following manner: professors=23%, associate professors= 22.9%, assistant professors=28.9%, and instructors and others=25.3%. In contrast, comparable figures for the 1981-82 school year occurred in the following manner: professors=27%, associate professors=24.5%, asssistant professors=23%, and instructors and others=24.6%. These figures indicate that a fairly even distribution of faculty, across all academic ranks, still existed as late as 1981. However, the percentages of faculty in the upper ranks has grown considerably in recent years (Jacobson,

1985). The Carnegie Foundation for the Advancement of Teaching's (Jacobson, 1985) recently compiled figures, reveals that faculty ranks are now distributed in the following manner: professors=34.1%, associate professors=24.5%, assistant professors=20.6%, and, instructors and others=20.7%. The increase in upper rank faculty appear to be a result of the low turnover and decreased mobility faculties have experienced in recent years (Finkelstein, 1984). Reserchers Mengus and Exum (1983) have found that as of 1983 women and minorities were disproportionately located in the lower ranks at the more research oriented institutions and took longer to obtain promotions in rank. In a summary of research efforts conducted over a twenty year period, which concentrated on college faculty, Austin and Gamson (1983) revealed that rank appeared to be a predictor of productivity, job satisfaction and ease of promotion. Also, faculty in the upper ranks were found to have more opportunities for input into institutional policies and tended to spend less time on class preparation.

Race

The passing of the Civil Rights Act of 1964 and the subsequent adoption of affirmative action policies on college campuses has resulted in an increase in studies on minority faculty. Most of the studies on minority faculty

have been limited to blacks, who teach at predominantly white institutions (Finkelstein, 1984). Therefore, this review will be limited to an examination of the literature on blacks in higher education and will not focus on other ethnic minorities who teach at higher education institutions.

Prior to the civil rights movement of the 1960s, blacks constituted about three percent of the academic profession (Finkelstein, 1984). Recent data suggest that little change in black representation on college campuses has occured (Bowen & Schuster, 1986; Finkelstein, 1984; Mengus & Exum, 1983; Willie & Stecklein, 1982). A nationwide survey of 5000 faculty members conducted by the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) revealed that the percentage of blacks in higher education had dropped to slightly more than two percent.

Although the number of black faculty has remained relatively stable, their patterns of institutional affiliation has changed more dramactically (Bowen & Schuster, 1986; Finkelstein, 1984). In 1969, between 75-85 percent of black faculty were located at predominantly black institutions (Finkelstein, 1984). The early part of the 1970s saw a shift in distribution when the proportion of black faculty at predominantly black institutions decreased by half (Finkelstein, 1984). Concurrently, the

proportion of blacks at predominantly white institutions increased by eight percent overall and by 12 percent at research oriented institutions (Finkelstein, 1984). Even with a substantial increase in representation, it was found that black faculty were still more likely to work at predominantly black and less research oriented institutions (Bowen & Schuster, 1986; Finkelstein, 1984; Mengus & Exum, 1983).

When compared to whites, black faculty were more likely to be clustered in lower ranks, to teach undergraduate students and to devote less time to research (Bowen & Schuster, 1986; Finkelstein, 1984; Mengus & Exum, 1983). Elmore and Blackburn (1983) contested this concept with findings that black and white faculty at Big Ten universities devoted an equal amount of time to teaching and research. Other researchers have found that black faculty are significantly more involved in student academic and personal counseling and less involved in off-campus professional activities (Cameron, 1978; Elmore & Blackburn, 1983). Blacks have been found to take longer to attain the doctorate and were more likely to have their careers adversely affected by obtaining their college degrees from less research oriented institutions (Finkelstein, 1984).

The differences between the work experiences of black and white faculty may have been attributable to conditions

beyond institutional control. Blacks were more adversely affected by the quality of the graduate training that they received (Finkelstein, 1984). Because the majority of blacks received their degrees from less research oriented institutions, they were more likely to acquire a job in higher education from a similar type of institution (Bowen & Schuster, 1986; Finkelstein, 1984; Mengus & Exum, 1983). Blacks may be receiving a different orientation to the higher education work environment as a result of their educational background (Finkelstein, 1984). Futhermore, Finkelstein asserts that blacks have been socialized into acquiring degrees in disciplines whose professional values were less productive than other disciplines. He bases this contention on research which suggests that the humanities disciplines, the disciplines in which blacks tend to cluster, have a less productive orientation to the academic work environment than other disciplines (Blackburn & Behymer, 1976). Finally, blacks were often asked to sacrifice time from their roles as academicians in order to mentor minority students and to serve on committees which address minority concerns (Finkelstein, 1984; Mengus & Exum, 1983).

Summary

In the previous research, demographic characteristics have played a key role in defining how faculty members

appear to experience the academic work environment. Researchers have claimed to link certain demographic characteristics with specific academic experiences. Assertions of how demographic characteristics interact with the academic environment have abounded because of these apparent linkages.

The research on the demographic characteristics of faculty has helped the academic community to understand the work environment by associating various demographic characteristics with different work experiences. As a result of the associations developed with demographic research, institutions and individual faculty are capable of taking a proactive rather than a reactive approach to needed adjustments in the academic workplace.

Intrinsic Dimensions of the Academic Work Environment

A discussion of faculty working conditions is complicated by the uniqueness of each working environment and the diversity of the workforce. It can be argued that each institution offers a different experience for its faculty, and, individual faculty members have differing perceptions of their academic experience. Researchers Austin and Gamson (1983) have identified two dimensions they believe are common to all academic work experiences. One dimension was called the intrinsic dimension which

incorporated the nature of the academic work, how it was done and how it affected the employee. The second dimension was called the extrinsic dimension, and incorporated environmental conditions under which academic work was done.

The next section of the review of literature will discuss the intrinsic dimensions of the academic workplace. Topics to be discussed include: (a) time devoted to specific activities, (b) productivity, (c) academic freedom and, (d) career satisfaction.

Time Devoted To Specific Activities

Time management within the academic environment is regulated by individual preference and institutional responsibility. On most campuses, faculty fulfill traditional roles of teaching, research and community service. Researchers have found that interest in different roles changed over the course of a career (Baldwin, 1979; Fulton & Trow, 1974). Allocation of time to different roles has been shown to be related to institutional type, discipline and faculty age (Baldridge et al., 1978; Fulton & Trow, 1974; Ladd, 1979; Willie & Stecklein, 1982). Individualized standards of professional performance also have impacted on how faculty allocate their time. In the present era college faculty members, at all levels, have indicated a strong preference for teaching regardless of

what other factors were taken into account (Austin & Gamson, 1983; Jacobson, 1985; Ladd, 1979).

On the average, most faculty members spent more time teaching classes than conducting any other academic responsibility. Figures obtained from the National Science Foundation (1981) indicated that faculty in science, engineering and social sciences had a weekly schedule that on the average was alloted in the following manner: 17.8 hours were devoted to instruction, 11 hours to research, nearly nine hours to public service, nearly five hours to professional enrichment and nearly four hours to remunerative outside work. Except for faculty employed at designated research universities, these figures were representative of how faculty throughout higher education manage their time (Yuker, 1984). Researchers Rich and Jolicoeur (1978) found that faculty in education and fine arts had the greatest preference for and devote the most time to teaching activities.

The type of institution with which faculty were affiliated was a major factor regarding the allocation of time for research (Baldridge et al., 1978; Fulton & Trow, 1974; Ladd, 1979; Willie & Stecklein, 1982). Willie and Stecklein (1982) found that the average time spent on research at state universities and private liberal arts colleges was less than five percent in three different

surveys conducted over three decades. In comparison, time spent on research at a research university was 13 percent in 1956, 23 percent in 1968 and 20 percent in 1980. The results of Willie and Stecklein's research illustrates the disparity that has existed between research universities and other institutions regarding time devoted to research.

Faculty members are involved in a variety of activities, although, teaching and research consumed most of their time. As faculty members become more experienced, they also become more comfortable with their teaching demands and tend to get more involved in non-teaching activities (Baldwin & Blackburn, 1981). Involvement in activities such as administrative duties, counseling, and consulting, varied by institutional type, rank and discipline (Bayer, 1973; Yuker, 1984). However, these activities represented a very small portion of total faculty responsibilities.

Productivity

Productivity in higher education usually has been associated with research publication. Those faculty who published considerable volumes of literature were considered most productive (Finkelstein, 1984). Productivity has appeared to be related to institutional level (Blackburn & Havinghurst, 1979; Ladd & Lipset, 1975). Data from a 1985 study reveals that close to one third of

5000 faculty members surveyed, reported that they have not had any articles published in academic or professional journals (Jacobson, 1985). In comparison to an earlier study conducted by Ladd and Lipset (1975), these figures represent an increase in the number of faculty who report that they have never published. The nationwide study conducted by Ladd and Lipset found that one fourth of all faculty members surveyed, reported that they never have had any articles published in academic or professional journals. Also, their study revealed massive variations in the rate of publication by institutional levels. Institutions which were classified as being lower tier institutions, according to the Carnegie Commission Classification of Institutions (1976), were found to have as many as 80 percent of their faculty members report that they never or rarely publish. In contrast, only 22 percent of faculty members who worked at the highest level institutions reported that they never or rarely publish. The discrepancies in research productivity, among institutional levels, appear to support the contention that research productivity can be associated with institutional affiliation (Blackburn & Havinghurst, 1979). Willie and Stecklein (1982) provided supportive data from their study of college faculty in Minnesota which revealed that at research institutions, three out of four faculty had

published, in contrast to a publication rate of one out of three for all other institutions. These studies support the common conception that drastic variations in publication rates occured among different institutional levels (Blackburn & Havinghurst, 1979; Ladd & Lipset, 1975).

Although age has been shown not to be a predictor of productivity, age has been associated with career productivity (Blackburn, 1979; Blackburn et al., 1978; Fulton & Trow, 1974). Researchers have found that faculty age at the time of first publication and faculty age at the awarding of the advance degree determined career productivity to an appreciable extent (Bayer & Dutton, 1977; Blackburn et al., 1978). Ladd (1979) found a higher rate of publication for academicians in their first two decades of higher education experience. Other researchers have found that productivity over a career is affected by job security, fear of risk taking and competition (Pelz & Andrews, 1976). Pelz and Andrews found that tension and competition produced better results than placid security when different work environments were compared (1976).

Academic Freedom

Academic freedom is a concept inherent to and valued within higher education. The concept was developed to protect faculty from being arbitrarily dismissed for the exercise of freedoms of thought and speech (Olswang & Lee,

1984). Olswang and Lee have reported that the originators of the concept of academic freedom focused on three basic elements: (1) freedom of inquiry and research, (2) freedom of teaching within the university, and (3) freedom of extramural utterance and action. Faculty are awarded tenure - permanent employment with an institution - as a means of insuring their academic freedom.

Academic freedom has provided faculty with job security that is unique to higher education (Olswang & Lee, 1984). The awarding of tenure serves to protect academic freedom and the individual autonomy that are associated with academic freedom. However, internal and external pressures have been interacting to modify the concepts of academic freedom and tenure as they have been known in the past (Olwangs & Lee, 1984). Olwangs and Lee assert that internal pressures, such as decreasing resources and a higher percentage of tenured faculty, coupled with external pressures, such as demands by state legislators for increased accountability, have forced educational institutions to reevaluate how academic freedom and the awarding of tenure is currently practiced.

An increasing amount of financial support for higher education has been derived from external sources (Bowen, 1982). The increase in external sources of institutional funding have been accompanied by increasing demands to

control the use of funds given to educational institutions (Olwangs & Lee, 1984). Educational institutions have been in a precarious position of trying to placate their external sources while at the same time protecting faculty rights to academic freedom and tenure. The task of appeasing both interest groups has been complicated by the financial realities of higher education in the 1980s. One research report indicated that a decision to award tenure to a 35 year old faculty member will probably cost the institution more than one million dollars by the time the professor retires (Mortimer et al., 1985). The number of faculty with tenure has limited the ability of institutions to infuse younger faculty into academic environments (Trumble, 1980). Recent revelations that two thirds of college faculty already hold tenure indicates that faculty opportunities will continue to be limited in the near future (Jacobson, 1985).

Academic freedom and tenure were reported as the two greatest sources of job satisfaction among faculty (Austin & Gamson, 1983). Institutional size and complexity have been found to be linked to a faculty member's autonomy and power (Baldridge et al., 1978). A group of researchers found that faculty at large institutions had more autonomy than faculty at smaller institutions (Baldridge et al., 1978). They found that faculty at the more research

oriented institutions had more autonomy and exercised greater power than faculty at less research oriented institutions. The importance of tenure to faculty was illustrated in the revelation that in 1976, 60 percent of faculty listed tenure as the most important factor in deciding whether or not to relocate (Ladd & Lipset, 1976).

Career Satisfaction

The academic work environment has been shown to be perceived differently by those outside of higher education from those who are inside the higher education environment (Yuker, 1984). Pearson and Seiler (1983) asserted that research on job satisfaction in higher education has been limited, due to perceptions that a high level of satisfaction existed in the area. A federal study supported this contention with results showing that college professors ranked 120 in a list of 130 occupations ranked in order of decreasing stress (National Institute of Occupational Safety and Health, 1978).

However, those who make up the profesoriate had differing views. Career satisfaction among faculty has been steadily declining for the past three decades (Willie & Stecklein, 1982). Willie and Stecklein found that 84 percent of the respondents to a 1980 survey indicated that they were satisfied or very satisfied with their careers. Data from the 1980 study indicated that satisfaction levels

had dropped from a high of 92.6 percent in 1956 and the 84.8 percent reported in 1968.

Ladd and Lipset (1976) reported that 88 percent of their respondents indicated that they would choose academic life as a career if they could remake their decision. However, more recent research has indicated that career satisfaction has been declining in recent years as can be shown by Jacobson's work in which he found an increase in job dissatisfaction among faculty (Jacobson, 1985). His findings indicated that 45 percent of all faculty at different institutional levels would advise against a career in higher education. He found that 52 percent of the respondents were prepared to give serious consideration to new academic job offers and 40 percent indicated that they might leave higher education within five years.

The increase in dissatisfaction with college teaching may be related to changes in the working environment and faculty compensation (Austin & Gamson, 1983). One study found that 72 percent of faculty believed that too many students are ill-suited for academic life (Ladd, 1976). The same study found that 96 percent of college faculty maintained that the students, with whom they have considerable contact, are seriously underprepared for college work. Other results from Ladd's study suggested that 81 percent of faculty believed that a lowering in

academic standards had occurred. Willie and Stecklein (1982) reported that the greatest source of faculty dissatisfaction was working conditions, salary, and administrative interactions. Another study asserted that low satisfaction was associated with limited opportunities for advancement, limited prospects for comfortable retirement and limited prospects for financial security (Bureau of Institutional Research, 1974). Researchers have reported that time constraints, related to excessive demands to do too many discrete tasks, were a source of stress and a chief complaint among faculty (Baldwin & Blackburn, 1981; Blackburn, 1979; Finkelstein, 1978).

According to Finkelstein (1978), job satisfaction is perhaps more related to a faculty member's personality and perceptions of their career than any other factor. Recently, McMillian (1986) reported that faculty are a source of their own dissatisfaction for imposing unrealistic standards on themselves. She has suggested that institutions contribute to these unrealistic expectations by requiring faculty to perform well, simultaneously in the areas of research, teaching and community serices. Austin and Gamson (1983) have indicated that the greatest sources of satisfaction were related to the intrinsic dimensions of the job in contrast to the greatest sources of dissatisfaction being related to the extrinsic dimensions

of the job. Their research indicated that autonomy, academic freedom, independence, nature of academic work, job stability, and social recognition were some of the most frequently mentioned sources of satisfaction reported by faculty. Major sources of dissatisfaction were reported to include salarly levels, time restrains, retirement prospects, and lack of resources. Austin and Gamson's assertions were based on a summary of published research efforts which have focused on the topic of job satisfaction among college faculty.

Summary

College faculty report having experienced a level of autonomy in the work environment that is unique to higher education. This independence is protected by the faculty rights which are outlined in tenure procedures. The freedom and job security, that are a part of the academic work environment, have been found to be the principal sources of job satisfaction among faculty.

Faculty are expected to be highly productive workers in return for the autonomy that they enjoy. Productivity among faculty has been associated with individual preference and academic orientation. Internalized faculty standards impact on their productivity as well as how individuals spend their time on the job.

Extrinsic Dimensions Of The Academic Work Environment

The next section of the review of literature will discuss the extrinsic dimensions of the academic workplace. Topics to be discussed include: (a) workload, (b) remuneration, and (c) opportunity structure.

Workload

Academicians appeared reluctant to participate in studies which investigate faculty workload (Yuker, 1984). According to one study, their disinterest in participating in such studies stemmed, apparently, from a belief that the obtained results would be inaccurate and provide a distorted perception of their professional contributions (Yuker, 1984).

Obtaining an accurate estimation of faculty workload is difficult because of the different methods by which it is determined. A lot of disagreement exists over which method best measured faculty's professional obligations (Yuker, 1984). Some institutions utilize credit hours and others utilize contact hours to assess workload. One study, utilizing percentages of time, found that the workload for most faculty averages out to be between 45 to 55 hours a week (Ladd, 1979). Futher, institutional level must be taken into consideration when workloads are discussed. Faculty employed at research universities usually have a lighter assigned workload than faculty at other types of

institutions (Yuker, 1984). When gender is considered, no significant difference exist between the workload of male and female faculty (Yuker, 1984). Finally, an inverse relationship has been identified between rank and workload (Yuker, 1984). In a review of several studies on faculty workload, Yuker reported that professors tend to have the lightest teaching loads while instructors and assistant professors were found to have the highest teaching loads.

Remuneration

One of the greatest sources of dissatisfaction for faculty has been identified as compensation (Ladd, 1979; Winter et al., 1981; Willie & Stecklein, 1982). Austin and Gamson (1983) suggested that the dissatisfaction with salary may be attributable to the inability of salaries to keep up with the cost of living over the last decade. A recent study indicated that 60 percent of college faculty believed that their salary is either fair or poor (Jacobson, 1985). The same study indicated that 75 percent of college faculty believed that their salaries have not kept pace with inflation. In fact, when compared to other professional employees, faculty salaries have failed to keep pace with the gains made by these employees (Carnegie Council on Policy Studies, 1980).

Historically, faculty compensation has been affected by a variety of factors. A positive correlation has been found

between research productivity and base pay and supplemental income (Marsh & Dillion, 1980). The same study was able to identify a positive correlation between departmental and institutional involvement and base salary. Faculty salaries tend to vary according to institutional type and discipline (Carnegie Council on Policy Studies, 1980; Ladd, 1979; Winter, 1982). College faculty at public institutions typically earn more than their counterparts at private institutions (Carnegie Council on Policy Studies, 1980). Doctoral granting institutions have paid a higher base salary than other types of institutions (Carnegie Council on Policy Studies, 1980). Researchers Marsh and Dillion (1980) obtained results that support a popular belief on college campuses that teaching was not rewarded in higher eduation (McLauglin et al., 1979), because their study reported a negative correlation between teaching activities and base salary.

Opportunity Structure

A growing number of college faculty have become disenchanted with career opportunities in higher education. Satisfaction with college teaching has been declining for the past three decades (Willie & Stecklein, 1982). A growing contingent of faculty have been advising others against choosing a career in higher education as well as questioning whether they would elect to become college

teachers if they could remake their decisions (Jacobson, 1985). Ladd and Lipset (1976) reported that 67 percent of college faculty believed that the status of the profession had declined. They also revealed that 40 percent of college faculty were less enthusiastic about their work, in comparison to when they first started their careers. The decline of faculty morale has continued for the past decade (Anderson, 1983). The faculty perception that little hope exists for improved oportunities has been described as a major cause of faculty dissillusionment (Austin & Gamson, 1983).

Within the last fifteen years career mobility has been drastically limited in higher education (Bowen & Schuster, 1986). Limited opportunities are attributed to low turnover among faculty, and an increasing number of faculty holding on to tenured positions (Jacobson, 1985). A faculty member's average length of service to an institution has been increasing (Willie & Stecklein, 1982). Concurrently, the desire of faculty to relocate to another institution has been increasing as well (Jacobson, 1985). One study found that 31 percent of its respondents thought they would be more satisfied at another institution and 44 percent thought they would be equally content at another insitution (Ladd & Lipset, 1976). A more recent study found that 52 percent of faculty indicated they would seriously consider

another job if one were offered (Jacobson, 1985). Results also indicated that faculty at public institutions were more inclined to relocate than faculty at private institutions. The decline in opportunities in higher education has produced a growing contingent of faculty who believe that opportunities for advancement will continue to be limited, and who feel trapped in the profession as a consequence (Jacobson, 1985).

Austin and Gamson (1983) have delineated the faculty work force into two groups which reflect how faculty are affected by limited opportunities. One group of workers was categorized as the moving group. This group aspired to move to a higher level within the profession. The other group was categorized as the stuck group. This group perceived that little chance exists for increased mobility within the profession. Those individuals, who perceived themselves as stuck, tended to develop lower aspirations, had lower self-esteem, were less likely to take risks, looked to peer groups or outside organizations for personal attachments and expressed dissatisfaction through griping and resistance to change.

Faculty members have been affected differently by limited opportunities in higher education. Schurr (1980) found that opportunity structure varied according to regional economic situations, institutional type and a

faculty member's personal circumstances. He found that faculty at research universities were not as severely affected by limited opportunities as those faculty who were employed at other types of institutions. His research also revealed that limited opportunities were especially severe for faculty at geographically isolated universities. He also found that opportunities for professional growth were just as likely to be limited within one's work environment as outside their work environment.

The increasing number of senior faculty members have limited the opportunities for younger faculty. Many of the senior faculty have traded their mobility for the job security of tenure (Austin & Gamson, 1983). Ladd and Lipset (1976) have claimed that the depressing opportunity structure has created a group of faculty who are strongly attached to their profession but who show weak attachments to their institutions. Austin and Gamson (1983) indicated that young faculty are less likely to be attached to their institution because institutional loyalty has been related to a faculty member's status in the institution, profession, and discipline. However, young faculty were less likely to have obtained these status traits. Unless the higher education establishment finds a way to expand the career horizons of young faculty, it is going to be

very dificult to revitalize the educational environment (Schurr, 1980).

Summary

Faculty have been protective of information about their workload committments. Faculty seemed to believe that those outside of higher education could not understand nor appreciate the intangibles of the position. Workload, both actual and perceived, may be a function of institutional affiliation.

Faculty compensation has been reported to be the greatest source of dissatisfaction. Dissatisfaction was attributed to the inability of salaries to keep up with the cost of living, or to match the gains of other professional employees. Salary fluctuations occur throughout higher education with differences in salary associated with institutional type, discipline and research productivity.

Limited opportunities appear to have tempered faculty morale. A growing contingent of faculty were dissatisfied with their career development. Faculty were more inclined to relocate or to leave the profession in an effort to revitalize their careers.

Research On Faculty In Physical Education

The research literature about the personal and professional characteristics of college faculty in

physical education was extremely limited. Little is documented about the personal or professional characteristics of the individuals who work in the profession. In one of the few studies that have focused on college faculty in physical education it was found that the prestige of the doctoral granting institution had a determining effect on subsequent employment in physical education (Massengale & Sage, 1982). The study investigated faculty mobility of physical educators at the top ranked departments of physical education that awarded doctoral degrees. Faculty, employed at these institutions, were studied to assess their mobility patterns. The sample consisted of 795 full-time faculty, with earned doctorates and academic rank, who taught at the 58 institutions which awarded the greatest number of doctoral degrees in physical education. These institutions were ranked from 1 to 58. Ratings were based on a scale developed by Massengale (1981), which reflected graduate faculty quality and doctoral program effectiveness as perceived by members of the National Association for Physical Education in Higher Education. Male faculty constituted 67 percent of the subjects and female faculty represented 33 percent of the subjects. Data on the rank and status of the subjects were obtained from reviews of college catalogs and bulletins published by the institutions, or by direct request made by

phone or through the mail. The results indicate that at the top ten ranked institutions, 30 percent of faculty members had graduated from one of the instituions in this category. In contrast, at the eight lowest ranked institutions, only 9 percent of faculty members had graduated from one of the institutions in this category.

The study also revealed that 31 perecnt of faculty employed at the institutions ranked in the top five and 30 percent of faculty employed at institutions ranked at levels six through ten, were employed in the same department in which they received their degree. In contrast, 14 percent of faculty employed at institutions ranked 49 through 54 and 13 percent of faculty employed at institutions ranked 54 through 58, were employed in the same department in which they received their degree. However, the researchers were unable to determine if faculty who are employed in the same departments in which they receive their degree had worked at another institution prior to obtaining their present positions. Based on their findings, Massengale and Sage contend that inbreeding - attaining employment at the same institution that has granted the doctorate degree - has been pervasive in physical education. They concluded from their results, that faculty in physical education were bound to the same career mobility patterns that existed among faculty in other

disciplines. These findings were based on the assumption that the rating scale, which was based on the perceptions of a limited sample of physical educators, adequately measured faculty quality and program effectiveness.

The data obtained from Massengale and Sage's initial study was reanalyzed to study the regional mobility of faculty in physical education (Sage & Massengale, 1985). The 58 institutions studied in the earlier research, were categorized into six different regions which correspond to the geographical districts of the American Alliance for Health, Physical Education, Recreation, and Dance. These regions are categorized into the following six districts: Eastern, Southern, Central, Midwest, Northwest, and Southwest. The regions were also ranked according to the number of institutions, in each region, which were ranked in the top twenty of Massengale's ratings of doctoral degree granting institutions in physical education. Because 13 out of the 20 highest ranking institutions were located in the Eastern and Midwest districts, these regions were ranked as the most prestigious. Since 4 out of the 20 highest ranking institutions were located in the Central and Southwest districts, these districts were ranked as the second most prestigious regions. Finally, with only 3 out of the 20 highest ranking institutions being located in the Southern and Northwest districts, these regions were ranked

as the least prestigious regions. Based on these regional guidelines, it was found that 57 percent of all faculty who obtained their doctoral degrees from the high prestige regions had migrated to another region in comparison to 44 percent of faculty from the lowest prestige region who had experienced interregional mobility. They maintain that, in general, doctoral faculty tended to remain in the same geographic region where they obtained their doctorate. In addition, faculty, who graduated from the more prestigious institutions, were found to have more mobility than faculty who graduated from less prestigious institutions. They concluded that faculty in physical education experienced the same geographical mobility that existed among faculty in other disciplines.

Summary

Little was known about physical educators in higher education. The lack of information on physical education was attributable to an absence of research on the topic. Physical educators were found to follow the same patterns of geographic and career mobility that existed among faculty in other disciplines. The practice of inbreeding was found to be pervasive in physical education, especially at the more prestigious doctoral granting institutions as defined by Massengale (1980).

CHAPTER III

PROCEDURES

The purpose of this study was to obtain data on the personal and professional characteristics of physical educators in higher education and to profile the features of physical educators who are employed at different institutional levels. Subjects were selected from institutions that were located in the Midwest and Southern regional districts of the American Alliance for Health, Physical Education, Recreation and Dance. The instrument used in the investigation was a modified version of a questionnaire developed by Willie and Stecklein (1982). The questionnaire developed by Willie and Stecklein was titled, "College Teaching As A Career" and will be referred hereafter as CTAAC. The questionnaire utilized in this study was titled, "Scott's Faculty Profile Survey" and will be referred hereafter as SFPS.

Answers to the following questions were sought from this study:

1. What are the personal and professional characteristics of some of the people who form the physical education profession?

2. How much time do physical educators devote to various professional activities?

3. What are the attitudes of physical educators toward current issues in higher education?

4. How satisfied are physical educators with their profession and their careers?

5. Does the profile of physical educators in higher education vary by institutional level?

Development of the Questionnaire

Data for this investigation were obtained from subjects who had completed the SFPS. The SFPS questionnaire consisted of 57 items designed to obtain information on the personal and professional characteristics of college faculty. SFPS was a revised version of the CTAAC developed by Willie and Stecklein in 1982. The CTAAC had originally been developed by Stecklein and Eckert (1958) in an effort to study college teachers in the state of Minnesota.

The original instrument developed by Stecklein and Eckert was designed to obtain data on the individuals who had chosen to work in Minnesota's higher education institutions. To facilitate the task of developing a viable instrument, two advisory committees were formed. One committee was composed of representatives from the different types of institutions that had agreed to

participate in the study. The second committee was composed of representatives from different colleges and divisions at the University of Minnesota. These two committees assisted Stecklein and Eckert in the development of the questionnaire, in the selection of the sample population, and in the encouragement of subject participation. In addition, the committees, with the assistance of a nationwide group of 50 educators, were utilized to establish content validity for the instrument. The questionnaire was then piloted in three different states and results were utilized to improve the instrument's effectiveness. Once all responses had been collected, 10 percent of the sample was randomly selected to be interviewed by trained interviewers. The interviews, which occurred in or near the offices of the subjects and lasted about 45 minutes to an hour, were used to check the reliability of the instrument.

Eckert and Williams (1972) replicated the study over a decade later with a modified version of the original questionnaire. Consequently, the questionnaire utilized by Willie and Stecklein in 1982 was the end-product of two prior efforts to obtain data on college faculty. Permission to utilize the CTAAC questionnaire was granted by John Stecklein (See Appendix A).

Willie and Stecklein's questionnaire was chosen for

this study for several reasons. First, the CTAAC had the advantage of having been utilized in three different studies conducted over a thirty year period. As a result, the questionnaire reflected the experience that the researchers had gained from their previous studies. The questionnaire had been revised twice in order to incorporate needed revisions that had been identified in prior studies.

A second reason for choosing the CTAAC was the wide range of issues covered by the questions. The CTAAC was divided into five categories. These categories included: choice of careers, education and previous experience, present position, appraisal of college teaching as a career, and demographic information. These categories encompassed issues and items of information that were pertinent to the understanding of the college teaching career.

A third reason for selecting CTAAC was that it provided three sets of data for comparative analysis. Having access to these sets of data enabled the present investigator to compare the results of the current study to data that had been collected from three previous studies which spanned a thirty year period.

Finally, the CTAAC was chosen, because the format of the questions required less modification than other

instruments considered for utilization in this study. A major objective in the development of SFPS was that all questions be posed in a multiple-choice format, which was perceived to be conducive to different types of statistical analysis. An appeal of the CTAAC was that many of the questions were already in the multiple-choice format and many of the remaining questions were easy to adapt to this format.

Adaptation of the CTAAC

Most of the items in SFPS were selected from questions found in the CTAAC. A group of 15 questions was incorporated into the SFPS exactly as they were published. Questions from the CTAAC that appeared in the SFPS without modification include questions in the following sections of SFPS:

I. Allocation of time to professional activities, which included questions;

7. To which one of the following activities would you prefer to give more time?

8. To which of the following activities would you prefer to give less time?

18. Assuming adequate personal income, your own good health, and no institutional restrictions, at what age would you like to retire from academic service?

II. Attitude toward profession and career, which included questions;

19. Please indicate which of the expressions below best describes your attitude toward college teaching as a career.

24. Do you think you would again choose to work in an educational institution if you could remake your decision?

25. If institutions would provide funds to enable you to enhance or change your present career, in which of the following would you participate?

III. Attitude toward current issues in higher education, which included questions;

27. What is your attitude toward collective bargaining for college faculty?

28. Do you think there should be a mandatory retirement age for college teachers?

IV. Personal and professional characteristics, which included questions;

39. Sex

46. Full-time gross salary for the academic year.

54. Have you held a full-time job in an occupational field other than teaching since the completion of your graduate education?

55. Are you presently working on another degree or certification?

57. When did you first think seriously about becoming a college teacher?

A second group of seven questions was included in the SFPS as they appeared in the CTAAC, except that multiple-choice responses were provided for each question. These seven questions were posed in an open-ended format in CTAAC. Selection of answers and response ranges for these seven questions were chosen based on the availability of comparative data (Carnegie Foundation for the Advancement of Teaching, 1985). Those questions which were modified in this manner included questions in the following sections of SFPS:

I. Allocation of time to professional activities, which included questions;

9. What was your teaching load, in semester credit hours, during the fall term of the current academic year?

10. What was your teaching load, in contact hours, during the fall term of the current academic year?

17. How many sabbatical leaves have you taken during your teaching career?

IV. Personal and professional characteristics, which included questions;

41. Marital status

47. Spouse's education

48. Mother's education

49. Father's education

A third group of 12 questions that appeared in SFPS was obtained from the CTAAC with major revisions. These questions had some wording modified as well as responses provided, in contrast to how they appear in CTAAC. All answers and response ranges were selected because of the existence of data that would facilitate comparative analysis (Carnegie Foundation for the Advancement of Teaching, 1985). Questions were modified to insure their compatibility with the selected responses. The questions which were modified in this manner include questions in the following sections of SFPS:

I. Allocation of time to professional activities, which included questions;

1. Teaching activities (including preparation, grading, thesis advising, etc.).

2. Counseling (personal and academic).

3. Other services to student groups or organizations.

4. Research and scholarly writing.

5. Committee and administrative duties.

6. Off-campus services (professional meetings, consultant services, community talks, etc.).

11. Number of national professional meetings attended during the 1984-85 school year?

15. Have you ever applied for research funds from any

agency other than your own college or university?

IV. Personal and professional characteristics, which included questions;

38. Age as of December 31, 1985

42. Dependent children

50. Which of the following means of support did you use to finance the cost of the major portion of your undergraduate education?

51. Which of the following means of support did you use to finance the cost of the major portion of your graduate education?

Finally, a group of 23 questions was incorporated in SFPS that were not included in CTAAC. These questions were conceived for this study and were adapted to the format utilized for the other questions appearing in SFPS. Questions were developed on issues that the investigator deemed pertinent to this study. In addition, questions were selected for inclusion in SFPS because in some cases, comparative data were available (Carnegie Foundation for the Advancement of Teaching, 1985). The questions which were developed in this manner include questions in the following sections of SFPS:

I. Allocation of time to professional activities, which included questions;

12. Total number of articles published in academic or

professional journals.

14. Are you currently doing research expected to lead to publication?

16. If you are in professional preparation, have you had contact with public school teachers during the past year at their school site?

II. Attitude toward profession and career, which included questions;

20. Please indicate which of the expressions below best describes your attitude toward the outlook for advancement within the profession.

21. Please indicate which of the expressions below best describes your attitude toward your base salary.

22. Please indicate which of the expressions below best describes your attitude toward toward the outlook for advancement within your institution.

23. Please indicate which of the expressions below best describes your attitude toward the teaching resources available at your institution.

26. Do you think you would again choose to pursue a career in physical education if you could remake your decision?

III. Attitude toward current issues in higher education, which included questions;

29. What is your attitude toward the concept of

affirmative action?

30. What is your attitude toward the use of computers in the teaching of educational material?

31. What is your attitude toward the amount of specialization that has occurred within the profession?

32. What is your attitude toward the use of computers in the management of the instructional process?

33. What is your attitude toward the relaxation of academic requirements in the admission of minority group members into graduate programs?

34. Please indicate which of the expressions below best describes your attitude toward the practice of academic freedom at your institution.

35. Please indicate which of the expressions below best describes your attitude toward the promotional process utilized by your institution.

36. Please indicate which of the expressions below best describes your attitude toward the quality of students who are deciding to major in physical education.

37. Please indicate which of the expressions below best describes your attitude toward the professional preparation students receive in physical education.

IV. Personal and professional characteristics, which included questions;

40. Race or ethnic group

43. Present academic rank

44. Type of appointment

45. Length of appointment

56. Number of years it took to complete your terminal degree?

Administration of a Pilot Study

Physical educators from institutions located in the Eastern district of the American Alliance for Health, Physical Education, Recreation and Dance were used as subjects for a pilot study. All institutional levels were represented within the group of subjects who participated in the pilot study. These individuals were asked to complete the SFPS and to record the time necessary for its completion. Respondents were also encouraged to provide comments on the clarity of questions. The investigator used the responses of this pilot group (n=6) for estimating the time needed for the completion of SFPS. Based on the responses of the individuals who had participated in the pilot study, it was determined that about 12 minutes were required to complete the questionnaire and that no other refinements to the instrument were needed.

Selection of Subjects

Subjects for this study were selected from higher

education institutions located in the Midwest and Southern regions of the United States as defined by the American Alliance for Health, Physical Education, Recreation and Dance. The Midwest and Southern regions included those states which were located in these regions of the country as designated by the American Alliance for Health, Physical Education, Recreation and Dance. The Midwestern region consisted of the following states: Illinois, Indiana, Michigan, Ohio, West Virginia, and Wisconsin. The Southern region consisted of the following states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Virginia, and Texas. These two regions were selected for participation in this study because the investigator believed they would provide a representative sample of the profession. This decision was based on Massengale and Sage's (1982) analysis of institutional quality which identified AAHPERD's Midwest region of higher education institutions as being a high prestige region, and AAHPERD's Southern region of higher education institutions as being a low prestige region. The regional rankings were based on the number of doctoral granting institutions, ranked in the top twenty of Massengale's rating system, that were located in each geographical region.

All four year institutions located in the Midwest and

Southern districts were targeted for participation. Actual participation was limited to institutions that offered a degree program in physical education as identified by the Directory of Physical Educators in Higher Education (1982). A total of 281 institutions met this criterion. Targeted institutions were categorized into a condensed version of the Carnegie Council on Policy Studies in Higher Education's (1976) classification of institutions which includes the following categories: research universities, doctoral granting institutions, comprehensive universities and colleges, and liberal arts colleges. Based on this classification scheme, 27 institutions were categorized as research institutions, 29 institutions were categorized as doctoral granting institutions, 146 institutions were categorized as comprehensive universities and colleges and 79 institutions were categorized as liberal arts colleges.

Faculty at the 281 targeted institutions were identified for participation as a result of their inclusion in the Directory of Physical Educators in Higher Education (1982). A stratified random sampling procedure (Leedy, 1985) was utilized to identify subjects for participation in the study. The process involved the stratification of faculty into four different institutional categories (see Appendix B). The names of 100 professionals were systematically selected in which every twentieth name, in

each of the four listings, was drawn after a random table was utilized to initiate the selection process. A total of 400 subjects were solicited for participation in this study. Of this number, 181 subjects contributed data for analysis. Based on a postmark review of the returned questionnaires, it was determined that 54 percent of the returned questionnaires were mailed from the southern district, 42 percent of the returned questionnaires were mailed from the midwest district, and four percent of the questionnaires were unabled to be categorized.

Collection of Data

On March 13, 1986, following approval of the study by the Human Subjects Review Committee of the School of Health, Physical Education, Recreation and Dance at the University of North Carolina at Greensboro, a packet of information was mailed to 400 faculty members. The packet included an invitation letter, a copy of SFPS, a postcard and a self-addressed stamped envelope (see Appendix C). The letter explained the nature of the study and requested the participation of each faculty member. Each subject was asked to utilize the questionnaire to provide insights and information on their professional development. The letter also informed subjects of their obligations if they agreed to participate.

Instructions for completing the SFPS were stated on the questionnaire. Respondents were asked to check their responses directly on the questionnaire. Completed forms were to be returned in the self-addressed stamped envelope that was enclosed with the questionnaire. The questionnaire required about 12 minutes for completion. The signed returned postal card was interpreted as an indication of the subject's willingness to participate in the study.

A return rate of at least 40 percent, for each institutional category, had been established as the targeted acceptance rate which would precede data analysis. On April 3, 1986 a second request for participation was mailed to all subjects located in the institutional categories where the acceptance rate had not been achieved (see Appendix D). The second letter stressed that full participation was vital to the completion of the study. Subjects were also requested to utilize the enclosed postal card to indicate their willingness to participate.

Anonymity of Respondents

The anonymity of respondents was preserved in several ways. First, a self-addressed stamped envelop was enclosed which enabled subjects to return the questionnaire without identifying its origins. Second, respondents were not asked to identify themselves on the SFPS. The only markings that

appeared on SFPS were different colored stars which represented the four different institutional classifications. Finally, a self-addressed postal card was included so that the name of each respondent, their institution, and whether they had elected to participate or not, could easily be determined. Subjects were asked to return the postal card separately from their completed SFPS so that their responses would remain anonymous. Postal cards were returned by 199 of the subjects selected for participation in the study. The information obtained from the returned postal cards enabled the investigator to identify nonrespondents for follow-up letters. Respondents wishing copies of the research summary were also identified from information provided in the returned postal cards.

Treatment of the Data

Responses from the completed questionnaires were transferred to a computerized answer sheet to ease recording and data entry. These answer sheets were used as a reference to input responses into a computer by which the statistical analysis was conducted. In the process of putting raw data into the computer, responses were converted from an alphabetic form to a numerical form, to facilitate analysis. In situations in which respondents failed to answer certain questions or provided more than

one answer, only the variable represented by that item was omitted from data analysis. All other responses were utilized for the study. Once the data file was organized and visually inspected for accuracy, the data were analyzed using the Statistical Package for Social Science (SPSS), (Nie et al., 1975).

SPSS is a system of computer programs that was specifically designed for the analysis of social science data. The system enables researchers to perform many different types of data analysis which are commonly used in the social sciences. Through the use of natural language control statements, a researcher is able to generate descriptive as well as inferential statistics in the analysis of raw data.

Analysis of the data involved the utilization of several SPSS programs. One program, entitled Frequencies, was utilized to analyze all 181 responses to the 57 questions which were included in the SFPS. This program generated frequency distributions and measures of central tendencies for each question. Another program, entitled Crosstabs, was utilized for the analysis of the relationships between variables. The identification of interrelationships between institutional levels and all other variables were achieved through the utilization of the Crosstabs program. In addition, interrelationships

between key demographic variables, which included, academic rank, gender, age, and race and all other variables were analyzed through the use of the Crosstabs program. The Crosstabs program provided statistics which reflected chi-square test for association by percentages for the different interrelationships examined. An alpha of .05 was used as the critical level for determining statistical significance for the chi-square statistic. This level of significance was chosen because, in recent years, it has become a common criterion for evaluating similar research outcomes (Minium, 1978). The results from the different statistical analyses enabled the obtained data to be systematically analyzed and compared to other sets of data, and the guiding questions of the study to be answered. The statistical programs that were utilized for data analysis were chosen because they enabled the nominal data, that was collected as a part of this study, to be more easily analyzed through the use of modal scores and chi-square statistics.

CHAPTER IV

DATA ANALYSIS AND DISCUSSION

The purpose of this investigation was to obtain data on the personal and professional characteristics of physical educators in higher education and to profile the features of physical educators who were employed at different institutional levels. The study used a modified version of a questionnaire developed by Willie and Stecklein (1982) to obtain data upon which profiles were developed. A total of 400 questionnaires were mailed to professionals who taught physical education, full-time, in a higher education environment.

The targeted sample population was stratified to include 100 professionals from four different institutional levels. These levels were identified as research institutions, doctoral institutions, comprehensive institutions, and liberal arts institutions. Data were collected from 181 respondents from institutions located in the Midwest and Southern geographical regions of the American Alliance for Health, Physical Education, Recreation and Dance. An overall response rate of 45 percent was achieved for the study. The response rate among

the different institutional categories occurred as follows: research institutions-44 percent, doctoral institutions-49 percent, comprehensive institutions-44 percent, and liberal arts institutions-44 percent. The number of returned questionnaires, received in each institutional category, met the targeted response rate of 40 percent which had been established prior to the mailing of the questionnaires.

A data analysis was conducted which examined the responses of all 181 subjects to the 57 questions which were part of the instrument utilized in the study. Data were analyzed through the use of the Statistical Package for Social Sciences (SPSS), computer program (Nie et al, 1985). The SPSS program enabled raw data, obtained from the subjects, to be systematically analyzed. Through the use of the SPSS programs, Frequency distributions and Crosstabs, measures of central tendency and chi-square statistics were generated from the raw data. A table was developed for each question which, reflected response percentages and modal responses for different institutional levels, as well as totals for all subjects. In addition, a table was developed which identified the relationship between key demographic variables (age, gender, institutional level, race and rank) and questionaire responses. An alpha of .05 was used as the critical level for determining statistical significance for the chi-square statistic. For situations in which subjects

failed to answer certain questions, or provided more than one answer, only the variable represented by that item was omitted from data analysis.

This study and its results will be described and summarized in the following parts: (a) allocation of time to professional activities, (b) attitude toward profession and career, (c) attitude toward current issues in higher education, and (d) personal and professional characteristics.

Allocation of Time to Professional Activities

In order to analyze the responses to questions in this section, frequency distributions and chi-square statistics were computed. The most frequently submitted answer, or modal response, are highlighted in subsequent discussions. However, discussion of chi-square statistics is limited to those results which were found to be significant.

Question one asked subjects to estimate the percentage of their professional time that was devoted to teaching activities. Table 1 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the bi-modal response, for all subjects, regarding time alloted for teaching, was 31-40% and 41-50%. Although these two responses occurred more frequently than any other response, they accounted for

only 31.6 percent of all subjects who answered this question. The remaining 68.4 percent of the subjects chose responses that were distributed throughout the full range of optional responses. Willie and Stecklein (1982) obtained a different modal answer, for subjects in their study, in response to the same question. They found that their subjects selected 71-80% more frequently than any other answer. The remaining subjects submitted responses that were distributed throughout the range of optional answers, as had been found in this study. However, the difference in findings between the two studies may be attributable to differences in sample populations utilized in the two studies. Willie and Stecklein included community college faculty in their sample, whereas, that population of educators was omitted from the present study.

Table 1 also illustrates an inequality in the modal response among respondents from different institutional levels. An analysis of the chi-square statistics, in Table 1-A, revealed that a significant relationship existed between institutional levels and responses to question one. This finding supports similar findings obtained by other researchers in studies of teaching activities which found that time devoted to teaching activities varied by institutional levels (Baldridge et al., 1978; Fulton & Trow, 1974; Ladd, 1979; Willie & Stecklein, 1982).

Table 1

Allocation of Time to Teaching Activities

	Institutional Level*									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0-10%	3	7.1	2	4.2	0	0	4	9.3	9	5.1
11-20%	2	4.8	5	10.4	1	2.3	6	14.	14	7.9
21-30%	4	9.5	9	18.8	5	11.4	2	4.7	20	11.3
31-40%	7	16.7	2	4.2	11	25.	8	18.6	28	15.8
41-50%	9	21.4	8	16.7	5	11.4	6	14.	28	15.8
51-60%	4	9.5	6	12.5	4	9.1	7	16.3	21	11.9
61-70%	2	4.8	8	16.7	4	9.1	4	9.3	18	10.2
71-80%	3	7.1	6	12.5	9	20.5	4	9.3	22	12.4
81-90%	7	16.7	1	2.1	2	4.5	2	4.7	12	6.8
91-100%	1	2.4	1	2.1	3	6.8	0	0	5	2.8

Table 1-A

Demographic Variables	df	X^2	level of significance
Age	63	61.05293	.5461
Gender	9	19.77840	.0193
Institutional level	27	41.28457	.0387
Race	18	43.98962	.0006
Rank	45	39.05191	.7210

* R=Research Institutions D=Doctoral Institutions
C=Comprehensive Institutions L=Liberal Arts Institutions

Table 1-A also identified relationships between gender and the percentage of time devoted to teaching activities. The modal response for male subjects was 41-50%, while the modal response for female subjects was 71-80%. The obtained differences in time allocated to teaching activities based on gender concurs with similar findings obtained in previous studies (Ladd & Lipset, 1976; Finkelstein, 1984; Bowen & Schuster, 1986).

Finally, a relationship between race and the percentage of time devoted to teaching activities is identified in Table 1-A. The modal response for white subjects was 41-50%, black subjects submitted 31-40% and 41-50% equally, while the one hispanic subject submitted 91-100% in response to question one. The finding that black subjects devoted an equal or lesser amount of time to teaching activities as white faculty, contrasts with findings obtained in other studies, in which blacks were found to devote more time to teaching activities than whites (Bowen & Schuster, 1986; Finkelstein, 1984; Mengus & Exum, 1983).

Question two asked subjects to estimate the percentage of their professional time that was devoted to personal and academic counseling. Table 2 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal

Table 2

Allocation of Time to Counseling

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0-10%	25	58.1	31	63.3	19	43.2	19	43.2	94	52.2
11-20%	12	27.9	9	18.4	18	40.9	17	38.6	56	31.1
21-30%	3	7.	7	14.3	4	9.1	7	15.9	21	11.7
31-40%	2	4.7	1	2.	2	4.5	0	0	5	2.8
41-50%	1	2.3	0	0	1	2.3	1	2.3	3	1.7
51-60%	0	0	1	2.	0	0	0	0	1	.6
61-70%	0	0	0	0	0	0	0	0	0	0
71-80%	0	0	0	0	0	0	0	0	0	0
81-90%	0	0	0	0	0	0	0	0	0	0
91-100%	0	0	0	0	0	0	0	0	0	0

Table 2-A

Demographic Variables	df	x^2	level of significance
Age	35	32.14706	.6066
Gender	5	4.74432	.4479
Institutional level	15	15.84829	.3922
Race	10	13.98052	.1739
Rank	25	28.86013	.2698

response, for all subjects, was 0-10%. The results revealed that very few of the respondents (16.8%) devoted more than 20 percent of their time to personal and academic counseling. Willie and Stecklein (1982) obtained a similar modal response to the same question in their study of college faculty in Minnesota, and only 13 percent of their subjects devoted more than 20 percent of their time to personal and academic counseling.

Question three asked subjects to estimate the percentage of their professional time that was devoted to services to student groups or organizations. Table 3 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was 0-10%. A similar modal response was obtained by Willie and Stecklein (1982) in an earlier study. A higher percentage of respondents (13.7%) to the present study reported that they devoted more than 20 percent of their time to student groups or organizations in comparison to the percentage obtained by Willie and Stecklein's subjects (4.4%). The difference in percentages between the two studies may be attributable to the fact that the present study is composed of only physical educators and reflects the effect of the dual role of teacher and coach that many physical educators fulfill on college campuses.

Table 3

Allocation of Time to Other Services to Students

	Institutional Levels									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0-10%	29	72.5	39	81.3	27	62.8	29	67.4	124	71.3
11-20%	6	15.	3	6.3	8	18.6	9	20.9	26	14.9
21-30%	4	10.	3	6.3	2	4.7	2	4.7	11	6.3
31-40%	0	0	1	2.1	1	2.3	1	2.3	3	1.7
41-50%	0	0	0	0	1	2.3	1	2.3	2	1.1
51-60%	1	2.5	2	4.2	4	9.3	1	2.3	8	4.6
61-70%	0	0	0	0	0	0	0	0	0	0
71-80%	0	0	0	0	0	0	0	0	0	0
81-90%	0	0	0	0	0	0	0	0	0	0
91-100%	0	0	0	0	0	0	0	0	0	0

Table 3-A

Demographic Variables	df	x^2	level of significance
Age	35	39.92268	.2605
Gender	5	5.37905	.3714
Institutional level	15	12.19027	.6646
Race	10	8.96494	.5354
Rank	25	33.31503	.1234

Question four asked subjects to estimate the percentage of their professional time that was devoted to research and scholarly writing. Table 4 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was 0-10%. Willie and Stecklein (1982) obtained a similar modal response for question four with a higher percentage of their subjects (24.3%), indicating that they devoted more than 20 percent of their time to research and scholarly writing, than was obtained in this study (9.3%).

An examination of the responses, by institutional level, revealed that no faculty from comprehensive and liberal arts institutions reported devoting more than 20 percent of their time to research and scholarly writing. Table 4-A indicates that a relationship existed between institutional level and responses to question four. This linkage between institutional level and time devoted to research and scholarly writing had been previously reported in other studies, in which faculty from upper level institutions were found to engage in more research than faculty employed at other institutional levels (Blackburn & Havinghurst, 1979; Ladd & Lipset, 1975; Willie & Stecklein, 1982). A relationship was found to exist between age and responses to question four. The modal response was found to

Table 4

Allocation of Time to Research and Scholarly Writing

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0-10%	26	61.9	30	62.5	30	73.2	41	95.3	127	73.
11-20%	9	21.4	10	20.8	10	24.4	2	4.7	31	17.8
21-30%	2	4.8	7	14.6	0	0	0	0	9	5.2
31-40%	4	9.5	1	2.1	0	0	0	0	5	2.9
41-50%	1	2.4	0	0	0	0	0	0	1	.6
51-60%	0	0	0	0	1	2.4	0	0	1	.6
61-70%	0	0	0	0	0	0	0	0	0	0
71-80%	0	0	0	0	0	0	0	0	0	0
81-90%	0	0	0	0	0	0	0	0	0	0
91-100%	0	0	0	0	0	0	0	0	0	0

Table 4-A

Demographic Variables	df	X^2	level of significance
Age	35	63.55571	.0022
Gender	5	6.36945	.2719
Institutional level	15	38.05300	.0009
Race	10	1.91760	.9969
Rank	25	17.07726	.8790

vary among the different age groups, with a higher percentage of subjects in the older and younger age groups indicating that they devoted more than 20 percent of their time to research activities. These results tend to support Fulton and Trow's (1974) contention that research productivity tends to follow a saddle shaped curve, if charted over a professional career.

Question five asked respondents to estimate the percentage of their professional time that was devoted to committee and administrative duties. Table 5 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was 0-10%. Willie and Stecklein (1982) obtained a similar modal response to question five in a previous study.

Table 5-A illustrates that a relationship existed between gender and the amount of time devoted to committee and administrative duties. The modal response for male subjects was 0-10%, whereas, 0-10% and 11-20% were submitted an equal number of times by female subjects. However, female subjects submitted the lower percentage answers more frequently (96.5%) than their male counterparts (79.9%). These findings support similar findings obtained by other researchers in which female faculty were found to devote less time to committee and

Table 5

Allocation of Time to Committee and Administrative Duties

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0-10%	24	55.8	18	36.7	20	47.6	18	40.9	80	44.9
11-20%	8	18.6	18	36.7	15	35.7	11	25	52	29.2
21-30%	3	7.	8	16.3	2	4.8	6	13.6	19	10.7
31-40%	3	7.	4	8.2	1	2.4	5	11.4	13	7.3
41-50%	1	2.3	1	2.	2	4.8	2	4.5	6	3.4
51-60%	2	4.7	0	0	1	2.4	0	0	3	1.7
61-70%	2	4.7	0	0	0	0	1	2.3	3	1.7
71-80%	0	0	0	0	1	2.4	0	0	1	.6
81-90%	0	0	0	0	0	0	0	0	0	0
91-100%	0	0	0	0	0	0	1	2.3	1	.6

Table 5-A

Demographic Variables	df	x^2	level of significance
Age	56	45.42366	.8428
Gender	8	30.12497	.0002
Institutional level	24	26.67006	.3201
Race	16	4.35059	.9982
Rank	40	56.71128	.0418

administrative duties than male faculty members (Bowen & Schuster, 1986; Finkelstein, 1984). Similarly, the relationship indentified in Table 5-A between rank and responses to question five in which differences in percentages of responses occurred between subjects from different academic ranks, supported Austin and Gamson's (1983) contention that faculty rank, and committee and administrative duties, are closely linked and determine input into institutional policies.

Question six asked respondents to estimate the percentage of their professional time that was devoted to off-campus services. Table 6 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was 0-10%. Similar results were obtained by Willie and Stecklein (1982) in which the most frequently reported response to question six was 0-10%.

Table 6-A indicates that a relationship existed between age and responses to question six. Subjects within different age categories responded differently in answering question six. Results in Table 6-A reveals that a relationship existed between race and time devoted to off-campus services. The findings indicated that 68.1 percent of the white subjects, 62.5 percent of black respondents, and the one hispanic subject submitted the

Table 6

Allocation of Time to Off-Campus Services

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0-10%	22	52.4	34	70.8	29	69	34	77.3	119	67.6
11-20%	17	40.5	12	25.	10	23.8	7	15.9	46	26.1
21-30%	1	2.4	2	4.2	2	4.8	3	6.8	8	4.5
31-40%	0	0	0	0	1	2.4	0	0	1	.6
41-50%	2	4.8	0	0	0	0	0	0	2	1.1
51-60%	0	0	0	0	0	0	0	0	0	0
61-70%	0	0	0	0	0	0	0	0	0	0
71-80%	0	0	0	0	0	0	0	0	0	0
81-90%	0	0	0	0	0	0	0	0	0	0
91-100%	0	0	0	0	0	0	0	0	0	0

Table 6-A

Demographic Variables	df	x^2	level of significance
Age	28	41.88277	.0445
Gender	4	1.82946	.7671
Institutional level	12	17.83465	.1208
Race	8	23.20205	.0031
Rank	20	18.89684	.5285

modal response suggesting no major differences in off-campus services by race even though a statistical significance was found to exist.

Question seven asked respondents to indicate to which, of a list of six professional activities, they preferred to devote more of their professional time. Table 7 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was research and scholarly writing. The remaining responses, when ranked to reflect the rate of their submission, occurred in the following descending order; teaching activities, other services to student groups, off-campus services, committee and administrative duties, and counseling. The results in Table 7 illustrate that a difference existed among the different institutional levels in the percentage of subjects who submitted research and scholarly writing for question seven.

Table 7-A indicates that a relationship existed between institutional level and responses submitted. A similar linkage was established by researchers, in a previous study, which associated institutional level and preference toward professional responsibilities (Baldridge et al., 1978; Fulton & Trow, 1974; Ladd, 1979; Willie & Stecklein, 1982).

Table 7

Activity Prefer to Give More Time

Answers	Institutional Level R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
teaching activities	8	21.1	12	26.1	17	40.5	20	50.	57	34.3
counseling	2	5.3	3	6.5	0	0	0	0	5	3.
other ser.to stud. gr.	4	10.5	4	8.7	7	16.7	5	12.5	20	12.
research & schol. writ.	22	57.9	18	39.1	13	31.	8	20.	61	36.7
comm. & admin. duties	0	0	5	10.9	3	7.1	2	5.	10	6.
off-campus services	2	5.3	4	8.7	2	4.8	5	12.5	13	7.8

Table 7-A

Demographic Variables	df	X^2	level of significance
Age	35	28.26218	.7831
Gender	5	10.74797	.0566
Institutional level	15	26.78051	.0306
Race	5	2.46251	.7821
Rank	25	28.81662	.2717

Question eight asked respondents to indicate to which, of a list of six professional activities, they preferred to devote less of their time. Table 8 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was committee and administrative duties, and that results were consistent across institutional levels. The remaining responses, when ranked to reflect the rate of their submission, occurred in the following decending order; research and scholarly writing, teaching activities, other services to student groups, counseling, and off-campus services.

In response to question eight, the subjects in Willie and Stecklein's study (1982) also selected committee and administrative duties more frequently than any other response. The uniformity of the results across institutional levels, and between two different studies, suggested that committee and administrative duties are tasks to which faculty would prefer to devote less of their professional time.

Question nine asked respondents to report their teaching load, in semester hours, for the fall term of the current academic year. Table 9 ilustrates the frequency of the range of responses, by institutional level, as well as

Table 8

Activity Prefer to Give Less Time

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
teaching activities	8	21.1	2	4.3	9	22.	3	7.3	22	13.3
counseling	2	5.3	3	6.5	1	2.4	5	12.2	11	6.6
other ser. to stud. gr.	0	0	5	10.9	6	14.6	3	7.3	14	8.4
research & schol. writ.	4	10.5	10	21.7	4	9.8	8	19.5	26	15.7
comm. & admin. duties	22	57.9	24	52.2	17	41.5	21	51.2	84	50.6
off-campus services	2	5.3	2	4.3	4	9.8	1	2.4	9	5.4

Table 8-A

Demographic Variables	df	x^2	level of significance
Age	35	34.18961	.5071
Gender	5	2.11303	.8333
Institutional level	15	22.81675	.0881
Race	5	7.08817	.2142
Rank	25	27.72282	.3208

totals for all subjects. Results indicated that the modal response, for all subjects, was 8-11 semester hours. The results indicated that fewer subjects, from research institutions, reported having teaching loads of more than eight semester hours. Although a systematic relationship was not found between institutional level and teaching load in this study, others have established a linkage between institutional level and teaching load (Baldridge et al., 1978; Fulton & Trow, 1974; Ladd, 1979).

Question ten asked subjects to report their teaching load, in contact hours, for the fall term of the current academic year. Table 10 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was 12-15 contact hours. A difference in the percentage of subjects from different institutional levels who submitted the modal response is evident in Table 10.

Table 10-A indicates that a relationship existed between institutional level and responses to question ten. Subjects from comprehensive and liberal arts institutions selected 8-11, subjects from doctoral institutions selected 12-15, while subjects from research institutions selected both 4-7 and 12-15 more frequently than any other response. This relationship supports similar findings obtained in

Table 9

Teaching Load in Semester Credit Hours

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
1-3	7	18.4	2	4.1	2	4.7	4	9.1	15	8.6
4-7	13	34.2	14	28.6	14	32.6	12	27.3	53	30.5
8-11	13	34.2	21	42.9	13	30.2	14	31.8	61	35.1
12-15	3	7.9	11	22.4	12	27.9	13	29.5	39	22.4
16-19	1	2.6	1	2.	1	2.3	1	2.3	4	2.3
20 or more	1	2.6	0	0	1	2.3	0	0	2	1.1

Table 9-A

Demographic Variables	df	X^2	level of significance
Age	35	28.53678	.7718
Gender	5	6.31345	.2769
Institutional level	15	15.41591	.4219
Race	10	3.50739	.9668
Rank	25	26.83804	.3640

Table 10

Teaching Load in Contact Hours

Answers	Institutional Level								Totals	
	R		D		C		L			
	n	%	n	%	n	%	n	%	n	%
1-3	6	15.4	1	2.1	0	0	2	4.5	9	5.1
4-7	9	23.1	8	16.7	4	9.1	5	11.4	26	14.9
8-11	8	20.5	10	20.8	14	31.8	17	38.6	49	28.
12-15	9	23.1	19	39.6	13	29.5	14	31.8	55	31.4
16-19	4	10.3	8	16.7	7	15.9	3	6.8	22	12.6
20 or more	3	7.7	2	4.2	6	13.6	3	6.8	14	8.

Table 10-A

Demographic Variables	df	X^2	level of significance
Age	35	30.40522	.6895
Gender	5	21.30412	.0007
Institutional level	15	25.01347	.0498
Race	10	7.08075	.7178
Rank	25	49.30080	.0026

other studies in which a difference in teaching load was found to exist between educators employed at different institutional levels (Baldridge et al., 1978; Fulton & Trow, 1974; Ladd, 1979). A relationship between rank and responses submitted was indicated in Table 10-A, in which differences in modal responses was evident among subjects from different academic ranks. The lower ranked faculty reported having more contact hours than the upper ranked faculty.

Question eleven asked subjects to indicate the number of professional meetings they attended during the 1984-85 school year. Table 11 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was one meeting. This result differed from findings obtained in the Carnegie Foundation for the Advancement of Teaching's study (Jacobson, 1985) in which the majority of subjects reported not attending a professional meeting during the past academic year. The difference in the results of the two studies suggests that physical educators are more likely to attend professional meetings than members of the professoriate at large. Table 11 indicates that subjects from research institutions reported a modal response which showed that they attended a higher number of professional meetings than subjects from

Table 11

Number of Professional Meetings Attended 1984-85

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0	3	7.3	8	16.3	6	13.6	4	9.1	21	11.6
1	9	22.	14	28.6	15	34.1	17	38.6	55	30.9
2	9	22.	11	22.4	5	11.4	17	38.6	42	23.6
3	12	29.3	7	14.3	10	22.7	5	11.4	34	19.1
4	4	9.8	5	10.2	4	9.1	1	2.3	14	7.9
5 or more	4	9.8	4	8.2	4	9.1	0	0	12	6.7

Table 11-A

Demographic Variables	df	x^2	level of significance
Age	35	50.96021	.0397
Gender	5	6.46492	.2636
Institutional level	15	22.06030	.1062
Race	10	11.90808	.2913
Rank	25	33.29485	.1239

other institutional levels, even though no systematic relationship was found between institutional level and responses to question eleven.

As indicated in Table 11-A, a relationship was found between age and responses to question eleven, in which a difference in the percentage of subjects from different age groups who submitted the modal response, was found to have occurred. A higher percentage of subjects, in the 45-49 age category, was found to have attended five or more professional meetings than subjects from other age categories.

Question twelve asked subjects to indicate the total number of articles they had published in academic or professional journals. Table 12 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was none. The finding that 33.9% of the subjects in this study had never published concurs with similar findings obtained in the Carnegie Foundation for the Advancement of Teaching study (Jacobson, 1985), in which 32.4% of all subjects reported they had never published.

Table 12-A illustrates that a relationship existed between institutional level and responses to question twelve. Subjects from doctoral and comprehensive

Table 12

Number of Articles Published in Career

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0	9	22.	11	22.4	15	34.1	25	58.1	60	33.9
1-4	12	29.3	15	30.6	13	29.5	15	34.9	55	31.1
5-8	3	7.3	11	22.4	7	15.9	1	2.3	22	12.4
9-12	3	7.3	3	6.1	4	9.1	1	2.3	11	6.2
13-16	2	4.9	2	4.1	1	2.3	0	0	5	2.8
17 or more	12	29.3	7	14.3	4	9.1	1	2.3	24	13.6

Table 12-A

Demographic Variables	df	x^2	level of significance
Age	35	33.36082	.5473
Gender	5	5.39318	.3698
Institutional level	15	36.12827	.0017
Race	10	5.91756	.8221
Rank	25	68.76523	.0000

institutions selected 1, subjects from research institutions selected 3, while subjects from liberal arts institutions selected both 1 and 2 more frequently than any other response. The association between institutional level and publication rate had been established in previous research efforts (Blackburn & Havinghurst, 1979; Ladd & Lipset, 1975). The association between rank and the number of articles published, in which upper ranked faculty were found to have published more than lower ranked faculty, supports Austin and Gamson's (1983) contention that rank appears to be a predictor of productivity, or confirms that productivity influences advancement in rank.

Question thirteen asked subjects to indicate the total number of books or monographs published or edited in their careers. Table 13 illustrates the frequency of the range of responses by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was none, and only 36.9% had published at all. The Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) obtained results which indicated that the majority of its subjects reported they had never published a book or monograph, and only 40.8% had published at all.

Table 13-A indicates that a relationship existed between institutional level and responses to question

Table 13

Number of Books Published in Career

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0	17	42.5	27	56.3	30	68.2	37	84.1	111	63.1
1	4	10.	9	18.8	9	20.5	3	6.8	25	14.2
2	7	17.5	6	12.5	1	2.3	4	9.1	18	10.2
3	7	17.5	3	6.3	2	4.5	0	0	12	6.8
4-7	4	10.	2	4.2	2	4.5	0	0	8	4.5
8 or more	1	2.5	1	2.1	0	0	0	0	2	1.1

Table 13-A

Demographic Variables	df	X^2	level of significance
Age	35	38.27222	.3232
Gender	5	2.95059	.7076
Institutional level	15	32.20427	.0060
Race	10	7.13855	.7123
Rank	25	28.19050	.2992

thirteen. In Table 13, differences are evident among the percentage of respondents, in each institutional category, that indicated they have never published a book, in response to question thirteen, with a higher publication rate occurring among subjects from doctoral and research institutions.

Question fourteen asked subjects to indicate whether or not they were doing research which they expected would lead to publication. Table 14 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was no. This result differed from results obtained by the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) in which a majority of subjects indicated that they were doing research that they expected would lead to publication. These results suggested that these physical educators are not engaged in as much active research as other members of the professoriate. Table 14 also illustrates that the modal response to question fourteen was not consistent across institutional levels. In contrast to responses reported by all other institutional levels, a majority of respondents from research institutions indicated that they were currently doing research which they expected would lead to publication.

Table 14

Currently Doing Research Expected to Lead to Publication

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
yes	29	70.7	22	44.9	19	44.2	8	18.2	78	44.1
no	12	29.3	27	55.1	24	55.8	35	79.5	98	55.4

Table 14-A

Demographic Variables	df	X^2	level of significance
Age	14	24.84901	.0361
Gender	2	.63933	.7264
Institutional level	6	26.02763	.0002
Race	4	.95957	.9159
Rank	10	9.52605	.4830

Results in Table 14-A indicated that a relationship was evident between institutional level and responses submitted, which support similar assertions made by Blackburn and Havinghurst (1979) as well as Ladd and Lipset (1975). Table 14-A indicates that a relationship existed between age and inclination toward research in which subjects from different age categories obtained different modal responses to the question about plans for publication of current research work.

Question fifteen asked subjects to indicate if they have applied for research funds from any agency other than their own college or university. Table 15 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was no. Although the modal response was consistent across institutional levels, variations in the percentages of subjects submitting the same answer, occurred among the different institutional levels.

Table 15-A illustrates that a relationship existed between institutional level and responses to question fifteen. Subjects from research institutions were found more likely to have applied for research funds from outside agencies than subjects from other institutional levels. A relationship was also found between rank, and responses to

Table 15

Have Applied for Research Funds From an External Agency

	Institutional Level								Totals	
Answers	R		D		C		L			
	n	%	n	%	n	%	n	%	n	%
yes	18	43.9	21	42.9	21	27.3	7	15.9	58	32.6
no	23	56.1	28	57.1	32	72.7	37	84.1	120	67.4

Table 15-A

Demographic Variables	df	x^2	level of significance
Age	14	24.84901	.0272
Gender	1	1.60118	.2057
Institutional level	3	10.87966	.0124
Race	2	.71624	.6990
Rank	5	22.98842	.0003

question fifteen in which faculty in the upper ranks were more likely to have applied for funds than faculty from the lower ranks. A relationship was evident between age and responses to question fifteen, in which subjects in the younger age groups were more likely to have applied for funds than subjects in the older age categories. Obtained results supported Fulton and Trow's (1974) assertion that research productivity was linked with institutional level, as well as rank, and that different activities are more important at certain stages of one's professional career.

Question sixteen asked subjects, if they are in professional preparation, to indicate if they had contact with public school teachers during the past school year. Table 16 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was yes. The figures in Table 16 illustrate that the responses were consistent across institutional levels. Results of the Carnegie Foundation for the Advancement of Teaching's (Jacobson, 1985) study revealed that 50.7 percent of their subjects also answered yes in comparison to the 64.6 percent of subjects in this study who submitted the same answer. The differences in the results between the two studies suggested that a slightly higher percentage of these physical educators were involved

Table 16

Contact With Public School Teachers at Their School Site

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
yes	26	63.4	31	64.6	27	62.8	27	67.4	113	64.6
no	3	7.3	7	14.6	8	18.6	5	11.6	23	13.1
not applicable	12	29.3	10	20.8	8	18.6	9	20.9	39	22.3

Table 16-A

Demographic Variables	df	X^2	level of significance
Age	14	13.51145	.4867
Gender	2	4.03927	.1327
Institutional level	6	3.50945	.7427
Race	4	4.72878	.3163
Rank	10	7.22300	.7042

in on-site visitations of public schools than other members of the professoriate.

Question seventeen asked subjects to indicate the number of sabbatical leaves that they had taken during their careers. Table 17 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was none. This finding differed from Willie and Stecklein's (1982) results in which 94 percent of the subjects reported taking either one or two sabbatical leaves. Sabbatical leaves were not an option for 4.3 percent of Willie and Stecklein's subjects in comparison to 2.8 percent of the subjects in this study. Also, Willie and Stecklein reported that 38.3 percent of all their subjects had taken advantage of the sabbatical leave option, whereas, only 29.2 percent of the subjects in this study, had taken a sabbatical. The difference in the results of the two studies suggests that the physical educators, in this sample, do not utilize the sabbatical leave option as often as other members of the professoriate.

Table 17-A indicates that a relationship existed between rank and the number of sabbaticals taken, in which upper ranked faculty were more likely to have taken a sabbatical leave than lower ranked faculty. This

Table 17

Number of Sabbatical Leaves Taken During Career

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
0	30	73.2	29	59.2	29	65.9	33	75.	121	68.
1	7	17.1	15	30.6	10	22.7	8	18.2	40	22.5
2	1	2.4	3	6.1	3	6.8	0	0	7	3.9
3	1	2.4	1	2	1	2.3	2	4.5	5	2.8
more than 4	0	0	0	0	0	0	0	0	0	0
not an option	2	4.9	1	2	1	2.3	1	2.3	5	2.8

Table 17-A

Demographic Variables	df	x^2	level of significance
Age	28	33.40438	.2212
Gender	4	7.39737	.1163
Institutional level	12	8.35554	.7568
Race	8	1.36847	.9947
Rank	20	63.77978	.0000

relationship is understandable since length of service may be related to elgibility for a sabbatical leave.

Question eighteen asked subjects to indicate at what age they would like to retire from academic services. Table 18 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was age 65. When age 65 was combined with the second most submitted answer, age 62, these two answers accounted for 46.9 percent of all responses. The remaining responses were spread throughout the full range of optional answers. Even though the responses to question eighteen were varied among institutional levels, no relationship was found between institutional level and responses to question eighteen. In contrast, Willie and Stecklein's (1982) results indicated that subjects from liberal arts institutions showed the stronger preference for an older retirement age, while subjects from state universities and community colleges expressed a stronger preference for a younger retirement age. Table 18-A indicates that a relationship existed between gender and responses selected, in which male subjects selected age 65, while female subjects selected age 62 more frequently than any other response.

Table 18

Preferred Retirement Age

Answers	Institutional Level R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
55 years or older	8	19.5	11	22.4	6	14.	7	16.7	32	18.3
56	3	7.3	1	2.	3	7.	2	4.8	9	5.1
59	5	12.2	6	12.2	6	14.	5	11.9	22	12.1
62	8	19.5	12	24.5	11	25.6	9	21.4	40	22.9
65	7	17.1	12	24.5	10	23.3	13	31.	42	24.
68	2	4.9	3	6.1	1	2.3	2	4.8	8	4.6
70	4	9.8	1	2.	4	9.3	1	2.4	10	5.7
over 70	4	9.8	3	6.1	2	4.7	3	7.1	12	6.9

Table 18-A

Demographic Variables	df	X^2	level of significance
Age	49	65.18793	.0607
Gender	7	14.71470	.0398
Institutional level	21	10.50075	.9116
Race	14	16.83830	.2649
Rank	35	40.95728	.2254

Summary

Very little previous information existed on how physical educators allocate their time to professional activities. Although several national and regional studies have examined the allocation of faculty time across disciplines, no study has focused exclusively on physical educators. This study has obtained data on how physical educators allocate their time for professional activities. The obtained data has enabled the following summary to be developed.

The results of this study indicate that physical educator's time management, for the most part, is consistent with what has been found to occur throughout higher education. In terms of time devoted to counseling, committee and administrative duties, and off-campus services, physical educators, regardless of the institutional level, were found to devote between 0 to 10 percent of their professional time to each. Futhermore, these are activities physical educators would prefer to devote less of their professional time regardless of institutional level. These findings are similar to results obtained by Willie and Stecklein (1982) in their study of college faculty in Minnesota.

The majority of these physical educators were found to devote between 0 to 10 percent of their profesional time to

services to student groups or organizations which was also the modal response in Willie and Stecklein's (1982) study. A number of physical educators reported devoting more than 20 percent of their professional time to student groups or organizations. This finding contrast with results obtained by Willie and Stecklein, in which a smaller percentage of their subjects reported devoting more than 20 percent of their time to these activities. The difference in results between the two studies may be attributable to the dual role of coach and teacher that some physical educators fulfill.

This study showed that a smaller percentage of physical educators devoted more than 20 percent of their time to research and scholarly writing when compared to college faculty in Minnesota (Willie & Stecklein, 1982). In addition, a significant relationship was identified between institutional levels and time devoted to research and scholarly writing. Subjects from research and doctoral institutions made up the majority of the persons indicating that they devoted more than 20 percent of their time to research activities. One should note that subjects from these institutional levels have indicated a preference for research and scholarly writing over other professional activities. In terms of research productivity, <u>per se</u>, these physical educators were found to have published at

about the same level as the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) had found to occur among the professoriate in general. A significant relationship was identified between institutional level and number of articles published; however, no relationship was found between institutional level and number of books published. Futhermore, it appears that research productivity among physical educators might not increase in the near future since most physical educators, in this sample, were not currently engaged in research that will eventually lead to publication, and most of this group have never applied for research funds from any agency outside their own institutions.

The allocation of time to teaching activities was found to vary among subjects from different institutional levels. Although the majority of subjects were found to devote 31-40 or 41-50 percent of their professional time to teaching activities, the most frequently submitted response was different for subjects from research (41-50%) and doctoral (21-30%) institutions.

A significant relationship was found between institutional level and teaching loads in student contact hours. A majority of physical educators in this sample reported a teaching load of 12-16 contact hours. Subjects from comprehensive and liberal arts institutions reported

having fewer student contact hours than subjects from research and doctoral institutions.

An analysis of how these physical educators utilize their professional time outside the institutional environment revealed some differences to what has been found to occur among other educators. The majority of physical educators in this study indicated that they had never taken a sabbatical leave. Compared to the results of the Willie and Stecklein study, in which most subjects were likely to have taken at least one sabbatical leave, the present results revealed that these physical educators may not have the same options or were not utilizing their sabbatical leave option. Physical educators in this study were found to attend more professional meetings and to have more on-site visitations with public school teachers than subjects in the Carnegie Foundation for the Advancement of Teaching study.

Finally, when asked at what age they would like to retire, the majority of these physical educators indicated that they would prefer to retire at age 65. However, a lot of disagreement existed on this issue.

Attitude Toward Profession and Career

In order to analyze the responses to questions in this section, frequency distributions and chi-square statistics

were computed. The most frequently submitted answer, or modal response, will be highlighted in subsequent discussions. Chi-square statistics were generated to determine if a relationship existed between different demographic variables and the answers submitted. Discussion of chi-square statistics will be limited to those results which were found to be significant.

Question nineteen asked subjects to choose between a set of answers which best describes their attitude toward college teaching as a career. Table 19 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was satisfied. When combined with the second most submitted answer, very satisfied, results indicate that 95 percent of the subjects were satisfied or very satisfied with their choice of college teaching as a career. The results obtained in this study were similar to results obtained by Willie and Stecklein (1982) in their study of college faculty, in which 86.5 percent of the subjects were either satisfied or very satisfied with college teaching as a career. However, the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) has reported that the level of dissatisfaction among college faculty has been increasing over the past ten years.

Table 19

Attitude Toward College Teaching as a Career

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
very dissatisfied	1	2.3	0	0	1	2.3	0	0	2	1.1
dissatisfied	1	2.3	0	0	2	4.5	0	0	3	1.7
indifferent	1	2.3	1	2.	1	2.3	1	2.3	4	2.2
satisfied	20	46.5	26	53.1	22	50.	23	52.3	91	50.6
very satisfied	20	46.5	22	44.9	18	40.9	20	45.5	80	44.4

Table 19-A

Demographic Variables	df	x^2	level of significance
Age	28	29.48485	.3883
Gender	4	2.20126	.6988
Institutional level	12	6.40445	.8943
Race	8	5.27531	.7278
Rank	20	17.42223	.6254

Question twenty asked subjects to choose between a set of answers which best describes their attitude toward the outlook for advancement in their profession. Table 20 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was satisfied. When combined with the answer, very satisfied, a majority (63.4%) of subjects indicated they were satisfied or very satisfied with the outlook for advancement in their profession, while a smaller contingent of subjects (21.7%) indicated they were dissatisfied or very dissatisfied with their profession. The Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) reported that 24.2 percent of its subjects were considering another line of work because they believed that prospects for advancement seem limited. The similarity in the percentage of dissatisfied subjects in the two studies indicated that about the same proportion of physical educators were dissatisfied with their careers as had been found to exist among other members of the professoriate.

Question twenty-one asked subjects to choose between a set of answers which best describes their attitude toward their base salary. Table 21 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal

Table 20

Attitude Toward Outlook for Advancement Within the Profession

	Institutional Level								Totals	
Answers	R		D		C		L			
	n	%	n	%	n	%	n	%	n	%
very dissatisfied	1	2.3	1	2.	3	6.8	0	0	5	2.8
dissatisfied	10	23.3	5	10.2	9	20.5	10	22.7	34	18.9
indifferent	3	7.	10	20.4	9	20.5	5	11.4	27	15.
satisfied	19	44.2	22	44.9	18	40.9	23	52.3	82	45.6
very satisfied	10	23.3	11	22.4	5	11.4	6	13.6	32	17.8

Table 20-A

Demographic Variables	df	X^2	level of significance
Age	28	26.36027	.5532
Gender	4	6.62242	.1572
Institutional level	12	14.22467	.2866
Race	8	2.51586	.9610
Rank	20	29.66962	.0754

response, for all subjects, was dissatisfied. When combined with the answer, very dissatisfied, results indicated that a slight majority of subjects (55.8%) were dissatisfied or very dissatisfied with their base salaries. The results were fairly consistent across institutional levels with a higher percentage of subjects from comprehensive and liberal arts institutions reporting being dissatisfied or very dissatisfied with their base salaries. A higher percentage of respondents from research and doctoral institutions reported being satisfied or very satisfied with their base salary. However, a systematic relationship was not found between institutional level and responses to the base salary question. The Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) obtained results in their study which found that 60.7 percent of their subjects believed that their salary was either fair or poor. The present findings supported the contention that salary is one of the greatest sources of dissatisfaction among college faculty (Austin & Gamson, 1983; Willie & Stecklein, 1982).

Question twenty-two asked subjects to choose between a set of answers which best describes their attitude toward the outlook for advancement at their institution. Table 22 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects.

Table 21

Attitude Toward Base Salary

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
very dissatisfied	4	9.3	6	12.2	6	14.	10	22.7	26	14.5
dissatisfied	18	41.9	18	36.7	21	48.8	17	38.6	74	41.3
indifferent	2	4.7	3	6.1	2	4.7	1	2.3	8	4.5
satisfied	16	37.2	19	38.8	13	30.2	12	27.3	60	33.5
very satisfied	3	7.	3	6.1	1	2.3	4	9.1	11	6.1

Table 21-A

Demographic Variables	df	x^2	level of significance
Age	28	38.40211	.0910
Gender	4	4.09426	.3934
Institutional level	12	7.64807	.8120
Race	8	4.18799	.8398
Rank	20	29.52409	.0779

Table 22

Attitude Toward Outlook for Advancement Within the Institution

Answers	Institutional Level								Totals	
	R		D		C		L			
	n	%	n	%	n	%	n	%	n	%
very dissatisfied	4	9.5	2	4.1	7	15.9	2	4.5	15	8.4
dissatisfied	11	26.2	10	20.4	8	18.2	12	27.3	41	22.9
indifferent	7	16.7	10	20.4	6	13.6	4	9.1	27	15.1
satisfied	15	35.7	21	42.9	22	50.	21	47.4	79	44.1
very satisfied	5	11.9	6	12.2	1	2.3	5	11.4	17	9.5

Table 22-A

Demographic Variables	df	x^2	level of significance
Age	28	35.29583	.1614
Gender	4	2.92178	.5710
Institutional level	12	12.51001	.4056
Race	8	8.66874	.3710
Rank	20	29.37305	.0807

Results indicated that the modal response, for all subjects, was satisfied. When combined with the answer, very satisfied, results indicated that 53.6 percent of the subjects reported that they were satisfied or very satisfied with the outlook for advancement at their institutions. An earlier study, conducted by Ladd and Lipset (1976), found that 50 percent of their respondents thought that their institution was a good or very good place for them, in contrast to nine percent of the subjects who believed that their institution was not a good place for them. A more recent study, conducted by the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985), found that 24.2 percent of the subjects were considering another line of work because of their belief that the outlook for advancement at their institution was limited.

Question twenty-three asked subjects to choose between a set of answers which best describes their attitude toward the teaching resources available at their institutions. Table 23 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was satisfied. When combined with the answer, very satisfied, results indicated that 63.5 percent of all subjects reported being satisfied or very satisfied

Table 23

Attitude Toward Available Teaching Resources

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
very dissatisfied	1	2.4	3	6.1	5	11.4	1	2.3	10	5.6
dissatisfied	7	17.1	9	18.4	9	20.5	16	36.4	41	23.
indifferent	3	7.3	4	8.2	4	9.1	3	6.8	14	7.9
satisfied	26	63.4	24	49.	24	54.5	22	50.	96	53.9
very satisfied	4	9.8	9	18.4	2	4.5	2	4.5	17	9.6

Table 23-A

Demographic Variables	df	X^2	level of significance
Age	28	37.12387	.1162
Gender	4	1.74374	.7828
Institutional level	12	16.33920	.1762
Race	8	9.11269	.3329
Rank	20	10.30026	.9624

about their available teaching resources. The results were fairly consistent across institutional levels, with a higher percentage of subjects from research institutions indicating that they were satisfied or very satisfied, with teaching resources. However, no relationhip was evident between institutional level and responses to question twenty-three. Table 23 also indicated that 28.6 percent of the respondents were either dissatisfied or very dissatisfied with the resources availiable at their institutions, with a higher percentage of dissatisfied subjects being affiliated with liberal arts and comprehensive institutions.

Question twenty-four asked subjects to indicate whether or not they would choose to work in an educational institution if they could remake their decision. Table 24 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was yes. Table 24 reveals that 76.5 percent of the respondents would choose to work in higher education if they could remake their decision. This result was fairly consistent across institutional levels with a higher percentage of affirmative responses being submitted by subjects from liberal arts institutions.

Table 24

Would Choose to Work in H.E. if Given a Second Choice

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
yes	34	79.1	37	75.5	28	65.1	38	86.4	137	76.5
no	5	11.6	5	10.2	4	9.3	1	2.3	15	8.4
uncertain	4	9.3	7	14.3	11	25.6	5	11.4	27	15.1

Table 24-A

Demographic Variables	df	x^2	level of significance
Age	14	9.56700	.7931
Gender	2	5.43804	.0659
Institutional level	6	8.58744	.1981
Race	4	1.80574	.7714
Rank	10	4.12463	.9415

These findings support results obtained by Willie and Stecklein (1982), in which 70 percent of their respondents indicated they would choose to work in a higher education institution if they could remake their decision. The results in Table 24, where 8.4 percent of the subjects indicated they would not choose to work in a higher education institution, was close to the 9 percent of subjects in the Willie and Stecklein study who submitted similar responses. However, the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) reported that 45 percent of its subjects would advise students from pursuing a career in higher education. Table 24 also indicates that more negative responses were submitted by subjects from research institutions, however, a relationship between institutional level and responses to question twenty-four was not found.

Question twenty-five asked subjects to choose between a set of answers which related to how they would enhance or change their careers. Table 25 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was career advancement. The remaining responses, when ranked to reflect the rate of their submission, occurred in the following decending order; career expansion and career alternatives. Table 25

Table 25

Use of Funds to Enhance or Change Career

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
career advancement	22	55	18	37.5	18	41.9	21	51.2	79	45.9
career expansion	12	30	19	39.6	15	34.9	12	29.3	58	33.7
career alternatives	6	15	11	22.9	10	23.3	8	19.5	35	20.3

Table 25-A

Demographic Variables	df	x^2	level of significance
Age	14	12.71663	.5489
Gender	2	1.00117	.6062
Institutional level	6	3.68625	.7190
Race	2	1.65975	.4361
Rank	10	7.48539	.6790

indicates that responses were consistent across institutional levels, with the only variation in the modal response occurring among subjects from doctoral institutions, who chose career expansion more frequently than any other answer. The results indicated that respondents were more likely to choose career advancement, or career expansion, to change their career status rather than opt for other career alternatives if funds were available for these purposes.

Question twenty-six asked subjects to indicate if they would choose a career in physical education if they could remake their decision. Table 26 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was yes. This finding was fairly consistent across institutional levels with a higher percentage of subjects from research and liberal arts institutions giving an affirmative response to the question of choosing the same career field again. The results also indicated that a higher percentage of respondents reported being uncertain as to how they would answer this question in comparison to those subjects who responded negatively to question twenty-six. These findings indicate that, in general, physical educators are satisfied with their profession; however, a number of physical educators were

Table 26

Would Choose a Career in P.E. if Given a Second Choice

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
yes	33	76.7	26	53.1	25	56.8	32	72.7	116	64.4
no	4	9.3	11	22.4	7	15.9	6	13.6	28	15.6
uncertain	6	14.	12	24.5	12	27.3	6	13.6	36	20.

Table 26-A

Demographic Variables	df	X^2	level of significance
Age	14	12.60524	.5578
Gender	2	.14992	.9278
Institutional level	6	8.88013	.1804
Race	4	1.37195	.8491
Rank	10	7.65772	.6622

not pleased with the profession or were not sure if they would choose to become physical educators if they could remake their decision.

Summary

A recent study conducted by the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) reported that college faculty were feeling uneasy about the state of academe and their own careers. The report found that 45 percent of the subjects, would advise young people against pursuing a higher education career. The present study has obtained data on the attitudes of physical educators toward their profession and careers. The obtained data has enabled the following summary to be developed.

The results of this study indicated that the majority of physical educators polled are satisfied with their profession and careers, and that most would make the same choice if they had to remake their decision. The study found that a vast majority of subjects were satisfied or very satisfied with their careers. The results indicated that a higher level of satisfaction exists among physical educators than was found to occur among others in higher education. A high percentage of physical educators indicated they would choose a career in physical education if they had to remake their decision. However, the percentage of physical educators who indicated they would

choose a career in physical education was less than the percentage of subjects who indicated they would choose a career in higher education if they had to remake their decision. This finding, coupled with results that indicated that 20 percent of all subjects were uncertain if they would choose a career in physical education if they could remake their decision, indicates that a substantial degree of ambivalence existed among these physical educators toward their profession. However, the majority of subjects reported being satisfied or very satisfied toward the outlook for advancement within the profession.

At the institutional level, a slight majority of subjects indicated they were satisfied or very satisfied with the outlook for advancement within their institution. However, the percentage of physical educators who indicated they were satisfied or very satisfied with the outlook for advancement at their institutions was less than the percentage of subjects who indicated they were satisfied or very satisfied with the outlook for advancement within the profession. In terms of teaching resources, the majority of subjects were satisfied with the resources available to them at their institutions, with a slightly higher than average level of satisfaction being reported by subjects from research institutions, and a lower than average level

of satisfaction being reported among subjects from liberal arts institutions.

A majority of physical educators indicated they would engage in career advancement activities, and a number of subjects indicated they would engage in career expansion activities, to enhance or to change their present careers. The issue which caused the highest level of dissatisfaction was base salary. A number of these physical educators indicated they were dissatisfied or very dissatisfied with their base salary. Physical educators from comprehensive and liberal arts institutions composed the majority of those subjects who were dissatisfied with their salaries.

Attitude Toward Current Issues in Higher Education

In order to analyze the responses to questions in this section, frequency distributions and chi-square statistics were computed. The most frequently submitted answer, or modal response, will be highlighted in subsequent discussions. Chi-square statistics were generated to determine if a relationship existed between different demographic variables and the answers submitted. Discussion of chi-square statistics will be limited to those results which were found to be significant.

Question twenty-seven asked subjects to indicate their attitude toward collective bargaining for college faculty.

Table 27 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects was uncertain. The results also indicate that an almost equal number of subjects selected the answer desirable, as had selected undesirable, in their response to the question on collective bargaining. A higher percentage of respondents reported that they thought collective bargaining was undesirable or highly undesirable (38%) in comparison to a slightly lower percentage of respondents who thought collective bargaining was desirable or highly desirable (34.1%). Willie and Stecklein (1982) obtained similar results in response to this question, however, a higher percentage of their respondents indicated that they believed collective bargaining was desirable or highly desirable (40.2%). The difference in the results of the two studies may be attributable to differences in sample populations between the two studies or regional sampling bias. The Foundation for the Advancement of Teaching (Jacobson, 1985) reported that they obtained results which indicated that 76.9 percent of their subjects believed that collective bargaining has no place in a college or university, even though 62.2 percent of these same subjects indicated they believed that collective

Table 27

Attitude Toward Collective Bargaining for College Faculty

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
highly desirable	6	13.6	6	12.2	3	7.	5	11.6	20	11.2
desirable	8	18.2	11	22.4	14	32.6	8	18.6	41	22.9
uncertain	13	29.5	12	24.5	13	30.2	12	27.9	50	27.9
undesirable	9	20.5	10	20.4	6	14.	12	27.9	37	20.7
highly undesirable	8	18.2	10	20.4	7	16.3	6	14.	31	17.3

Table 27-A

Demographic Variables	df	x^2	level of significance
Age	28	21.98038	.7822
Gender	4	1.05724	.9010
Institutional level	12	6.46240	.8910
Race	8	14.19039	.0769
Rank	20	16.91454	.6585

bargaining is likely to bring higher salaries and improved benefits.

Question twenty-eight asked subjects if they think there should be a mandatory retirement age for college teachers. Table 28 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was no. Table 28 illustrates that the modal response was different among the different institutional categories. More respondents from research and comprehensive institutions submitted, yes, in contrast to a higher percentage of subjects from doctoral and liberal arts institutions submitting, no, in response to a mandatory age rule. However, a systematic relationship was not found between institutional level and responses to question twenty-eight. Willie and Stecklein (1982) also reported that, no, was the most frequently obtained response, to the retirement age question in their study.

Question twenty-nine asked subjects to indicate their attitudes on the concept of affirmative action. Table 29 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was desirable. A majority of respondents (66.3%) reported that they thought affirmative action was desirable

Table 28

Should Mandatory Retirement be Enforced Against College Teachers

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
yes	23	52.3	21	42.9	24	54.5	14	31.8	82	45.3
no	21	47.7	28	57.1	20	45.5	30	68.2	99	54.7

Table 28-A

Demographic Variables	df	X^2	level of significance
Age	7	9.59019	.2130
Gender	1	.03936	.8427
Institutional level	3	5.72656	.1257
Race	2	2.20632	.3318
Rank	5	7.31374	.1983

Table 29

Attitude Toward Affirmative Action

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
highly desirable	14	31.8	15	30.6	15	34.1	7	15.9	51	28.2
desirable	20	45.5	18	36.7	14	31.8	17	30.6	69	38.1
uncertain	2	4.5	9	18.4	5	11.4	9	20.5	25	13.8
undesirable	4	9.1	4	8.2	8	18.2	9	20.5	25	13.8
highly undesirable	4	9.1	3	6.1	2	4.5	2	4.5	11	6.1

Table 29-A

Demographic Variables	df	x^2	level of significance
Age	28	23.89301	.6872
Gender	4	15.25513	.0042
Institutional level	12	14.23506	.2860
Race	8	11.72559	.1639
Rank	20	27.39172	.1246

or highly desirable. This finding was consistent across institutional levels and confirms findings obtained in a previous study, in which the majority of subjects (58.3%) indicated they were satisfied with the results of affirmative action at their institutions (Jacobson, 1985).

Table 29-A indicates that a relationship existed between gender and responses to question twenty-nine. A higher percentage of female subjects (79.7%) indicated that they thought affirmative action was desirable or very desirable in comparison to their male counterparts (59.5%).

Question thirty asked subjects to indicate their attitude toward the use of computers in the teaching of educational material. Table 30 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was desirable. A majority of respondents (87.8%) indicated that computer usage was desirable or highly desirable in the teaching of educational materials. Although the results were fairly consistent across institutional levels, a higher percentage of respondents from research and doctoral institutions submitted, highly desirable, in response to the question of the desirability of computers for educational use, than subjects from comprehensive and liberal arts institutions. The results appear to indicate that these physical

Table 30

Attitude Toward the Use of Computers in the Instructional Process

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
highly desirable	19	43.2	27	55.1	16	36.4	11	25.	73	40.3
desirable	18	40.9	19	38.8	25	56.8	24	54.5	86	47.5
uncertain	6	13.6	3	6.1	2	4.5	8	18.2	19	10.5
undesirable	0	0	0	0	1	2.3	0	0	1	.6
highly undesirable	1	2.3	0	0	0	0	1	2.3	2	1.1

Table 30-A

Demographic Variables	df	x^2	level of significance
Age	28	27.57990	.4869
Gender	4	2.98452	.5604
Institutional level	12	18.42009	.1035
Race	8	10.61518	.2245
Rank	20	23.91887	.2460

educators, especially those employed at research and doctoral institutions, are ready to embrace the incorporation of the computer into the learning environment which may reflect their perception of the availability of such resources.

Question thirty-one asked subjects to indicate their attitude toward the amount of faculty specialization that has occurred within the profession. Table 31 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was desirable. Table 31 illustrates that the response to this question was fairly consistent across institutional levels with a majority of subjects (64.1%) indicating that they thought faculty specialization was either desirable or highly desirable. The Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) reported that 41.1 percent of their respondents indicated that they thought faculty specialization has hurt the undergraduate curriculum. The results obtained in this study suggest that the majority of these physical educators may not share this perception although the question was not asked in precisely these terms.

Question thirty-two asked subjects to indicate their attitude toward the use of computers in the management of

Table 31

Attitude Toward Faculty Specialization

	Institutional Level								Totals	
Answers	R		D		C		L			
	n	%	n	%	n	%	n	%	n	%
highly desirable	8	18.2	6	12.2	7	15.9	2	4.5	23	12.7
desirable	20	45.5	22	44.9	24	54.5	27	61.4	93	51.4
uncertain	6	13.6	13	26.5	6	13.6	8	18.2	33	18.2
undesirable	7	15.9	7	14.3	6	13.6	7	15.9	27	14.9
highly undesirable	3	6.8	1	2.	1	2.3	0	0	5	2.8

Table 31-A

Demographic Variables	df	X^2	level of significance
Age	28	21.39017	.8087
Gender	4	4.77903	.3107
Institutional level	12	12.30420	.4216
Race	8	12.80338	.1188
Rank	20	16.69793	.6725

Table 32

Attitude Toward the Use of Computers for Educational Management

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
highly desirable	18	40.9	16	33.3	12	27.3	11	25.	57	31.7
desirable	14	31.8	22	45.8	22	50.	22	50.	80	44.4
uncertain	11	25.	8	16.7	9	20.5	10	22.7	38	21.1
undesirable	0	0	2	4.2	1	2.3	0	0	3	1.7
highly undesirable	1	2.3	0	0	0	0	1	2.3	2	1.1

Table 32-A

Demographic Variables	df	X^2	level of significance
Age	28	25.47870	.6017
Gender	4	1.63715	.8021
Institutional level	12	10.60736	.5628
Race	8	6.58293	.5822
Rank	20	25.52073	.1822

the instructional process. Table 32 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was desirable. A clear majority (76.1%) of respondents indicated that they thought computer managed instruction was desirable or highly desirable. The obtained results were consistent across institutional levels which suggest that the majority of these physical educators, regardless of institutional level, endorsed the concept of computer managed instruction.

Question thirty-three asked subjects to indicate their attitude toward the relaxation of academic requirements in the admission of minority group members into graduate programs. Table 33 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was undesirable. Table 33 indicates that the majority of respondents (65.7%), across all institutional levels, indicated that the relaxation of academic standards for minority group members was undesirable or highly undesirable. These results suggest that a majority of these physical educators are against the idea of relaxing standards in the admission of minority group members into graduate programs.

Table 33

Attitude Toward Relaxing Academic Standards for Minority Students

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
highly desirable	0	0	0	0	0	0	2	4.5	2	1.1
desirable	10	22.7	4	8.2	7	15.9	4	9.1	25	13.8
uncertain	8	18.2	9	18.4	7	15.9	11	25.	35	19.3
undesirable	15	34.1	24	49.	16	36.4	16	36.4	71	39.2
highly undesirable	11	25.	12	24.5	14	31.8	11	25.	48	26.5

Table 33-A

Demographic Variables	df	X^2	level of significance
Age	28	25.33613	.6095
Gender	4	1.72751	.7857
Institutional level	12	14.07914	.2957
Race	8	29.12168	.0003
Rank	20	17.71494	.6062

Table 33-A indicates that a relationship existed between race and the responses to question thirty-three, in which the modal response for the hispanic subject was, uncertain. The black subjects submitted, desirable, more frequently, while the white subjects submitted, undesirable, more frequently than any other answer. These findings suggest that minority group subjects were more apt to endorse the relaxation of academic standards for admission to graduate programs than their white counterparts, althought the format of the question did not allow for the development of a rationale to explain the response.

Question thirty-four asked subjects to indicate their attitude toward the practice of academic freedom at their institutions. Table 34 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was satisfied. A majority (81.2%) of all subjects reported being satisfied or very satisfied with the practice of academic freedom at their institutions. These results were consistent across institutional levels and indicated that the majority of these physical educators were content with the practice of academic freedom at their institutions. The Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985)

Table 34

Attitude Toward Practice of Academic Freedom

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
very dissatisfied	4	9.1	0	0	3	6.8	1	2.3	8	4.4
dissatisfied	1	2.3	3	6.1	4	9.1	2	4.5	10	5.5
indifferent	2	4.5	4	8.2	5	11.4	5	11.4	16	8.8
satisfied	26	59.1	26	53.1	27	61.4	26	59.1	105	58.
very satisfied	11	25.	16	32.7	5	11.4	10	22.7	42	23.2

Table 34-A

Demographic Variables	df	x^2	level of significance
Age	28	23.09784	.7281
Gender	4	3.25062	.5168
Institutional level	12	13.82895	.3118
Race	8	7.46208	.4877
Rank	20	22.10538	.3348

obtained results which indicated that the majority (51.3%) of their subjects believed that academic freedom would be protected on their campuses whether or not faculty members could get tenure. The Carnegie Foundation for the Advancement of Teaching also reported that the majority (76.9%) of their subjects believed that the administration at their institution strongly supported academic freedom.

Question thirty-five asked subjects to indicate their attitude toward the promotional process utilized at their institutions. Table 35 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was satisfied. The figures in Table 35 indicate that almost as many respondents reported being dissatisfied or very dissatisfied (41.4%), as had reported being satisfied or very satisfied (48.6%), in response to this question. The diversity of the answers submitted suggests that a great deal of disagreement, or possibly inequality of practice, exists within the profession on the issue of promotional policies.

Question thirty-six asked subjects to indicate their attitude toward the quality of students who have decided to major in physical education. Table 36 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results

Table 35

Attitude Toward Promotional Process

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
very dissatisfied	7	15.9	7	14.3	7	15.9	4	9.1	25	13.8
dissatisfied	12	27.3	17	34.7	14	31.8	7	15.9	50	27.6
indifferent	9	20.5	4	8.2	2	4.5	3	6.8	18	9.9
satisfied	14	31.8	17	34.7	19	43.2	29	65.9	79	43.6
very satisfied	2	4.5	4	8.2	2	4.5	1	2.3	9	5.

Table 35-A

Demographic Variables	df	X^2	level of significance
Age	28	36.41145	.1324
Gender	4	5.88764	.2077
Institutional level	12	20.10798	.0651
Race	8	14.30495	.0742
Rank	20	29.71888	.0745

indicated that the modal response, for all subjects, was satisfied. However, an almost equal percentage of subjects submitted, dissatisfied, in response to the question of student quality. The results also indicated that, dissatisfaction, was the modal response for all institutional levels, except for research institutions, even though a relationship was not found between institutional level and responses submitted. Figures obtained by the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) indicated that 59.3 percent of their subjects indicated that they thought the academic ability of their undergraduate students should be rated fair or poor. The results of the two studies suggest that the issue of undergraduate student academic quality is a common concern among educators.

Table 36-A indicates that a relationship existed between age and responses submitted, in which younger subjects were more likely to express satisfaction with undergraduate student quality than subjects in the older age categories. Table 36-A also indicates that a relationship existed between gender and responses submitted, in which the majority of male subjects (41.7%) indicated they were satisfied with undergraduate student quality, whereas, the majority of female subjects (52.6%)

Table 36

Attitude Toward Quality of Students Majoring in P.E.

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
very dissatisfied	2	4.7	0	0	3	7.	0	0	5	2.8
dissatisfied	15	34.9	21	42.9	18	41.9	19	44.2	73	41.
indifferent	2	4.7	7	14.3	6	14.	6	14.	21	11.8
satisfied	22	51.2	20	40.8	15	34.9	18	41.9	75	42.1
very satisfied	2	4.7	1	2.	1	2.3	0	0	4	2.2

Table 36-A

Demographic Variables	df	X^2	level of significance
Age	28	61.65437	.0002
Gender	4	12.85505	.0120
Institutional level	12	12.23971	.4266
Race	8	13.16376	.1063
Rank	20	28.90331	.0897

Table 37

Attitude Toward Quality of Professional Preparation in P.E.

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
very dissatisfied	3	7.1	0	0	2	4.5	0	0	5	2.8
dissatisfied	15	35.7	14	28.6	12	27.3	12	27.3	53	29.6
indifferent	1	2.4	1	2.	1	2.3	1	2.3	4	2.2
satisfied	23	54.8	31	63.3	26	59.1	28	63.6	108	60.3
very satisfied	0	0	3	6.1	3	6.8	3	6.8	9	5.

Table 37-A

Demographic Variables	df	X^2	level of significance
Age	28	23.51445	.7069
Gender	4	3.41061	.4916
Institutional level	12	9.81372	.6323
Race	8	1.68965	.9891
Rank	20	19.13824	.5129

indicated they were dissatisfied with undergraduate student quality.

Question thirty-seven asked subjects to indicate their attitude toward the professional preparation students receive in physical education. Table 37 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was satisfied. This result was consistent across all institutional levels. Even though a majority of subjects indicated they were satisfied with the professional preparation of students, a number of subjects (32.4%) indicated they were dissatisfied or very dissatisfied with the professional preparation students receive in physical education. These results appear to suggest that the majority of these physical educators believed that they were adequately preparing future physical educators, but, a distinct contingent of physical educators, in the sample, believed a better job could be done.

Summary

A major focus of the recent Carnegie Foundation for the Advancement of Teaching study (Jacobson, 1985) was an investigation of faculty attitude's toward current issues in higher education. Their inquiry covered a wide range of issues that were perceived to be a major concern to

faculty, and to be essential to the vitality of higher education. This study has obtained data on the attitudes of a sample of physical educators toward a limited number of issues that are believed to be essential to the profession, and to higher education in general. The obtained data have enabled the following summary to be developed.

When asked their attitudes toward collective bargaining, the majority of these physical educators were uncertain of the value of collective bargaining in an educational setting. About an equal percentage of respondents thought collective bargaining was desirable or very desirable as had reported that collective bargaining was undesirable or very undesirable. These results indicated that collective bargaining may be an issue upon which physical educators's opinion is sharply divided. Regional or age differences might be considered in the further search for an explanation. Mandatory retirement was another issue upon which these physical educators did not agree. Although a slight majority of these physical educators indicated that they thought mandatory retirement was desirable or highly desirable, the majority of subjects from research and comprehensive institutions thought mandatory retirement was undesirable or highly undesirable.

A high level of dissatisfaction was found among physical educators in their attitudes toward the

promotional process utilized at their institutions. Even though a slight majority of subjects indicated they were satisfied or very satisfied with the promotional processes at their institutions, an almost equal percentage of physical educators reported being dissatisfied with the promotional processes at their institutions.

A consensus opinion apparently was found among physical educators in response to questions on computer application and affirmative action. The majority of physical educators endorsed the concept of computer managed and computer aided instruction, regardless of institutional level. Similarily, a majority of physical educators agreeded that affirmative action was a desirable or very desirable practice in higher education. In contrast to the acceptance of the concept of affirmative action, the majority of physical educators sampled expressed their disapproval of the idea of relaxing academic standards in the admission of minority group members into graduate programs.

Another example of the difference of opinion that existed among respondents was related to the quality of students who are entering the profession. Results indicated that even though 44.3 percent of these physical educators were satisfied or very satisfied with the quality of students who are entering the profession, 43.8 percent of

the respondents reported being dissatisfied or very dissatisfied with student quality. Yet, most physical educators indicated that they were satisfied with the professional preparation students received at their institutions. Some might say these differences may indicate that these faculty have an exaggerated view of their effect on students.

Finally, a majority of the physical educators polled indicated that they were satisfied or very satisfied with the pratice of academic freedom at their institutions; and, that they thought faculty specialization was desirable within the profession. In this latter perception, physical educators have not expressed the concern of others in higher education that over specialization can work to the detriment of the undergraduate experience as had been found in the Carnegie Foundation for the Advancement of Teaching report.

Personal and Professional Characteristics

In order to analyze the responses to questions in this section, frequency distributions and chi-square statistics were computed. The most frequently submitted answer, or modal response, will be highlighted in subsequent discussions. Chi-square statistics were generated to determine if a relationship existed between different

demographic variables and the answers submitted. However, discussion of chi-square statistics will be limited to those results which were found to be significant.

Question thirty-eight asked subjects to report their age as of December 31, 1985. Table 38 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was 50-59 years old. The second most submitted response was 45-49 years old. The results in Table 38 indicated that 75.6 percent of all subjects reported being 40 years of age or older. These figures are consistent with the findings obtained in the Carnegie Foundation for the Advancement of Teaching's (Jacobson, 1985) recent study of the professoriate and support the contention that college faculty are an aging group of professionals. Table 38-A indicates that a relationship existed between academic rank and responses to question thirty-eight, in which a majority of upper ranked faculty reported belonging to an older age group than lower ranked faculty.

Question thirty-nine asked subjects to identify their gender. Table 39 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was male. The percentages of male

Table 38

Age as of December 31, 1985

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
19 or younger	0	0	0	0	0	0	0	0	0	0
20-24	0	0	2	4.1	0	0	0	0	2	1.1
25-29	1	2.3	1	2.	0	0	0	0	2	1.1
30-34	3	7.	3	6.1	3	6.8	6	13.6	15	8.3
35-39	7	16.3	8	16.3	6	13.6	4	9.1	25	13.9
40-44	5	11.6	5	10.2	9	20.5	8	18.2	27	15.
45-49	13	30.2	6	12.2	10	22.7	14	31.8	43	23.9
50-59	8	18.6	19	38.8	13	29.5	7	15.9	47	26.1
60 or older	6	14.	5	10.2	3	6.8	5	11.4	19	10.6

Table 38-A

Demographic Variables	df	x^2	level of significance
Age	49	1260.00073	.0000
Gender	7	11.98450	.1011
Institutional level	21	24.29417	.2790
Race	14	23.06694	.0592
Rank	35	89.84740	.0000

Table 39

Sex

Answers	Institutional Level								Totals	
	R		D		C		L			
	n	%	n	%	n	%	n	%	n	%
female	14	32.6	22	44.9	12	27.3	11	25	59	32.8
male	29	67.4	27	55.1	32	72.7	33	75	121	67.2

Table 39-A

Demographic Variables	df	X^2	level of significance
Age	7	11.98450	.1011
Gender	1	175.49017	.0000
Institutional level	3	5.08093	.1660
Race	2	4.61940	.0993
Rank	5	5.33759	.3761

subjects (67.2%) and female subjects (32.8%) were similar to the results obtained in the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) study in which 73 percent of the respondents were males and 27 percent of the respondents were female. The results obtained in these two studies indicated that physical education, like most other disciplines in higher education, is a profession in which the majority of its members are male.

Question forty asked subjects to indicate their racial or ethnic origin. Table 40 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was white. The majority of all respondents, regardless of institutional level, reported being white. Out of the 181 subjects who participated in the study, only nine subjects indicated they were non-white, with the majority of these individuals being affiliated with comprehensive and liberal arts institutions. This finding confirms previous research efforts, which asserted that minority faculty comprise a very small percentage of college faculty and were more likely to work at less research oriented institutions (Bowen & Schuster, 1986; Jacobson, 1985; Finkelstein, 1984; Mengus & Exum, 1983). The results of this study indicate that the racial and ethnic make-up of the physical

Table 40

Race or Ethnic Group

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
white	42	97.7	48	98.	40	90.9	41	93.2	171	95.
black	0	0	1	2.	4	9.1	3	6.8	8	4.4
american indian	0	0	0	0	0	0	0	0	0	0
hispanic	1	2.3	0	0	0	0	0	0	1	.6
asian american	0	0	0	0	0	0	0	0	0	0
other	0	0	0	0	0	0	0	0	0	0

Table 40-A

Demographic Variables	df	χ^2	level of significance
Age	14	23.06693	.0592
Gender	2	4.51940	.0993
Institutional level	6	8.5999	.1974
Race	4	360.00006	.0000
Rank	10	6.48153	.7733

educators in this sample is comparable to the racial and ethnic make-up of educators throughout all higher education.

Question forty-one asked subjects to indicate their marital status. Table 41 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was married. This finding was consistent across all institutional levels and Table 41 indicated that a number of physical educators (22.9%) reported that they had never married. These results are consistent with findings obtained by Willie and Stecklein (1982), as well as, the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985). In the earlier study, 74.7 percent of all subjects reported being married while 75.9 percent of the subjects in the latter study reported being married.

Table 41-A indicates that a relationship existed between age and responses to question forty-one. A higher percentage of subjects in the older and younger age groups reported being married than other subjects. Table 41-A also indicates that a relationship existed between gender and responses to question forty-one in which a higher percentage (90%) of males reported being married than the

Table 41

Marital Status

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
married	28	66.7	30	61.2	30	68.2	37	84.1	125	69.8
seperated or divorced	5	11.9	3	6.1	3	6.8	1	2.3	12	.6.7
widowed	0	0	1	2.	0	0	0	0	1	.6
never married	9	21.4	15	30.6	11	25	6	13.6	41	22.9

Table 41-A

Demographic Variables	df	X^2	level of significance
Age	21	36.06801	.0215
Gender	3	84.12415	.0000
Institutional level	9	10.58563	.3052
Race	6	14.97442	.0205
Rank	15	7.14487	.9535

percentage of female subjects (62.7%) who reported being married.

Question forty-two asked subjects to indicate if they had any dependent children. Table 42 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was none. However, an almost equal percentage of subjects submitted, one, in response to the inquiry on dependent children. The results indicated that the modal response was the same for all institutional levels, except for subjects from liberal arts institutions where a higher percentage of subjects reported having at least one dependent child.

An analysis of the chi-square statistics in Table 42-A reveals that the relationship between institutional level and dependent children was not due to chance. Results indicate that subjects from research, doctoral, and comprehensive institutions selected none, while subjects from liberal arts institutions selected 1-2 more frequently than any other response. Table 42-A also indicates that a relationship between age and responses submitted existed in which subjects from younger age categories were more likely to have reported having at least one dependent. As indicated in Table 42-A, a relationship existed between gender and responses submitted, in which the majority of

Table 42

Number of Dependent Children

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
none	17	39.5	17	39.5	26	54.2	13	29.5	78	43.6
1-2	16	37.2	16	37.2	15	31.3	28	63.6	72	40.2
3-4	9	20.9	9	20.9	6	12.5	2	4.5	25	14.
5-6	1	2.3	1	2.3	1	2.1	1	2.3	4	2.2
more than 6	0	0	0	0	0	0	0	0	0	0

Table 42-A

Demographic Variables	df	x^2	level of significance
Age	21	58.09136	.0000
Gender	3	40.9386	.0000
Institutional level	9	17.03267	.0482
Race	6	2.95184	.8149
Rank	15	11.72620	.6996

male subjects reported having one dependent child, while the majority of female subjects reported having none.

Question forty-three asked subjects to indicate their academic rank. Table 43 illustrates the frequency of the range of responses, by institutional level as well as totals for all subjects. Results indicated that the modal response, for all subjects, was associate professor. However, as reflected in Table 43, an almost equal percentage of subjects submitted, assistant professor, in response to the question on academic rank. The results indicated that a difference in modal responses existed between the different institutional levels, although a significant relationship between institutional level and responses submitted, was not found. The results obtained in this study were not consistent with findings obtained by the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985), in which the modal response of this study was the answer, professor. The differences in the results between the two studies suggests that academic rank, among these physical educators, do not follow the pattern evident in other areas of higher education.

Table 43-A indicates that a significant relationship existed between age and responses submitted to the question on academic rank. Subjects in the older age categories were

Table 43

Present Academic Rank

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
professor	11	25.6	11	22.4	14	31.8	12	27.9	48	26.8
associate professor	14	32.6	17	34.7	16	36.4	12	27.9	59	33.
assistant professor	10	23.3	18	36.7	9	20.5	17	39.5	54	30.2
instructor	4	9.3	3	6.1	3	6.8	2	4.7	12	6.7
lecturer	3	7.	0	0	2	4.5	0	0	5	2.8
no designated rank	0	0	0	0	0	0	0	0	0	0
other	1	2.3	0	0	0	0	0	0	1	.6

Table 43-A

Demographic Variables	df	X^2	level of significance
Age	35	89.84740	.0000
Gender	5	5.33759	.3761
Institutional level	15	14.98454	.4525
Race	10	6.48153	.7733
Rank	25	895.00049	.0000

more likely to have obtained a higher academic rank, than subjects in the younger age categories.

Question forty-four asked subjects to indicate the type of appointment they hold at their institution. Table 44 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was regular with tenure. Table 44 indicates that the results were consistent across institutional levels, with a higher percentage of subjects from doctoral and comprehensive institutions submitting, regular with tenure, than subjects from other institutional levels, although no relationship was found between institutional level and responses submitted. The figures obtained in this study were consistent with results obtained by the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) in which the majority of their subjects (69.5%) submitted, regular with tenure, in response to the appointment type question.

Table 44-A indicates that a relationship existed between age and responses submitted, in which subjects from the oldest and youngest age categories were more likely to be on a regular tenure appointment than subjects in other age categories. An analysis of the chi-square statistics in table 44-A reveals that a relationship existed between rank

Table 44

Type of Appointment

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
regular with tenure	27	67.5	40	81.6	35	79.5	30	68.2	132	74.6
regular without tenure	12	30.	9	18.4	9	20.5	13	29.5	43	24.3
acting	0	0	0	0	0	0	0	0	0	0
visiting	1	2.5	0	0	0	0	1	2.3	2	1.1

Table 44-A

Demographic Variables	df	x^2	level of significance
Age	14	51.03177	.0000
Gender	2	4.49935	.1054
Institutional level	6	5.21755	.5162
Race	4	98.73352	.0000
Rank	8	74.75291	.0000

and responses submitted, in which subjects from the upper academic ranks were more likely to be on a regular tenure appointment than subjects from lower academic ranks, who were more likely to been on regular appointments without tenure. A relationship was also found to exist between race and responses submitted, in which the one hispanic subject submitted, visiting, and differences in the percentage of subjects who submitted the modal response being evident between white (75.6%) and black (62.5%) respondents. It should be noted that the very small percentage of black respondents (4.4%) makes comparison of percentages tenuous.

Question forty-five asked subjects to indicate the length of their professional contract. Table 45 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was 9-10 months. The predominance of the 9-10 months contract term was consistent across institutional levels with a higher percentage of subjects from doctoral institutions having the 9-10 months term. Even though a higher percentage of subjects from research and liberal arts institutions submitted, 12 months, which was the second most cited answer to question forty-five, no relationship was found between institutional level and responses submitted. The Carnegie Foundation for the Advancement of

Table 45

Length of Appointment

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
9-10 months	24	55.8	40	81.6	33	75.	26	60.5	123	68.7
12 months	15	34.9	7	14.3	10	22.7	13	30.2	45	25.1
other	4	9.3	2	4.1	1	2.3	4	9.3	11	6.1

Table 45-A

Demographic Variables	df	x^2	level of significance
Age	14	40.19653	.0002
Gender	2	14.81042	.0006
Institutional level	6	10.18414	.1171
Race	4	16.33934	.0026
Rank	10	15.18688	.1254

Teaching (Jacobson, 1985) obtained similar results in their study of college faculty, in which the majority of their subjects (74%) were appointed for a 9-10 months contracts.

Table 45-A indicates that a relationship existed between age and responses to question forty-five, in which differences in the percentage of subjects who reported the 9-10 months term was evident among the different age categories. A higher percentage of female subjects (87.9%) are on the 9-10 months contract than their male counterparts (59.5%), which resulted in a significant relationship being identified between gender and responses in this regard. An analysis of the chi-square statistics in Table 45-A indicates that a relationship existed between race and responses submitted. Results revealed that the responses of the hispanic subject was, other, while the majority of white (69.4%) and black (62.5%) subjects submitted, 9-10 months in response to the inquiry on length of contract.

Question forty-six asked subjects to choose among a set of answers which included their full-time gross salary for the 1985-86 academic year. Table 46 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was $27,500-32,499. The second most submitted answer was,

Table 46

Full-Time Gross Salary

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
under $12,500	1	2.4	0	0	0	0	0	0	1	.6
$12,500-17,499	0	0	0	0	1	2.3	3	7	4	2.2
$17,500-22,499	4	9.5	3	6.1	3	6.8	12	27.9	22	12.4
$22,500-27,499	6	14.3	12	24.5	11	25.	13	30.2	42	23.6
$27,500-32,499	12	28.6	19	38.8	11	25.	10	23.3	52	29.2
$32,500-37,499	7	16.7	4	8.2	8	18.2	3	7.	22	12.4
$37,500-42,499	4	9.5	9	18.4	4	9.1	1	2.3	18	10.1
$42,500 or over	8	9.6	2	4.1	6	13.6	1	2.3	17	9.6

Table 46-A

Demographic Variables	df	X^2	level of significance
Age	49	77.92986	.0053
Gender	7	7.80192	.3504
Institutional level	21	43.71384	.0025
Race	14	184.12851	.0000
Rank	35	111.82039	.0000

$22,500-27,499, and as Table 46 illustrates the lower salary figure was submitted more frequently by subjects from comprehensive and liberal arts institutions.

Chi-square statistics in Table 46-A indicated that the diversity among responses, across institutional levels, was not due to chance, and that a relationship existed between institutional level and responses submitted. The Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) obtained different results in their study of college faculty, in which the average salary of their respondents was found to be between $22,000-24,999. However, the Carnegie Foundation for the Advancement of Teaching's study utilized different salary ranges in assessing the salary levels of its subjects. Table 46-A indicates that a relationship existed between race and responses submitted, in which white subjects reported, $27,500-32,499 as being their base salary range and black subjects reported, $17,500-22,499 as being their base salary range. The one hispanic subject submitted, under $12,500, as his response to the question on base salary. The small number of subjects and academic rank and type of appointment held by the hispanic and black subjects may account for the discrepancy in salary levels found between these subjects and the white subjects in the study.

An analysis of the chi-square statistics in Table 46-A indicates that a relationship existed between academic rank and the responses submitted. Higher ranked faculty were more likely to report earning a higher salary than lower ranked faculty. The results in Table 46-A, which indicated that no relationship existed between gender and responses submitted to the inquiry on base salary, differed from the findings obtained in previous studies. In earlier studies, female faculty members were found to earn less money than male faculty members (Bowen & Schuster, 1985; Mengus & Exum, 1983).

Question forty-seven asked subjects to indicate the level of education attained by their spouses. Table 47 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was attained advance degree. However, an almost equal number of subjects submitted, college graduate, for their response. The results were fairly consistent across institutional levels with a higher percentage of subjects from liberal arts institutions submitting the modal response. The results of this study were found to be comparable to results obtained by the Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985), in their study of college faculty, in which the majority of their

Table 47

Spouse's Education

Answers	Institutional Level R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
8th grade or less	0	0	0	0	0	0	0	0	0	0
some high school	0	0	0	0	0	0	0	0	0	0
completed high school	3	9.7	1	3.3	1	3.2	2	5.7	7	5.5
some college	8	25.8	6	20.	3	9.7	8	22.9	25	19.7
college grad.	9	29.	6	20.	11	35.5	15	42.9	41	32.3
attend. grad./pro. sch.	2	6.5	1	3.3	5	16.1	3	8.6	11	8.7
attained advance degree	9	29.	16	53.3	11	35.5	7	20.	43	33.9

Table 47-A

Demographic Variables	df	X^2	level of significance
Age	28	32.67708	.2478
Gender	4	5.74879	.2187
Institutional level	12	15.43012	.2188
Race	4	12.78891	.0124
Rank	16	12.89931	.6801

subjects submitted, attained advance degree, in response to the same question.

Table 47-A indicates that a relationship existed between race and responses submitted in which the modal response for black subjects was, attended graduate or professional school, and the answer, attained advance degree. Even though white subjects indicated the same modal response as black subjects for spouse educational level, the results indicated that there was more dispersion among the answers of the white subjects than what was found to occur among the black subjects, whose spouses seem likely to be highly educated. It should be noted that the very small percentage of black respondents (4.4%) makes comparison of percentages tenuous.

Question forty-eight asked subjects to indicate the level of education attained by their mothers. Table 48 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was completed high school. Table 48 indicates that the modal response was consistent across institutional levels. The results obtained in this study were similar to results obtained by the Carniegie Foundation for the Advancement of Teaching (Jacobson, 1985), in which they reported that, completed high school, was the most

Table 48

Mother's Education

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
8th grade or less	8	18.6	8	16.3	10	22.7	5	11.4	31	17.2
some high school	4	9.3	4	8.2	2	4.5	7	15.9	17	9.4
completed high school	14	32.6	18	36.7	21	47.7	24	54.5	77	42.8
some college	7	16.3	9	18.4	4	9.1	4	9.1	24	13.3
college grad.	4	9.3	8	16.3	7	15.9	2	4.5	21	11.7
attended grad./pro. sch.	1	2.3	1	2.	0	0	0	0	2	1.1
attained advance degree	5	11.6	1	2.	0	0	2	4.5	8	4.4

Table 48-A

Demographic Variables	df	x^2	level of significance
Age	42	37.85594	.6534
Gender	6	7.93293	.2431
Institutional level	18	23.64155	.1671
Race	12	12.76675	.3862
Rank	30	47.20328	.0238

frequently submitted response to the question of maternal educational level.

Table 48-A indicates that a relationship existed between rank and responses submitted. Differences in the percentages of subjects who submitted, completed high school, was evident among the different academic ranks (professor=43.8%, associate professor=49.2%, Assistant professor=40.7%, instructor=33.3%, and lecturer=20%).

Question forty-nine asked subjects to indicate the level of education attained by their fathers. Table 49 illustrates the frequency of the range of responses, by institutional level, as well as, totals for all subjects. Results indicated that the modal response, for all subjects, was 8th grade or less. However, an almost equal number of respondents submitted, completed high school, in response to question forty-nine. Table 49 illustrates that some variation occurred among the different institutional levels, in which subjects from research and comprehensive institutions reported lower paternal educational level more frequently, while subjects from doctoral and liberal arts institutions reported higher paternal educational level more frequently, although no relationship was found between institutional level and responses submitted. The results obtained in this study were consistent with the findings of the Carnegie Foundation for the Advancement of Teaching's

Table 49

Father's Education

	Institutional Level								Totals	
Answers	R		D		C		L			
	n	%	n	%	n	%	n	%	n	%
8th grade or less	14	31.8	11	22.4	12	27.3	12	27.3	49	27.1
some high school	2	4.5	7	14.3	10	22.7	7	15.9	26	14.4
completed high school	10	22.7	15	30.6	10	22.7	13	29.5	48	26.5
some college	4	9.1	8	16.3	1	2.3	7	15.9	20	11.
college grad.	7	15.9	4	8.2	7	15.9	0	0	18	9.9
attended grad./pro. sch.	4	9.1	1	2.	3	6.8	0	0	8	4.4
attained advance degree	3	6.8	3	6.1	1	2.3	5	11.4	12	6.6

Table 49-A

Demographic Variables	df	X^2	level of significance
Age	42	61.60668	.0259
Gender	6	9.37245	.1537
Institutional level	18	28.02229	.0617
Race	12	17.52327	.1310
Rank	30	53.84271	.0048

(Jacobson, 1985) study of college faculty, in which the answer, eighth grade or less, was the most frequently submitted response in their study.

Table 49-A indicates that a relationship existed between age and responses submitted, in which subjects from the older age categories were more likely to report lesser levels of paternal education, than subjects from the younger age categories. A relationship was also identified between rank and responses submitted, in which the majority of professors submitted, eighth grade or less, while the majority of subjects in other academic ranks submitted, completed high school, in response to the inquiry on the level of paternal education.

Question fifty asked subjects to indicate the means of support they used to finance the major portion of their undergraduate education. Table 50 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was parents or in-laws financial assistance. Table 50 indicates that the answer, parents or in-laws financial assistance, was the most submitted response across all institutional levels, with the second most submitted response being, scholarship, fellowship or grant. These results appear to indicate that the majority of these physical educators financed their

Table 50

Financial Support of Undergraduate Education

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
par./in-laws fin. asst.	17	48.6	20	54.1	12	37.5	13	39.4	62	45.3
personal savings	3	8.6	2	5.4	2	6.3	2	6.1	9	6.6
borrowed funds	0	0	2	5.4	1	3.1	0	0	3	2.2
G.I. benifits	2	5.7	3	8.1	2	6.3	4	12.1	11	8.
spouse's sav./earn.	0	0	1	2.7	0	0	0	0	1	.7
schol./fellow./grant	6	17.1	5	13.5	7	21.9	8	24.2	26	19.
assistantship	2	5.7	0	0	0	0	0	0	2	1.5
inst/other staff post.	0	0	0	0	0	0	0	0	0	0
other campus job	1	2.9	1	2.7	4	12.5	4	12.1	10	7.3
off-campus job	4	11.4	3	8.1	4	12.5	2	6.1	13	9.5

Table 50-A

Demographic Variables	df	x^2	level of significance
Age	56	96.14761	.0007
Gender	8	34.67017	.0000
Institutional level	24	21.09461	.6331
Race	16	9.34863	.8984
Rank	40	40.12741	.4646

undergraduate education through their parents or in-laws financial assistance, or through scholarships, fellowships, or grants. The predominance of parental support, in response to question fifty, was consistent with results obtained by Willie and Stecklein (1982) in their study of Minnesota college faculty.

Table 50-A indicates that a relationship existed between age and responses submitted, in which subjects 60 or older were more likely to submit, G.I. benefits, while subjects in the other age categories were more likely to submit, parents or in-laws financial asistance, in response to the inquiry on how their undergraduate education was financed. A relationship also existed between gender and responses submitted, in which a higher percentage of female subjects (75.3%) were supported by their parents than their male counterparts (28.7%).

Question fifty-one asked subjects to indicate the means of support used to finance the major portion of their graduate education. Table 51 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was assistantship. The second most frequently submitted answer was personal savings, which was the modal response for subjects from research and liberal arts institutions, while subjects from doctoral and

Table 51

Financial Support of Graduate Education

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
par./in-laws fin. asst.	1	3.	0	0	2	6.9	3	8.6	6	4.4
personal savings	11	33.3	7	18.4	6	20.7	12	34.3	36	26.7
borrowed funds	1	3.	1	2.6	2	6.9	3	8.6	7	5.2
G.I. benifits	1	3.	2	5.3	2	6.9	4	11.4	9	6.7
spouse's sav./earn.	1	3.	2	5.3	1	3.4	1	2.9	5	3.7
schol./fellow./grant	2	6.1	3	7.9	2	6.9	0	0	7	5.2
assistantship	10	30.3	16	42.1	10	34.5	10	28.6	46	34.1
inst./other staff post.	3	9.1	1	2.6	1	3.4	1	2.9	6	4.4
other campus job	1	3.	2	5.3	0	0	0	0	3	2.2
off-campus job	2	6.1	4	10.5	3	10.3	1	2.9	10	7.4

Table 51-A

Demographic Variables	df	x^2	level of significance
Age	63	114.15984	.0001
Gender	9	22.17201	.0083
Institutional level	27	21.15234	.7791
Race	9	4.07284	.9066
Rank	45	48.14986	.3466

comprehensive institutions submitted, assistantship, more frequently. In contrast, Willie and Stecklein (1982) obtained results in which their modal response was, personal savings, with the second most submitted answer being, scholarship, fellowship, or grant. The results of this study suggest that the majority of these physical educators financed their graduate education with assistanships and personal savings, in contrast to what was found to occur in a study of college faculty in Minnesota.

Table 51-A indicates that a relationship existed between age and responses submitted, in which different modal answers were obtained by subjects from different age groups. A relationship was found to exist between gender and responses submited, in which a majority of male subjects (33.7%) received assistantships, while the majority of female subjects (43.8%) financed their graduate education through their personal savings.

Question fifty-two asked subjects to indicate the number of years, including the present one, they have been on the full-time staff of any college or university. Table 52 illustrates the frequency of the range of responses, by institutional level, as well as, totals for all subjects. Results indicated that the modal response, for all subjects, was 20 or more years. Table 52 indicates that the dominant occurrence of 20 or more years of service was

Table 52

Years of Higher Education Experience

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
1-3	0	0	1	2.1	1	2.3	2	4.5	4	2.2
4-7	3	7.1	6	12.5	1	2.3	4	9.1	14	7.9
8-11	6	14.3	8	16.7	7	15.9	8	18.2	29	16.3
12-15	5	11.9	4	8.3	5	11.4	5	11.4	19	10.7
16-19	11	26.2	7	14.6	12	27.3	9	20.5	39	21.9
20 or more	17	40.5	22	45.8	18	40.9	16	36.4	73	41.

Table 52-A

Demographic Variables	df	x^2	level of significance
Age	35	199.52365	.0000
Gender	5	8.99953	.1091
Institutional level	15	8.36419	.9084
Race	5	23.79543	.0002
Rank	25	80.26253	.0000

consistent across institutional levels. When combined with the answer, 16-19 years of service, the results indicated that 62.9 percent of all subjects reported having 16 or more years of full-time college teaching experience.

Table 52-A indicates that a relationship existed between age and responses submitted, in which subjects from the older age categories indicated they had more years of professional experience than subjects from the younger age categories. A relationship was evident between race and responses submitted, in which the modal response for black subjects was, 16-19 years, while the modal response for white subjects was, 20 or more years, in regard to length of higher education employment. Finally, a relationship between rank and responses submitted was evident, in which higher ranked faculty indicated having more years of professional experience than lower ranked faculty.

Question fifty-three asked subjects to indicate the number of years they have been at their present institution. Table 53 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was 20 or more years. The second most submitted answer was, 4-7 years. These results appear to indicate that the majority of these physical educators have either been at their present institutions

Table 53

Years at Present Institution

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
1-3	3	6.8	4	8.2	2	4.5	3	6.8	12	6.6
4-7	11	25.	8	16.3	9	20.5	7	15.9	35	19.3
8-11	6	13.6	7	14.3	5	11.4	8	18.2	26	14.4
12-15	8	18.2	2	4.1	7	15.9	7	15.9	24	13.3
16-19	8	18.2	9	18.4	8	18.2	8	18.2	33	18.2
20 or more	8	18.2	19	38.8	13	29.5	11	25.	51	28.2

Table 53-A

Demographic Variables	df	X^2	level of significance
Age	35	164.76749	.0000
Gender	5	5.74431	.3319
Institutional level	15	10.54434	.7842
Race	10	28.65712	.0014
Rank	25	67.62019	.0000

for an extended period of time, or for a limited period of time, which suggested a bimodal cohort distribution.

Table 53-A indicates that a relationship existed between age and responses submitted, in which subjects from the older age categories indicated that they have been at their institutions for a longer period of time, than subjects from the younger age categories. Table 53-A indicates that a relationship between race and responses submitted, in which the hispanic and black subjects submitted, 1-3 years, more frequently, while their white conterparts submitted, 20 or more years, more frequently, in response to the question on length of service to their present institutions. Finally, a relationship between rank and and responses submitted was evident, in which professors and associate professors submitted, 20 or more years, more frequently, while faculty in other ranks were more likely to have served their institutions for a shorter period of time.

Question fifty-four asked subjects to indicate whether or not they held a full-time job in an occupational field other than teaching since the completion of their graduate schooling. Table 54 illustrates the frequency of the range of responses, by institutional level, as well as totals for all subjects. Results indicated that the modal response, for all subjects, was no. Table 54 indicates that the

Table 54

Have Held a Job in an Occupational Field Other Than Teaching

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
yes	11	25.	5	10.2	4	9.1	3	7.	23	12.8
no	33	75.	44	89.8	40	90.9	40	93	157	87.2

Table 54-A

Demographic Variables	df	x^2	level of significance
Age	7	5.98768	.5412
Gender	1	8.34880	.0039
Institutional level	3	8.02377	.0455
Race	2	7.96338	.0187
Rank	5	8.92760	.1120

percentage of subjects who submitted the modal response differed among the institutional levels.

The results in Table 54-A indicates that a relationship existed between institutional level and responses submitted. Subjects from research institutions were more likely to have worked outside of teaching than subjects from other institutional levels. A relationship existed between gender and responses submitted, in which a higher percentage of female subjects (98.3%) had never worked outside of teaching, than the male subjects (81.7%) who participated in this study. An analysis of the chi-square statistics in table 54-A indicates that a relationship existed between race and responses submitted, in which the hispanic subject submitted, yes, and all of the black subjects submitted, no, in regard to the question on employment outside of teaching.

Question fifty-five asked subjects to indicate whether or not they were presently working on another degree or certification. Table 55 illustrates the frequency of the range of responses, by institutional level, as well as, totals for all subjects. Results indicated that the modal response, for all subjects, was no. This result was consistent across institutional levels and suggested that the majority of these physical educators were not presently

Table 55

Working on Another Degree or Certification

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
yes	6	13.6	4	8.2	4	9.3	4	9.1	18	10.
no	38	86.4	45	91.8	39	90.7	40	90.9	162	90.

Table 55-A

Demographic Variables	df	X^2	level of significance
Age	7	36.13263	.0000
Gender	1	.68642	.4074
Institutional level	3	.89380	.8269
Race	2	.16523	.9207
Rank	5	28.61663	.0000

engaged in any type of formal education that would lead to a degree or certification.

Table 55-A indicates that a relationship existed between age and responses submitted, in which the majority of subjects in the older age categories answered no, more frequently than subjects in the younger age categories. A relationship was also found to exist between rank and responses submitted, in which a higher percentage of subjects from the higher academic ranks answered no, more frequently than subjects from the lower academic ranks.

Question fifty-six asked subjects to indicate the number of years it took them to complete their terminal degree. Table 56 illustrates the frequency of the range of responses, by institutional level, as well as, totals for all subjects. Results indicated that the modal response, for all subjects, was 3-4 years. This finding was consistent across institutional levels, except for subjects from liberal arts institutions, where 5-6 years and not applicable were the modal responses. However, no relationship was found between institutional level and responses to question fifty-six. These findings suggest that subjects from liberal arts institutions took longer to complete their terminal degree or were less likely to have acquired a terminal degree, than subjects from other institutional categories.

Table 56

Number of Years Required to Complete Terminal Degree

	Institutional Level									
Answers	R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
1-2	7	15.9	4	8.3	11	25.6	9	20.9	31	17.4
3-4	22	50.	18	37.5	14	32.6	10	23.3	64	36.
5-6	9	20.5	11	22.9	12	27.9	11	25.6	43	24.2
7-8	1	2.3	4	8.3	1	2.3	1	2.3	7	3.9
9-10	2	4.5	3	6.3	1	2.3	1	2.3	7	3.9
more than 10	0	0	0	0	1	2.3	0	0	1	.6
not applicable	2	4.5	8	16.7	3	7.	11	25.6	24	13.5

Table 56-A

Demographic Variables	df	x^2	level of significance
Age	49	49.00314	.4730
Gender	7	6.44104	.4893
Institutional level	21	29.03108	.1133
Race	14	3.11750	.9988
Rank	35	35.61060	.4395

Table 57

First Thought Seriously About Becoming a College Teacher

Answers	Institutional Level R		D		C		L		Totals	
	n	%	n	%	n	%	n	%	n	%
prior to coll. entrance	1	2.3	1	2.1	5	11.6	7	15.9	14	7.9
during undergrad. study	14	32.6	16	33.3	11	25.6	10	22.7	51	28.7
between coll/grad sch.	12	27.9	11	22.9	10	23.3	13	29.5	46	25.8
during grad. school	12	27.9	19	39.6	15	34.9	7	15.9	53	29.8
after rec. high. degre.	4	9.3	1	2.1	2	4.7	7	15.9	14	7.9

Table 57-A

Demographic Variables	df	X^2	level of significance
Age	28	26.89959	.5237
Gender	4	1.08929	.8960
Institutional level	12	21.12000	.0487
Race	8	13.52426	.0950
Rank	20	31.06734	.0543

Question fifty-seven asked subjects to indicate when they first thought seriously about becoming a college teacher. Table 57 illustrates the frequency of the range of responses, by institutional level, as well as, totals for all subjects. Results indicated that the modal response, for all subjects, was during graduate school. However, an almost equal number of subjects submitted the answer, during undergraduate study, as well as, between college and graduate school, in response to the question on the timing of choosing a career in higher education.

Table 57 illustrates that results were not consistent across institutional level and as indicated in Table 57-A a relationship existed between institutional level and responses to question fifty-seven. These results appeared to indicate that physical educators, from different institutional levels, were influenced to become college teachers at different times in their lives. Table 57-A indicates that a relationship existed between rank and responses submitted in which subjects from the different academic ranks reported that they thought of becoming a college teacher at different times in their lives.

Summary

One of the major goals of this study was to obtain data on the personal and professional characteristics of physical educators in higher education. Data on the

personal and professional characteristics of physical educators would allow this group of professional educators to be compared to educators in other disciplines in higher education. The study has obtained the needed data from a limited sample of physical educators which enabled the following summary to be developed.

The results indicated that the personal and professional characteristics of physical educators in higher education are quite similar to the personal and professional characteristics of other faculty in higher education. As had been found in other studies, the majority of faculty sampled were married, white males, between the ages of 50-59 who have no dependents. Figures obtained in this study indicated that most of the physical educators sampled hold the rank of associate professor, work 9-10 months a year, and earn between $27,500 to 32,499 in annual salary. In terms of salary, it was found that subjects from comprehensive and liberal arts institutions earned less than subjects from research and doctoral institutions. Most physical educators were found to have 20 or more years, of professional experience, and have been at their present institutions for 20 or more years. The data indicated that most physical educators had no professional experience outside of higher education. Most of these physical educators were not working on another degree or

certification. Of those physical educators who did possess terminal degrees, between three and four years were required to complete degree requirements.

The data indicated that most of these physical educators, who are married, have a spouse who has attained an advanced degree and many of these same physical educators have come from families in which the mother has completed high school and the father has attained at least an eighth grade education. The study found that most physical educators financed their undergraduate education with their parents' or in-laws' financial assistance, and have financed their graduate education through assistantships. Results indicated that the majority of physical educators sampled first thought seriously about becoming college teachers when they were in graduate school.

The preceding discussions and summaries reflected on the data obtained through the utilization of SFPS. Although SFPS acquired data sufficient for the purposes of this study, it is believed that the instrument could be improved. Recommended revisions include changes which would: (a) allow for a zero response to be an option for questions 1-6, (b) include a, not applicable, response for questions 47 and 56, and, (c) edit wording in questions 50 and 51 to insure that only one response is submitted.

CHAPTER V

CONCLUSIONS

The purpose of this study was to obtain data on the personal and professional characteristics of physical educators in higher education and to profile the features of physical educators who are employed at different institutional levels. A questionnaire titled, Scott's Faculty Profile Survey, was utilized to obtain data upon which profiles were developed.

A total of 181 respondents, from four-year institutions located in the Midwest and Southern geographical regions of the American Alliance for Health, Physical Education, Recreation and Dance, provided data for this study. Subjects were stratified into the institutional categories of research institutions, doctoral institutions, comprehensive institutions, and liberal arts institutions. Information obtained from the mailed questionnaires was utilized for data analysis to answer the research questions.

The Statistical Package for Social Sciences (Nie et al., 1975), was used to analyze data. Frequency distributions, measures of central tendency, and chi-square

statistics were generated through the use of the SPSS's Frequency and Crosstabs programs. An alpha of .05 was used as the critical level for determining statistical significance for the chi-square statistic.

Findings

Based on the results of the data obtained in this study and within the limitations of this study, the following findings are reported.

1. What are the personal and professional characteristics of some of the people who form the physical education profession?

These physical educators were found to possess personal and professional characteristics that are in most ways similar to those prevalent among educators throughout higher education. The exceptions to this generalization appear in the job specific areas of time management, job satisfaction, and certain patterns of preference related to service, teaching and research.

2. How much time do physical educators devote to various professional activities?

(a) These physical educators have been found to allocate their professional time in a manner that, in some cases, is specific to the profession. A significant difference was found in the amount of time physical

educators devoted to research and scholarly writing (less), services to student groups or organizations (more), and teaching activities (less) in comparison to how other educators allot their time for these activities.

(b) No significant difference was found between these physical educators and others in higher education, in the allotment of time for counseling, committee and administrative duties, and off-campus services. Differences were found between physical educators and other educators in that physical educators attended professional meetings more frequently, and utilized the sabbatical leave option less frequently than others in higher education.

3. What are the attitudes of physical educators toward current issues in higher education?

These physical educators were found to exhibit almost total agreement on some current issues and widespread disagreement on other current issues in higher education. The issues in which agreement was evident are summarized separately from issues in which disagreement was found.

(a) A consensus of affirmative opinion was evident on the issues of faculty specialization, affirmative action, standards for admission of minority students into graduate school, and computer aided, as well as, computer managed instruction. Faculty specialization, affirmative

action, and computer aided, as well as, computer managed instruction were identified as being desirable by a majority of these physical educators. Most were against the idea of relaxing academic standards in the admission of minority group members into graduate programs.

(b) Widespread disagreement was found on the issues of collective bargaining, academic freedom, student quality, promotional processes, and the professional preparation of students.

4. How satisfied are physical educators with their profession and careers?

The majority of these physical educators were found to be satisfied with their profession as well as their choice of careers. These physical educators were found to exhibit a higher degree of satisfaction toward their career, and profession, than was found to exist among other members of the professoriate. Most indicated that they would make the same career decisions if given another opportunity to do so.

5. Do the profile features of physical educators in higher education vary by institutional level?

Significant differences, in profile features, were found to occur among these physical educators with different institutional affiliations. Variations in profile features were found to occur with the following variables:

amount of time devoted to teaching activities, amount of time devoted to research and scholarly writing, preferred allocation of time to professional activities, teaching load in contact hours, number of articles published, number of books published, engagement in current research, application for research funds from outside agencies, number of dependent children, salary, professional experience outside of teaching, and when interest in college teaching was first developed. No significant differences were found, among subjects from different institutional levels, in an analysis of the other variables investigated in the study.

Implications

The data generated from this study yielded information that may be used as a data base to increase understanding of the career development process. Limitations, imposed by the sampling procedures utilized in the study, prevent this study from being generalized to populations beyond the regions of the sample. However, the knowledge gained from this regionally representative sample of physical educators, can be used to gain valuable insights into the career patterns of these physical educators. In addition, the present state of the profession, as represented by this sample of physical educators, can be better understood.

The study has generated information that will enable members of the profession to assess and contrast their own career development paths with the career development processes utilized by others within the profession. This insight into different career development practices can provide individual members with an awareness of career development options and allow them to chart their own career development from a factual data base. Such a strategic career development process will enable informed members of the profession to develop a proactive, rather than a reactive, approach to career planning.

A proactive approach to career development involves the utilization of available knowledge for making career decisions. The present study indicated that career opportunities, within an institution as well as the profession, were found to be related to research productivity, demographic characteristics, resource availability, institutional affiliation and personal values. Informed physical educators can use this information in guiding their career development toward the achievement of their personal and professional goals as a result of these findings which helped to elucidate the academic work environment.

Students who aspire to a career in physical education can also employ a proactive approach to career development.

Future physical educators could use the knowledge obtained in this study to guide their career aspirations. Students will also be attuned to the means by which the occupational socialization, to which they are exposed to during graduate training, may ultimately influence career development. The knowledge gained from this study might enable future physical educators to make career choices among those activities that they believe will serve to enhance the vitality of the profession and themselves.

The vitality of a profession is inextricably intertwined with the ability of faculty members to maintain their own personal and professional vitality. This relationship exists because, in higher education, a discipline is defined by the personal and professional characteristics of its members. Stagnation and resistance to change by faculty within a discipline can curtail the evolution of a discipline, as well as its members. Conversely, professional growth and receptivity to change may enhance both the vitality of the individual as well as the profession. For these reasons, the results of this study, and its insights into faculty growth and development, have practical implications for those members of the profession who are responsible for guiding the profession's development and for representing the interest of the profession in the higher education community.

The establishment of baseline data on the personal and professional characteristics of physical educators in higher education is one of the most useful results of the study showing, as it does the complex network of possible individual patterns of responses. Physical education administrators will be able to compare and contrast the personal and professional characteristics of faculty at their institutions with the results obtained. Administrative decisions concerning faculty development issues can be related to what has been found to be the norm within this sample population. Based on this evaluative process, institutional resources then could be targeted to programs that have been found to be effective in enhancing career development among college faculty. The process of targeting resources to areas that facilitate faculty development, and of basing administrative decisions on what has been found to be effective, will serve to enhance the vitality of the profession.

The study indicates that this sample of physical educators possess personal and professional characteristics that have the potential to enhance as well as retard the vitality of the profession. For example, some results indicated that: (a) the majority of these physical educators have a high attendance rate at professional conventions, (b) are willing to accept new technology into

the learning environment, (c) are receptive to the concept of affirmative action, (d) would prefer to devote more time to research and scholarly writing over other professional activities, and (e) are willing to conduct on-site visitations with public school teachers. These are characteristics that have the potential to enhance the vitality of the profession because of reported attitudes toward time management and receptivity to change.

In contrast, results which indicate that the majority of these physical educators: (a) are not currently engaged in research that is expected to lead to publication, (b) have not solicited funds for research from organizations outside of their own institutions, (c) are dissatisfied with the promotional processes utilized at their institutions, and (d) disagree on the level of quality of students entering the profession. These are characteristics that have the potential to pose a serious threat to the profession's vitality presumably because of the strong relationship between research productivity and professional progress.

The study yielded results which suggested that incongruencies existed between expressed values and actions taken within the academic workplace. For example, most of these physical educators indicated that they would prefer to devote more time to research and scholarly writing. Yet,

a majority of those polled reported that they were not currently engaged in research that would lead to publication or actively seeking research funds from external sources. These results imply that, although research publication is a valued professional activity, most physical educators have not transcended from valuing this concept to incorporating their values into their professional lifestyle.

The majority of physical educators in this sample indicated their support for the concept of affirmative action and its implications of accessibility. Yet, limited opportunities were found to exist for women, minorities, and people who belong to particular age groups. Some physical educators have challenged the profession to adopt a multicultural perspective in training future teachers (Hellison, 1986; Swisher & Swisher, 1986) in the belief that such a perspective will instill a since of social consciousness among members of the profession (Sage, 1985). However, results revealed that these values have not transcended into actual opportunities, within the academic workplace, for a large number of women, minorities, and people belonging to certain age categories. The incongruencies identified within the study, between expressed values and professional behavior may serve to confuse members of the profession on the role of values

within the academic workplace. Such a state of misunderstanding is perceived to be another threat to the vitality of the profession.

The results of this study have also identified a different set of issues that do not pose a direct threat to the profession's vitality. However, if not properly addressed, these issues could become destabilizing forces within the profession. One such issue is the age pattern of members of the profession. Results indicate that 36 percent of the sample population reported being 50 years of age or older. These figures indicate that many of these physical educators may be reaching retirement decisions and that educational institutions will have the opportunity to replace these faculty positions in the near future. The vitality of the profession could be threatened if the profession is not capable of replacing retiring faculty members with well qualified personnel. In light of the results which indicated that disagreement existed among the sample population about the quality of students entering the profession, this issue could become a major dilemma for the profession.

Another potentially destabilizing issue is the number of physical educators who have expressed dissatisfaction with their careers. The recent Carnegie Foundation for the Advancement of Teaching (Jacobson, 1985) report indicated

that dissatisfaction with the higher education working environment is not unique to physical education. Dissatisfaction among physical education faculty is an issue that has the potential to be an unsettling force within the profession. It would be very difficult to recruit quality students into the profession if a well publicized level of discontent were reported to exist. Therefore, the level of dissatisfaction among physical educators is an issue that may cause problems for the profession.

The concept of specialization, and the research results which indicated that a majority of physical educators believe specialization is desirable, is another issue with which the profession should be concerned. The physical education profession would be wise to study the problems that other disciplines have experienced within their disciplines as a result of extreme specialization. Specialization has the potential to create conflict between faculty values and institutional needs which can also lead to instability within a profession (Rudolph, 1984; Hoffman, 1985; Thomas, 1985).

Conclusions

The following conclusions were reached after the study's results were analyzed in conjunction with an assessment of the implications of these findings.

1. The physical education profession, like other professions in higher education, is at a point where actions taken in the near term can influence the continued vitality of the profession. The faculty in physical education have enough positive personal and professional characteristics in place to serve as a foundation for the future growth and development of the profession. However, issues exist that have the potential to threatened the vitality and continued evolution of the profession. How these issues are addressed will determine, to a great degree, the evolution and vitality of the profession.

2. Physical education faculty possess many personal and professional characteristics comparable to those found throughout higher education. For example, physical educators exhibit, the same patterns toward time management, attitudes toward their profession and careers, attitude toward current issues, and demographic characteristics that the majority of their colleagues in other disciplines possess.

Recommendations

The findings of the present study led to the following recommendations for future research efforts.

1. Replicate this study in all geographical regions of the United States to develop data that could be generalized to all physical education faculty and would determine if regional differences exists in the personal and professional characteristics of physical education faculty.

2. Study specific job responsibilities of physical educators at different institutional levels to develop a better understanding of the professional orientation these educators receive at different institutional levels and to gain insights into the occupation socialization that is thought to occur at different institutional levels

3. Study the career paths of administrators of physical education programs, as well as state, regional and national leaders within the profession to compare and contrast their career paths with the career paths of other physical education faculty.

BIBLIOGRAPHY

American Council on Education, Office of Minority Concern 1980-1982, 1984-1985). Fact book on higher education.Washington: ACE.

Anderson, R. (1983) Finance and effectiveness: a study of college environments. Princeton: Educational Testing Service.

Austin, A. & Gamson Z. (1983). Academic workplace: new demands, heightened tensions. ASHE-ERIC Higher Education Research Report No. 10. Washington, D.C.: Association for the Study of Higher Education.

Babbie, E. (1973). Survey research methods. Belmont, California: Wadsworth Publishing Co. Inc.

Babbie, E. (1983). The practice of social research. Belmont, California: Wadsworth Publishing Co. Inc.

Baker, J. (1980). Rating of doctoral programs in physical education in the United States. International Journal of Physical Education, 17, 31-32.

Baldridge, V., Curtis, D., Ecker, G., & Riley, G. (1978). Policy making and effective leadership: a national study of academic management. San Fransisco: Jossey-Bass.

Baldwin, R. (1979). Adult and career development: what are the implications for faculty. Current Issues in Higher Education, (2) 13-20.

Baldwin, R. & Blackburn R. (1981). The academic career as a developmental process: implications for higher education. Journal of Higher Education, 52, (6), 598-614.

Balian, E. (1982). How to design, analyze, and write doctoral research. New York: University Press of America.

Bayer, A. (1973). Teaching faculty in academe-1972-73. Washington, D.C.: American Council on Education.

Bayer, A. & Dutton, J. (1977). Career age and research-professional activities of academic scientists. Journal of Higher Education, (May/June), 48, 259-282.

Blackburn, R., Behymer, C., & Hall, D. (1978). Research note: correlates of faculty publications. Sociology of Education, April, 132-141.

Blackburn, R. (1979). Academic careers: patterns and possibilities. Current Issues in Higher Education, (2), 25-27.

Blackburn, R., & Havinghurst, R. (1979). Career patterns of U.S. male academic social scientists. Higher Education, 8, 553-572.

Blackburn, R., Chapman, D., & Cameron, S. (1981). "Cloning in academe: mentorship and academic careers," Research in Higher Education, 15, (4),315-327.

Blackburn, R. (1985). Faculty career development: theory and practice. In S. Clark & D. Lewis (Eds.), Faculty Vitality and Institutional Productivity (pp.55-85). New York: Teachers College Press.

Bowen, H. (1982). The state of the nation and the agenda for higher education. San Francisco: Jossey-Bass.

Boyer, C. & Lewis, D. (1985). And on the seventh day: faculty consulting and supplemental income. ASHE-ERIC Higher Education Report No. 3. Washington, D.C.: Association for the Study of Higher Education.

Bureau of Institutional Research (1974). University of Illinois employees job satisfaction study. Champaign, Illinois: University of Illinois, Educational Resources Information Center.

Cameron, K. (1978). Measuring organizational effectiveness in institutions of higher education. Administrative Science Quarterly, 23, (4), 604-626.

Cameron, S. & Blackburn, R. (1981). Sponsorship and academic career success. Journal of Higher Education, 52, (4), 369-377.

Carnegie Commission on Higher Education (1969). In D. Crase (Ed.), Needed: comprehensive profiles of school health educators. The Journal of School Health, Aug. 391-393.

Carnegie Council on Policy Studies in Higher Education (1976). A classification of institutions of higher education. Berkley, Ca: Carnegie Council for Policy Studies in Higher Education.

Carnegie Council on Policy Studies in Higher Education (1980). Three thousand futures: the next twenty years for higher education. San Francisco: Jossey-Bass.

Carnegie Foundation for the Advancement of Teaching (1982). The control of the campus. Lawrenceville, N.J., Princeton University Press.

Clark, S. & Lewis, D. (1985) Faculty vitality and institutional productivity. New York: Teachers College Press.

Cole, S. (1979). Age and scientific performance. American Journal of Sociology, 84 (4),958-977.

DeVries, D. (1975). The relationship of role expectations to faculty behavior. Research in Higher Education, 3, (2), 111-127.

Directory of Physical Educators in Higher Education, (1982). Champaign, Illinois: Human Kinetics Publishers, Inc.

Eckert, R. & Williams, H. (1972) College faculty view themselves and their jobs. Minneapolis: The University of Minnesota.

Elmore, C., & Blackburn, R. (1983). Black and white faculty in white research universities. Journal of Higher Education, 54, (1), 1-15.

Exum, W., Menges, R., Watkins, B., & Berglund, P. (1984). Making it at the top. American Behavioral Scientist, 27,(3), 301-324.

Finkelstein, M. (1978). Three decades of research on american academics: a descriptive portrait and synthesis of findings. Unpublished doctoral dissertation, State University of New York-Buffalo.

Finkelstein, M. (1984). The American academic profession. Columbus, Oh: Ohio State University Press.

Fulton, O., & Trow, M., (1974). Research activity in American higher education. Sociology of Education. 47, 29-33.

Harris, S. (1972) A statistical portrait of higher education. New York: McGraw-Hill.

Hellison, D. (1986). Professional Priorities. Journal of Physical Education, Recreation and Dance. 57, (7), 33-34.

Hoffman, S. (1985). Specialization + fragmentation = extermination a formula for the demise of graduate education. Journal of Physical Educacation, Recreation & Dance. August, 19-22.

Jacobson, R. (1985). Nearly 40 pct. of faculty members said to consider leaving academe. Chronicle of Higher Education. 41 (8), 1,22.

Jacobson, R. (1985). New carnegie data show faculty members uneasy about the state of academe and their own careers. The Chronicle of Higher Education, 41, (16), 23-28.

Kovacs, F. (1979). Higher education faculty, characteristics and opinions. Washington, D.C.: National Education Association.

Ladd, E. (1979). The work experience of American college professors:some data and an argument. Current Issues in Higher Education. (2), 3-12.

Ladd, E. & Lipset, S. (1973). Professors, unions and American higher education. Berkely: The Carnegie Commision.

Ladd, E. & Lipset, S. (1976). Technical report: 1975 survey of the American professorate. Storrs, Ct: University of Connecticut, Social Science Data Center.

Ladd, E. & Lipset, S. (1975) "What professors think." The Chronicle of Higher Education, 11, (1), 2,9.

Ladd, E. & Lipset, S. (1975) "How profesors spend their time." The Chronicle of Higher Education, 11, (5), 2.

Ladd, E. & Lipset, S. (1976). "What professors like best about their jobs?" The Chroncicle of Higher Education, 12, (5), 10.

Ladd, E. & Lipset, S. (1976). "Nearly all professors are satisfied with their choice of an academic career." The Chronicle of Higher Education, 12, (10), 11.

Ladd, E. & Lipset, S. (1976). Survey of the social, political and educational perspectives of american college and university faculty: final report. Storrs, Conn.: University of Connecticut.

Ladd, E. & Lipset, S. (1977). The 1977 survey of the American professorate in technical report: 1977 survey of the American professoriate by R.K. MacDonald. Storrs: Ct Institute for Social Inquiry, University of Connecticut.

Leedy, P. (1985). Practical research: planning and design. New York:Macmillan Publishing Co., Inc.

Leslie, L., Swiren, J., & Flexner, H. (1977). Faculty socialization and instructional productivity. Research in Higher Education. 7, (21), 127-143.

Lewis, L. (1975). Scaling the ivory tower: merit and its limits in academic careers. Baltimore: John Hopkins University Press.

Locke, L. (1976). Proposals that work: a guide for planning research. New York: Teachers College Press.

Luck, E. (1970). An analysis of employment theory and practice in physical education. Dissertation Abstracts International, 37, 6384-A -6385-A.

Marsh, H. & Dillion, K. (1980). Academic productivity and faculty supplemental income. Journal of Higher Education, 51, (5), 546-555.

Massengale, J. (1981). Status and prestige among American physical education doctoral programs. Paper presented at the Northwest District Convention of the American Alliance for Health, Physical Education, Recreation and Dance, Seattle.

Massengale, J. & Sage, G. (1982) Departmental prestige and career mobility patterns of college physical educators. Research Quarterly, 53,(4), 305-311.

McMillen, L. (1986). Job competition, unrealistic expectations said to generate an anxious professoriate. The Chronicle of Higher Education, March 26, 27.

McLaughlin, G., Montgomery, J. & Mahan, B. (1979). Pay, rank, and growing old with more of each. Research in Higher Education, 11, (1), 23-35.

Menges, R. & Exum, W. (1983). Barriers to the progress of women and minority faculty. Journal of Higher Education, 52, (2), 115-135.

Minium, E. (1978). Statistical reasoning in psychology and education. New York: John Wiley & Sons.

Mortimer, K., Bagshaw, M., & Masland, A. (1985). Flexibility in academic staffing: effective policies and practices. ASHE-ERIC Higher Education Research Report No. 1. Washington, D.C.: Association for the Study of Higher Education.

Naisbitt, J. (1982). Megatrends: ten new directions transforming our lives. New York, Warner Books.

National Education Association (1979). Higher education faculty: characteristics and opinions. Washington, NEA.

National Institute for Occupational Safety and Health, Department of Health Education and Welfare (1978). Cited in, How to deal with stress on the job. U.S. News and World Report. 84, (10), 80-81.

National Science Foundation (1981). Activities of science and engineering faculty in universities and 4-year colleges: 1978/79. Washington, D.C.: NSF.

Nie, N., Hull, C., Jenkins, S., & Bent, D. (1975). Statistical Package for the Social Sciences. 2d ed. New York: McGraw-Hill.

Olswang, S. & Lee, B. (1984). Faculty freedoms and institutional accountability: interactions and conflicts. ASHE-ERIC Higher Education Research Report No. 5. Washington, D.C.: Association for the Study of Higher Education.

Oromaner, M. (1981). The quality of scientific scholarship and the "graying" of the academic profesion: a skeptical view. Research in Higher Education, 15, (3), 231-239.

Pearson, D. & Seiler, R. (1983). Environmental satisfiers in academe. Higher Education, 12, 35-47.

Pelz, D. & Andrews, F. (1966). Scientists in organizations. Rev. ed., New York: John Wiley and Sons.

Reichardt, C. & Cook, T. (eds.). (1979). Qualitative and quantitative methods in evaluation research. Beverly Hills, Ca: Sage Publications.

Rich, H. & Jolicoeur, P. (1978). Faculty role perceptions and preferences in the seventies. Sociology of Work and Occupations, 5, (4),423-445.

Rudolph, F. (1962). The American college and university: a history. New York: Vintage Books.

Sage, G. & Massengale, J. (1985). Prestige and regional mobility of doctoral faculty in graduate departments of physical education. Research Quarterly, 56, (2), 170-175.

Schurr, G. (1980). Freeing the "stuck" and aiding the terminated: expanding the career horizons of tenured college professors. Dover, Deleware: Center for the Study of Values, University of Deleware.

Schuster, J. & Bowen H. (1985). The faculty at risk. Change, Setptember/October, 31-34.

Stecklein, J., & Eckert, R. (1958). An exploratory study of factors influencing the choice of college teaching as a career. Minneapolis: The University of Minnesota.

Swisher, K. & Swisher, C. (1986). A multicultural physical education approach an attitude. Journal of Physical Education, Recreation and Dance, 57, (7), 35-39.

Thomas, J. (1985). Physical education and paranoia-synonyms. Journal of Physical Education, Recreation & Dance, November/December, 20-22.

Trumble, R. (1980) "Young instructors: concerns, options, and opportunities," Research in Higher Education, 12, (4), 335-345.

Williams, G., Blackstone, T., & Metcalf, D. (1974). The academic labor market. New York: Elsevier.

Willie, R. & Stecklein, J. (1982). A three decade comparison of college faculty characteristics, satisfactions, activities and attitudes. Research in Higher Education, 16, (1), 81-93.

Winter, D., McClelland, D., & Stewart, A. (1981). A new case for the liberal arts. San Francisco: Jossey-Bass.

Yuker, H. (1974). Faculty workload: facts, myths and commentary. Washington, D.C., American Association for Higher Education.

Yuker, H. (1984). Faculty workload: research, theory and interpretation. ASHE-ERIC Higher Education Research Report No. 10. Washington, D.C.: Association for the Study of Higher Education.

Appendix A: Instrument Use Approval

UNIVERSITY OF MINNESOTA
TWIN CITIES

College of Education

Psychological Foundations of Education
Department of Educational Psychology
300 Burton Hall
178 Pillsbury Drive S.E.
Minneapolis, Minnesota 55455

February 25, 1986

Mr. Marvin W. Scott
7366 Broken Staff
Columbia, MD 21045

Dear Mr. Scott:

Please excuse my belated reply to your letter.

Yes, you have my permission to use our college teacher form in your study. Also, I would appreciate receiving a summary of the results of your study as well as an abstract of the proposed study.

Best wishes on your project.

Sincerely,

John E. Stecklein

John E. Stecklein
Professor
Educational Psychology

JES/bj

Appendix B: Participation Rates

FACULTY PARTICIPATION BY INSTITUTIONAL LEVELS

Type of Institution	eligible faculty	number selected	number of returns
Research (n=27)	649	100	44
Doctoral (n=29)	669	100	49
Comprehensive (n=146)	2161	100	44
Liberal Arts (n=79)	655	100	44

Appendix C: Letter and Instrument

7366 Broken Staff
Columbia, Md. 21045
March 14, 1986

Dear Colleague:

I am writing to request your participation in a dissertation study that I will be conducting in fulfillment of degree requirements for the University of North Carolina at Greensboro. The project is entitled, " A Study to Profile the Features of Physical Educators in Higher Education by Institutional Level." It will involve the collection of data, which will identify features of physical educators, for the purpose of profiling physical educators employed at different institutional levels.

Your insights into your own professional development, as a physical educator at your institution, is an invaluable source of information. I am asking that you share your knowledge and opinions with me, so that the generic qualities of physical education faculty can be illuminated in this study. The information I am gathering will be of help to the American Allaince for Health, Physical Education, Recreation and Dance and to other organizations concerned with the welfare of physical education faculty, as well as scholars who are studying current issues in higher education.

I know how busy faculty members are, and realize that other surveys may have made similar demands on your time. However, the present study is unique in its scope and purpose. It is the first to focus, exclusively, on the features of physical education faculty, and the first to categorize responses by institutional level. The accuracy of the survey, and the worth of its findings are dependent upon your willingness to cooperate with the study. I believe the importance of the study will justify the time you give it.

I assure you that your answers will be held in strictest confidence. I am interested only in statistical relationships and will under no circumstances report responses on an individual or institutional basis. Any special markings on your form are used solely for internal data processing. A post card is enclosed for the purpose of informing me of your willingness to participate. I hope you will find the questionnaire interesting, and that you will complete and return it to me while you have it in hand.

Thank you for the courtesy of your cooperation.

Sincerly,

Marvin W. Scott

Marvin W. Scott

A STUDY TO PROFILE THE FEATURES OF PHYSICAL EDUCATORS IN HIGHER EDUCATION BY INSTITUTIONAL LEVEL

SCOTT'S FACULTY PROFILE SURVEY

INSTRUCTIONS

A. Use a pencil to check (X) your response directly on the paper.
B. Erase completely any answer you wish to change.
C. After you complete the questionnaire, please enclose it in the self-addressed envelope provided. Also, please fill out the enclosed postcard indicating that you are returning the questionnaire and return both of them to me.

Section I: Allocation of Time to Professional Activities

Questions 1-7: What percentage of your professional activities, for the current academic year, do you estimate have been, or will be, devoted to the following activities?

1. Teaching activities (including preparation, grading, thesis advising, etc.)
   a.( )0-10% b.( )11-20% c.( )21-30% d.( )31-40% e.( )41-50%
   f.( )51-60% g.( )61-70% h.( )71-80% i.( )81-90%
   j.( )91-100%

2. Counseling (personal and academic)
   a.( )0-10% b.( )11-20% c.( )21-30% d.( )31-40% e.( )41-50%
   f.( )51-60% g.( )61-70% h.( )71-80% i.( )81-90%
   j.( )91-100%

3. Other services to student groups or organizations
   a.( )0-10% b.( )11-20% c.( )21-30% d.( )31-40% e.( )41-50%
   f.( )51-60% g.( )61-70% h.( )71-80% i.( )81-90%
   j.( )91-100%

4. Research and scholarly writing
   a.( )0-10% b.( )11-20% c.( )21-30% d.( )31-40% e.( )41-50%
   f.( )51-60% g.( )61-70% h.( )71-80% i.( )81-90%
   j.( )91-100%

5. Committee and administrative duties
   a.( )0-10% b.( )11-20% c.( )21-30% d.( )31-40% e.( )41-50%
   f.( )51-60% g.( )61-70% h.( )71-80% i.( )81-90%
   j.( )91-100%

6. Off-campus services (professional meetings, consultant services, community talks, etc.)
   a.( )0-10% b.( )11-20% c.( )21-30% d.( )31-40% e.( )41-50%
   f.( )51-60% g.( )61-70% h.( )71-80% i.( )81-90%
   j.( )91-100%

7. To which one of the following activities would you prefer to give more time?
   a.( )teaching activities b.( )counseling c.( )other services to student groups or organizations d.( )research and scholarly writing e.( )committee and administrative duties f.( )off-campus services

8. To which one of the following activities would you prefer to give less time?
a.( )teaching activities b.( )counseling c.( )other services to student groups or organizations d.( )research and scholarly writing e.( )committee and administrative duties f.( )off-campus services

9. What was your teaching load, in semester credit hours, during the fall term of the current academic year?
a.( )1-3 b.( )4-7 c.( )8-11 d.( )12-15 e.( )16-19 f.( )20 or more

10. What was your teaching load, in contact hours, during the fall term of the current academic year?
a.( )1-3 b.( )4-7 c.( )8-11 d.( )12-15 e.( )16-19 f.( )20 or more

11. Number of national professional meetings attended during the 1984-85 school year?
a.( )0 b.( )1 c.( )2 d.( )3 e.( )4 f.( )5 or more

12. Total number of articles published in academic or professional journals in your career?
a.( )0 b.( )1-4 c.( )5-8 d.( )9-12 e.( )13-16 f.( )17 or more

13. Total number of books or monographs published or edited in your career?
a.( )0 b.( )1 c.( )2 d.( )3 e.( )4-7 f.( )8 or more

14. Are you currently doing research expected to lead to publication?
a.( )yes b.( )no

15. Have you ever applied for research funds from any agency other than your own college or university?
a.( )yes b.( )no

16. If you are in professional preparation, have you had contact with public school teachers during the past year at their school site?
a.( )yes b.( )no c.( )not applicable

17. How many sabbatical leaves have you taken during your teaching career?
a.( )0 b.( )1 c.( )2 d.( )3 e.( )more than 4 f.( )not an option

18. Assuming adequate personal income, your own good health, and no institutional restrictions, at what age would you like to retire from academic service? Please check the response closest to the desired age.
a.( )55 years and under b.( )56 c.( )59 d.( )62 e.( )65 f.( )68 g.( )70 h.( )over 70

Section II: Attitude Toward Profession and Career

19. Please indicate which of the expressions below best describes your attitude toward college teaching as a career
a.( )very dissatisfied b.( )dissatisfied c.( )indifferent
d.( )satisfied e.( )very satisfied

20. Please indicate which of the expressions below best describes your attitude toward the outlook for advancement within the profession.
a.( )very dissatisfied b.( )dissatisfied c.( )indifferent
d.( )satisfied e.( )very satisfied

21. Please indicate which of the expressions below best describes your attitude toward your base salary
a.( )very dissatisfied b.( )dissatisfied c.( )indifferent
d.( )satisfied e.( )very satisfied

22. Please indicate which of the expressions below best describes your attitude toward the outlook for advancement within your institution
a.( )very dissatisfied b.( )dissatisfied c.( )indifferent
d.( )satisfied e.( )very satisfied

23. Please indicate which of the expressions below best describes your attitude toward the teaching resources available at your institution
a.( )very dissatisfied b.( )dissatisfied c.( )indifferent
d.( )satisfied e.( )very satisfied

24. Do you think you would again choose to work in an educational institution if you could remake your decision?
a.( )yes b.( )no c.( )uncertain

25. If institutions would provide funds to enable you to enchance or change your present career, in which of the following would you participate?
a.( )career advancement (i.e. improving performance and stature in your present professional field)
b.( )career expansion (i.e. improving performance and stature by adding another academic or administrative activity to your present one)
c.( )career alternatives (i.e. changing from an academic position to a position outside of academia)

26. Do you think you would again choose to pursue a career in physical education if you could remake your decesion?
a.( )yes b.( )no c.( )uncertain

Section III: Attitude Toward Current Issues in Higher Education

27. What is your attitude toward collective bargaining for college faculty?
a.( )highly desirable b.( )desirable c.( )uncertain
d.( )undesirable e.( )highly undesirable

28. Do you think there should be a mandatory retirement age for college teachers?
a.( )yes b.( )no

29. What is your attitude toward the concept of affirmative action?
a.( )highly desirable b.( )desirable c.( )uncertain
d.( )undesirable e.( )highly undesirable

30. What is your attitude toward the the use of computers in the teaching of educational material?
a.( )highly desirable b.( )desirable c.( )uncertain
d.( )undesirable e.( )highly undesirable

31. What is your attitude toward the amount of faculty specialization that has occurred within the profession?
a.( )highly desirable b.( )desirable c.( )uncertain
d.( )undesirable e.( )highly undesirable

32. What is your attitude toward the use of computers in the management of the instructional process?
a.( )highly desirable b.( )desirable c.( )uncertain
d.( )undesirable e.( )highly undesirable

33. What is your attitude toward the relaxation of academic requirements in the admission of minority group members into graduate programs?
a.( )highly desirable b.( )desirable c.( )uncertain
d.( )undesirable e.( )highly undesirable

34. Please indicate which of the expressions below best describes your attitude toward the practice of academic freedom at your institution.
a.( )very dissatisfied b.( )dissatisfied c.( )indifferent
d.( )satisfied e.( )very satisfied

35. Please indicate which of the expressions below best describes your attitude toward the promotional process utilized by your institution.
a.( )very dissatisfied b.( )dissatisfied c.( )indifferent
d.( )satisfied e.( )very satisfied

36. Please indicate which of the expressions below best describes your attitude toward the quality of students who are deciding to major in physical education.
a.( )very dissatisfied b.( )dissatisfied c.( )indifferent
d.( )satisfied e.( )very satisfied

37. Please indicate which of the expressions below best describes your attitude toward the professional preparation students receive in physical education.
a.( )very dissatisfied b.( )dissatisfied c.( )indifferent d.( )satisfied e.( )very satisfied

Section IV: Personal and Professional Characteristics

38. Age as of December 31, 1985
a.( )19 or younger b.( )20-24 c.( )25-29 d.( )30-34 e.( )35-39 f.( )40-44 g.( )45-49 h.( )50-59 i.( )60 or older

39. Sex
a.( )female b.( )male

40. Race or ethnic group
a.( )white b.( )black c.( )American Indian d.( )Mexican-American,Puerto-Rican, hispanic e.( )Asian-American f.( )other

41. Marital status
a.( )married b.( )separated or divorced c.( )widowed d.( )never married

42. Dependent children
a.( )none b.( )1-2 c.( )3-4 d.( )5-6 e.( )more than 6

43. Present academic rank
a.( )professor b.( )associate professor c.( )assistant professor d.( )instructor e.( )lecturer f.( )no designated rank g.( )other

44. Type of appointment
a.( )regular with tenure b.( )regular without tenure c.( )acting d.( )visiting

45. Length of appointment
a.( )9-10 months b.( )12 months c.( )other

46. Full-time gross salary for 1985-86 academic year
a.( )under $12,500 b.( )$12,500-17,499 c.( )$17,500-22,499 d.( )$22,500-27,499 e.( )$27,500-32,499 f.( )$32,500-37,499 g.( )$37,500-42,499 h.( )$42,500 or over

47. Spouse's education
a.( )8th grade or less b.( )some high school c.( )completed high school d.( )some college e.( )college grad f.( )attended graduate or professional school g.( )attained advanced degree(s)

48. Mother's education
a.( )8th grade or less b.( )some high school c.( )completed high school d.( )some college e.( )college grad f.( )attended graduate or professional school g.( )attained advanced degree(s)

49. Father's education
a.( )8th grade or less b.( )some high school c.( )completed high school d.( )some college e.( )college grad f.( )attended graduate or professional school g.( )attained advance degree(s)

50. Which of the following means of support did you use to finance the cost of the major portion of your undergraduate education ?
a.( )parents or in-laws financial assistance b.( )personal savings c.( )borrowed funds d.( )G.I. benefits e.( )spouse's savings or earnings f.( )scholarship, fellowship, or grant g.( )assistantship h.( )instructorship or other staff position i.( )other campus job j.( )off-campus job

51. Which of the following means of support did you use to finance the cost of the major portion of your graduate education?
a.( )parents or in-laws financial assistance b.( )personal savings c.( )borrowed funds d.( )G.I. benefits e.( )spouse's savings or earnings f.( )scholarship, fellowship, or grant g.( )assistantship h.( )instructorship or other staff position i.( )other campus job j.( )off-campus job

52. How many years, including the present one, have you been on the full-time staff of any college or university?
a.( )1-3 b.( )4-7 c.( )8-11 d.( )12-15 e.( )16-19 f.( )20 or more

53. How many years have you been at your present instituton?
a.( )1-3 b.( )4-7 c.( )8-11 d.( )12-15 e.( )16-19 f.( )20 or more

54. Have you held a full-time job in an occupational field other than teaching since the completion of your graduate education?
a.( )yes b.( )no

55. Are you presently working on another degree or certification?
a.( )yes b.( )no

56. Number of years it took to complete your terminal degree?
a.( )1-2 b.( )3-4 c.( )5-6 d.( )7-8 e.( )9-10 f.( )more than 10 g.( )not applicable

57. When did you first think seriously about becoming a college teacher?
a.( )prior to college entrance b.( )during undergraduate study c.( )between college and graduate school d.( )during graduate school e.( )after receiving highest degree

Name _____

Institution _____

Please check below.

____ I have completed the survey and mailed it.

____ I am not interested in participating in the study.

____ I would like a copy of results.

Appendix D: Follow-up Letter

7366 Broken Staff
Columbia, Md. 21045
April 14, 1986

Dear Colleague:

I am writing to follow-up on a letter I mailed to you about three weeks ago. At that time, I requested your participation in a doctoral study that I will be conducting for the University of North Carolina at Greensboro. The purpose of the study is to profile features of physical educators in higher education who are employed at different institutional levels. Enclosed with the letter was a questionnaire, designed to obtain data on various features of physical educators, and a postcard on which you were asked to indicate your willingness to participate. However, I am sorry to say that I have not received a reply.

Your participation is vital to the completion of the study. I would like to ask that you try to find fifteen minutes in your busy schedule to fill out the questionnaire enclosed with this letter. If you plan to mail the questionnaire or have decided not to participate in the study, please return the postcard indicating your choice, so you will not be contacted in future follow-up efforts.

Thank you for the courtesy of your cooperation.

Sincerly,

Marvin W. Scott