EVALUATING DEPARTMENT CHAIRS' EFFECTIVENESS USING FACULTY RATINGS

by

B. JAN MIDDENDORF

B.S., University of Rhode Island, 1987
M.A., Ohio University, 1992

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department Of Curriculum and Instruction
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2009

Abstract

This study examined relationships between faculty perceptions of their academic department chair's overall effectiveness and their ratings of his/her personal characteristics and administrative methods. The experimenter analyzed secondary data obtained from the Individual Development and Educational Assessment (IDEA) Center's *Feedback for Department Chairs* system. Data came from 604 department chairs and their corresponding 9,125 faculty members across the years 2003 to 2007. Faculty completed the 70-item *Faculty Perceptions of Department Head/Chair Survey,* and their department chair responded to the 30-item *Department Head/Chair Information Form*. Exploratory factor analysis (EFA) of department chair ratings revealed three underlying dimensions of administrative responsibilities, ranked in order of importance: Departmental Operations, Faculty Enhancement, and Research and Assessment. EFAs of faculty ratings determined one factor explained the department chair's personal characteristics—Flexibility/Adaptability—and one factor explained the department chair's performance of administrative methods—Communication and Coordination. Items with high component matrix coefficients were summed to produce scales with high reliability for each factor. Multiple regression analysis indicated that faculty ratings of the department chair's Flexibility/Adaptability and Communication and Coordination explained 83% of the variance in their ratings of the department chair's overall effectiveness ($p < .001$). Ratings on Communication and Coordination explained the most variance. Faculty ratings of the department chair's performance of administrative responsibilities also explained 83% of the variance in their ratings of the chair's overall effectiveness ($p < .001$). Faculty Enhancement showed the strongest relationship. The findings help to explain the underlying dimensions of the academic department chair's effectiveness and the role of faculty ratings in evaluation.

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Acknowledgements

The completion of this research project was dependent on several individuals' support, encouragement, guidance, and cooperation. I would like to offer my sincere appreciation and gratitude to the members of my advisory committee: Drs. Michael Holen, Steve Benton, Linda P. Thurston, and Margaret Gail Shroyer. Without their remarkable talents, knowledge, and individual expertise, this dissertation would not have been possible. Each of their counsel, challenge for excellence, and encouragement provided the continual support needed to accomplish this task. Thank you to Bill Pallet and Amy Gross from the IDEA Center for trusting me and allowing me to utilize their data for this research. I would also like to thank my colleagues at the Office of Educational Innovation and Evaluation for their continual support and motivation. And, thank you to Doug and Terry for providing me with a writing haven to finish the last leg of my journey.

Thank you to my dear friends, Cindy, Paula, and Sally for helping me see the light at the end of the tunnel and for keeping me sane through this taxing journey. Furthermore, I am especially indebted to my boss, mentor, and friend, Linda Thurston. Without her persuasive nature, continual encouragement, and dedicated persistence this task would not have been brought to fruition.

In addition to the above this journey would not be possible without the love and support of my entire family. Thank you to my children, Andre and Sarah, for their steadfast love and enthusiasm and for sharing the sacrifice required to accomplish this task. Thank you to my brilliant sisters Nancy, Linda, Terry, Karen, Bev, Gloria, and Lisa who have inspired me in immeasurable ways. Thank you to my loving brothers Doug, David, Paul and Jeff. I am extremely grateful for your love and support. And, thank you to my mother- and father-in-law for bringing their son into this world. He is the wind beneath my wings and the music in my heart.

And, thank you to my mother and late father who raised me with unconditional love and with the belief that all things are possible. The rumpled version of my father's favorite poem

was a constant reminder of what is possible despite the many obstacles that we face in our lives. Thank you to my family, friends, committee, and colleagues for never giving up on me.

Don't Quit!

When things go wrong as they sometimes will.
When the road you're trudging seems all up hill.

When funds are low and the debts are high.
And you want to smile, but you have to sigh.

When care is pressing you down a bit.
Rest, if you must, but don't you quit.

Life is strange with its twists and turns.
As everyone of us sometimes learns.

And many a failure turns about.
When we might have won had we stuck it out:

Don't give up though the pace seems slow –
You may succeed with another blow.

Success is failure turned inside out –
The silver tint of the clouds of doubt

And you never can tell how close you are.
It may be near when it seems so far:

So stick to the fight when you're hardest hit –
It's when things seem worst that you must not quit.

\- Author unknown

Finally and most importantly, thank you to my beloved husband and best friend Gerad - without you my world is incomplete. Thank you for believing in me, for your enduring love and devotion, and for all our adventures together now and forever.

Dedication

I dedicate this "book" to my children, Andre and Sarah, who are the best part of me.

CHAPTER 1 -
Introduction

"… the most useful way to build and sustain a culture of excellence is to create a culture of critical reflection and continuous improvement, (Wergin, 2003: p. xiii)

The department chair plays a vital role in contributing to the pursuit of excellence in the world of higher education. Despite this prominent role, few formalized mechanisms exist for evaluating the department chair's performance. Review of literature and scholarly work intended for department chairs offer insights on what constitutes meaningful evaluation and the important functions necessary to serve as an effective administrator in higher education. This descriptive study is designed to: (a) examine the underlying dimensions of the department chair's responsibilities, methods/strategies, and personal characteristics; and (b) investigate how faculty perceptions of their department chair performance of these dimensions are related to their overall ratings of the department chair's effectiveness. This chapter is organized in the following sections: (1) overview of the issues, (2) statement of the problem, (3) purpose of the study, (4) significance of the study, (5) delimitations, assumptions, and limitations of the study, and (6) definition of terms.

Overview of the Issues

Over the past 30 years there have been volumes written about department chairs' roles and responsibilities, essential characteristics of leadership, and challenges associated with the position (e.g., Braskamp, 2008; Chu, 2006; Creswell et al., 1990; Christie, 2007; Gmelch & Miskin, 1993, 2007; Hecht et al., 1999; Higgerson, 1996; Padron, 2008; Seagren et al., 1993; Matz, 2007). Therefore, if one is a new department chair, there are several resources available to choose from to facilitate the navigation of this role. Like any high quality 'captain' it is important to have an accurate map, a strong healthy crew, and, most importantly, a means to

ensure that you are on the right path to reach your destination. 'Means' in this context refer to the appropriate instruments to assess effectiveness, regardless of whether you are crossing the ocean or managing your department. Departments play a critical role in many aspects of institutional vitality, such as influencing decisions relative to the quality of the institution, course content, discipline requirements, and faculty salaries (Coats, 2000; Hoyt and Spangler, 1977). Some have argued that the quality of an institution's educational program depends on the success of the department and, ultimately, the effectiveness of its department chair (Bennett & Figuli, 1990; Coats, 2000; Knight & Holen, 1985).

Despite the tacit importance of the role of department chairs, very little has been written about how to evaluate their performance and effectiveness. In addition, there are few evaluation instruments designed specifically for department chairs to assist them in navigating what can be tumultuous waters. The one exception is the Individual Development and Educational Assessment (IDEA) Center's *Feedback for Department Chairs* system, which has been in operation for over 30 years. The IDEA Center maintains a confidential data base of ratings from department chairs and faculty related to importance and performance of administrative responsibilities, personal characteristics, and administrative methods.

The current study will draw from this data base to address the following questions: Which roles and responsibilities do department chairs view as most important? Furthermore, which department chair behaviors, as perceived by faculty, are most strongly related to fulfilling those responsibilities? Are the strengths of the department chair's personal characteristics or the frequency of various administrative behaviors most highly correlated with the department chair's performance?

As outlined by Mitchell (2004), evaluators generally have the same purposes in common when evaluating department chairs: (1) consider a department chair's goals, accomplishments, and contributions for a given period of time; (2) provide feedback on performance and accomplishments; (3) discuss the department chair's strengths and weaknesses; and (4) set goals for the future. The IDEA Center's *Feedback for Department Chairs* system emulates these important features because it is objective, it encompasses both aspects of formative and summative evaluation, and it provides specific recommendations about areas of strength and strategies for improvement. This research is aimed at learning more about what those essential

administrative responsibilities and operations are from the perspective of the department chairs and the faculty.

Statement of Problem

Much has been written about the roles and responsibilities of academic department chairs as well as the leadership challenges that are faced in this administrative position. Providing leadership is especially difficult in institutions of higher education given the complexity of the department chair's role as one who must chart the course of the department, evaluate faculty and staff, oversee budgets, and serve as the liaison and advocate between both the dean and faculty. The job is multifaceted and calls for the department chair to function as both a leader of the department and a manager of its resources (Williams, 2007).

In addition, most department chairs enter into these positions with little awareness of what the job really entails, and even less preparation for what awaits them in the position (Christie, 2007; Chu, 2006; Gmelch & Miskin, 1993, 2007; Hecht et al., 1999; Creswell et al., 1990; and, Wheeler, et al, 2008).

Department chairs have become more influential as agents of change and more accountable in terms of their effectiveness (Wheeler et al., 2008). The need to make departments stronger, more effective, and efficient through department chair leadership is also increasing, as is the need to understand how to assess these efforts (Leaming, 2007). Much research has been conducted on the department chair's duties; however, there are few studies that examine which of these roles and responsibilities are most important to the department chair's effectiveness.

As articulated by Downey and Cox (2002), evaluations conducted on campus tend to focus on programs, students, and faculty; however, there has been little concentration on evaluation efforts for administrative personnel, such as deans, department chairs, and other executive personnel. Given the important functions and responsibilities associated with these positions, evaluation of those holding them should play a more central role in universities' evaluation efforts (Downey and Cox, 2002).

In describing the essential roles and responsibilities of department chairs, Lucas (1994) asserts the need for evaluation and feedback is evident:

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More than 80 percent of the many chairs with whom I have worked have never participated in formal goal setting, and more than 90 percent have never been evaluated in their role as chair. This lack of feedback increases role ambiguity for chairs, who often feel uncertain about how others perceive their performance and unsure about how far to go on their own in determining departmental direction. (p. 23)

Purpose of Study

The purpose of the this study is to (a) examine the underlying dimensions of the department chair's responsibilities, methods/strategies, and personal characteristics; and (b) investigate how faculty perceptions of their department chair's performance of these dimensions are related to their overall ratings of the department chair's effectiveness. As such, the study sought to answer the following questions:

Research Questions:

1. What is the underlying factor structure of the department chairs' importance ratings of administrative responsibilities?

2. How reliable are any scales derived from exploratory factor analysis (EFA) of the department chairs' importance ratings of administrative responsibilities?

3. Do department chairs rate some scales higher than others in terms of importance?

4. What is the underlying factor structure of faculty ratings of the department chair's performance of administrative responsibilities?

5. What is the underlying factor structure of faculty ratings of the department chair's personal characteristics?

6.   What is the underlying factor structure of faculty ratings of the department chair's performance of administrative methods?

7.   How reliable are any scales derived from the EFAs performed on faculty data?

8.   Are the scales for faculty ratings of the department chair's performance of responsibilities, personal characteristics, and administrative methods related to faculty members' overall judgment of the department chair's effectiveness?

9.   Are the scales for faculty ratings, based on those derived from the EFA performed on department chairs' importance ratings of administrative responsibilities, related to faculty members' overall judgment of the department chair's effectiveness?

Because this study is primarily descriptive, in most cases no hypotheses are specified for the research questions. However, the following hypotheses are proposed for Questions 8 and 9:

Hypothesis 1: Faculty ratings of the department chair's performance of responsibilities, personal characteristics, and administrative methods will be positively related to faculty members' overall judgment of the department chair's effectiveness.

Hypothesis 2: Faculty ratings, based on those derived from the EFA performed on department chairs' importance ratings of administrative responsibilities, will be positively related to faculty members' overall judgment of the department chair's effectiveness.

Significance of Study

Overall, results from this study will provide a better understanding of factors related to the department chair's effectiveness, and it will provide evidence that assessment can provide valuable formative feedback for department chairs. This study will contribute to new insights in

matters of interest to administrators in higher education as well as evaluators in the field. Finally, the information gained from this examination will help define future agendas for research in the areas of evaluation and academic administration in higher education.

Delimitations and Assumptions of the Study

This study was limited to the department chairs and faculty that participated in the IDEA Center's *Feedback for Department Chairs* system during the years of 2003 to 2007. The study assumes that the department chairs and faculty completed the survey instruments honestly and to the best of their ability. The investigator assumes that evaluation is an important and necessary endeavor that provides valuable insight to assessing and improving all aspects of society.

Limitations of the Study

The limitations identified in this study involve the ability to generalize the results of the study to the larger population of administrators, the inherent limitations of self-selection, and the research methods chosen to conduct the study.

The first limitation is how the population studied was selected. Because the sample studied was not randomly selected from the "parent" population, there are limitations concerning the extent to which conclusions can be generalized. The population included in the study consisted entirely of department chairs and faculty that participated in the IDEA Center's *Feedback for Department Chairs* system during the years of 2003 to 2007. Conclusions potentially are restricted to the sample collected and therefore the generalization of the results can be achieved only if the analysis using different samples reveals the same results (Field, 2005). In addition, the dataset from the IDEA Center contained aggregated data for each department chair by forming means from the faculty ratings. By aggregating data and forming means for each department, the potential exists of losing the within-department variance data that could provide additional insights.

The second limit to the study involves the possible effects of self-selection. Self-selection bias occurs whenever the sample population being studied has any control over whether to

participate. Participants' decision to participate may be correlated with traits that affect the study, potentially making the participants a non-representative sample (Heckman, 1979). This research used only those individuals who had previously participated in the IDEA Center's *Feedback for Department Chairs* system on a voluntary basis and for whom scores were available.

The third limitation is the quantitative nature of the research itself. All statistical procedures have limitations, and quantitative research has the possibility of over-generalizing the interpretation from the results to the population of the study, in this case department chairs (Creswell, 2003). In addition, the study is based exclusively on quantitative analysis and, as such, qualitative aspects of this research are not included. Quantitative analysis has its merits in research, but not including qualitative aspects of a research creates a condition where individual stories do not provide enlightenment in the study of department chair performance and effectiveness (Patton, 2004).

Definitions of Key Terms

The following definitions and acronyms are intended to clarify terms that appear throughout this study:

Chair Information Form (CIF) is one of the two instruments in the IDEA Center's *Feedback for Department Chairs* system. The instrument is comprised of 30 items, including a section that asks department chairs to rate the *importance* on items related to 20 administrative responsibilities. An additional 10 items query chairs about various departmental characteristics.

Department is an academic unit that houses faculty members with common academic backgrounds and that teach in the same discipline or mixed disciplines, depending on the size and mission of the university.

Department Chair or Chairperson (see Department Head) means the person appointed to administer the programs and supervise the faculty of an academic department, including persons with the title of department chair or department head. For the clarification purposes, the department head/chair will be labeled as "department chair" throughout this study.

Department Head (see Department Chair or Chairperson) means the person appointed to administer the programs and supervise the faculty of an academic department, including persons with the title of department head, department chair. For the clarification purposes, the department head/chair will be labeled as "department chair" throughout this study.

Evaluand is any object of an evaluation such as person, program, idea, policy, product, object, performance, or any other entity being evaluated (Scriven, 1991).

Evaluee is the person who is the object of an evaluation (Scriven, 1991).

Faculty Perception of Department Head Survey (FPDHS) is one of the two instruments in the IDEA Center's *Feedback for Department Chairs* system. The FPDHS is a 70-item instrument containing 67 objectively worded items and 3 short-answer written-response items. All objective items were constructed using a Likert-type format with five possible responses ranging from 1 to 5 (1=low; 5=high); however the wording of the scale anchors varies, depending on the subscales. This instrument is described in detail in Chapter Three.

Feedback for Department Chairs system is a data-based tool developed by the IDEA Center for evaluating and developing department chairpersons at colleges and universities. This system is comprised of two instruments and a summarized feedback report. This feedback system provides a comprehensive assessment of the effectiveness of academic chairpersons or department heads.

Formative Evaluation refers to evaluations that are conducted periodically throughout the program or term to provide feedback for modifications or improvements prior to the completion of program, event, or contract. Formative evaluation is applicable to evaluating both programs and people. Questions associated with this approach are: How can the program or position be improved? (Patton, 2008).

IDEA (Individual Development and Educational Assessment) Center is a nonprofit organization whose mission is to serve colleges and universities committed to improving learning, teaching,

and leadership performance. The Center supports the evaluation and development of both programs and people. The emphasis Center is on improving teaching, learning, and the higher education process (IDEA, 2009).

Personnel evaluation refers to the systematic assessment of a person's qualifications or performance, or both, in relation to a role and defensible purpose of an institution, profession, program, or other entity (Stufflebeam, 2007).

Summative Evaluation refers to evaluations conducted at the completion of a program, event, or contract (or other type of evaluand). Results from summative evaluation benefit external audiences, other decision-makers, as well as the client. This evaluation draws together and supplements previous information and provides an overall judgment of the evaluand's or evaluee's value. Questions associated with this approach are: Should the program/position be continued? If so, at what level? What is the overall merit or worth of the program/position? (Patton, 2008).

Theory of evaluation is a coherent set of conceptual, hypothetical, pragmatic, and ethical principles that form a general framework to guide the study and practice of evaluation (Stufflebeam, 2007).

Conclusions

This chapter has provided an introduction to the study, the statement of the problem, its purpose and significance, the delimitations, assumptions, and limitations, and a list of key terms and acronyms to be used in presenting the study. The remaining chapters are organized as follows. Chapter Two reviews the relevant literature in assessment and evaluation in higher education as it applies to the academic department chair. Chapter Three describes the research methods and procedures applied in the study. Chapter Four presents the results of the data analyses, and Chapter Five summarizes the study with a discussion of key findings, implications, and suggestions for further research.

CHAPTER 2 -
Literature Review

Introduction

This chapter reviews the relevant literature in assessment and evaluation in higher education as it applies to the academic department chair. Four distinct bodies of literature are reviewed: (1) an overview of evaluation theories and guiding principles; (2) the purpose and types of evaluation in higher education; (3) the role of the department chair in higher education; and (4) instruments for evaluating department chairs and their effectiveness. The chapter is organized in accordance with these four lines of research.

Overview of Evaluation Theories and Principles

Evaluation Theories

This study is based on the premise that evaluation is an important discipline aimed at assessing and helping to improve all aspects of society. In addition, the standards and guiding principles for program evaluation are also applicable to other areas in the field of evaluation, such as personnel evaluation (Stufflebeam, 2007). Evaluation serves society by providing "affirmation of worth, value, improvement, accreditation, accountability, and when necessary, a basis for termination" (Stufflebeam, 2007, p. 4).

Evaluation, as a field of study, is relatively new and specific theories grounded in empirical research are still emerging (Alkin, 2004; Stufflebeam, 2007). In an attempt to categorize these theories, Alkin (2004) developed a framework referred to as the "Evaluation Theory Tree" (Alkin, 2004). The tree, as the metaphor, has a trunk and three main branches of evaluation. The trunk is built on a dual foundation of *accountability* and *systematic social inquiry*. Accountability is designed to improve programs and society. Social inquiry is the

systemic study of the behavior of groups of individuals in various kinds of social settings by a variety of methods. The three branches of the Evaluation Theory Tree are *use*, *methods* and *valuing* (Alkin, 2004). Each branch lists the evaluation theorists associated with the particular branch. Despite the use of the term 'theory' in evaluation literature, Alkin asserts that it is more appropriate to use the term *approaches* or *models*. Therefore, each branch of the evaluation tree refers to the various types of models or approaches utilized in evaluation practice   (Alkin, 2004).

The branch of the tree that informs this study is the *use* branch. The *use* branch refers to designing evaluations that are intended to inform decision-making and ensure that evaluation results have a direct impact on decision making and organizational change. The models associated with this branch are from the evaluation work of theorists' Daniel Stufflebeam, Michael Quinn Patton, and to some extent, Michael Scriven. Scriven's major contribution to evaluation is his definition of the role of the evaluator in making value judgments (Alkin, 2004; Shadish, et al., 1991). Scriven (1976) argues that "the evaluator, in valuing, must fulfill his or her role in serving the 'public interest,' and taking responsibility for communicating those outcomes beyond the clients, users, and stakeholders, but to all potential consumers" (p. 220). This approach plays an important role in the evaluation of higher education, given the wide range of 'potential consumers' and 'stakeholders.' In addition, Scriven has contributed to the evaluators' vernacular to add clarity to the field with terms such as formative and summative evaluation, and evaluand (entity being evaluated) (Scriven, 2004).

Stufflebeam is most noted for his development and implementation of the CIPP model, where the acronym stands for four types of evaluation: context, input, process, and product. Context evaluation relies on identifying needs to define program objectives, and input evaluation leads to decisions on strategies and designs for improvement. Process evaluation involves identifying shortcomings to refine development or implementation, and product evaluation measures outcomes for decisions regarding the continuation or refinement of an entity being evaluated (Stufflebeam, 2004). The CIPP model emphasizes that "evaluation's most important purpose is not to prove, but to improve" (Stufflebeam, 2004, p. 247). A variation of this model has been valuable in defining a framework in which to assess and evaluate various aspect of higher education (Gardiner, 2000, 2007).

Patton's (1978, 1986, 1997, 2008) scholarly work on utilization-focused evaluation primarily emphasizes the use of evaluation to a broader spectrum of identified stakeholders. The

premise is that it is not sufficient to think of evaluation as solely related to decision-makers, but it is necessary to think about the evaluator's obligation to ensure that "utilization" takes place. The evaluator should be proactive and not be satisfied with an evaluation that 'gathers dust' (Alkin, 2004; Patton, 1978). In Braskamp and Wergin's (1987) overview of the value of evaluating administrative programs, Patton's definition is "Utilization occurs when there is an immediate, concrete, and observable effect on specific decisions and program activities resulting directly from evaluation findings" (p. 94). Studies on utilizing evaluative information, by Patton et al. (1978) and Braskamp and Brown (1980), have shown consistently that the prospects for genuine impact of evaluation depend on the presence and strengths of several factors. They include: (1) identification of specific individuals or groups who have an interest in the evaluation being done and the information it generates; (2) a clear focus of the evaluation purpose; (3) a shared understanding of how the data are to be interpreted and used; and (4) a genuine commitment to the evaluation process (Braskamp and Wergin, 1987).

Evaluation Principles

The shared principles from these evaluation theorists' are categorized by four main uses: improvement, accountability, dissemination, and enlightenment. Improvement refers to providing information for developing a service, program, or other, ensuring its quality, or improving it. This type of evaluation use is referred to as *formative evaluation*. Formative evaluation in its simplest form provides ongoing feedback for improvement (Scriven, 2004; Stufflebeam, 2007).

Formative evaluation is conducted during the development stage of a program or the beginning stages of a new position and continues to be an ongoing process. This type of evaluation offers guidance to those who are responsible (e.g., department chairs) for ensuring continuous improvement in the quality of their program operations (departments). It is also used to set goals and priorities, provide direction for planning alternative courses of action (if necessary), and guide management by assessing implementation plans and interim results (Stufflebeam, 2007).

Accountability, in the context of use, refers to summative evaluations. Summative evaluation occurs at an end of a cycle, completion of a program, or for a finished product. These evaluations bring together previously collected information to supplement an overall judgment of

the evaluand's value. Reports are cumulative in nature and record what has been accomplished in a specified timeframe (Scriven, 2004; Stufflebeam, 2007).

Summative and formative evaluation can be interdependent, meaning that formative evaluation often forms the basis for the summative evaluation. Collectively these approaches complement each other by providing the evaluand or evaluee with an assessment of their overall effectiveness and performance. The main features of formative and summative evaluations as summarized by Stufflebeam (2007, p. 5) are presented in Table 2-1. The table has been modified to include the descriptors relevant to this study.

Table 2-1

Summary of Formative and Summative Evaluation[1]

Descriptors	Formative Evaluation	Summative Evaluation
Purpose	Measures improvement; Focuses on quality assurance	Provides an overall judgment of the evaluand
Use	Guidance for decision-making	Determines accountability for successes and failures; Promotes understanding
Functions	Provides feedback for improvement	Informs others about evaluand's value
Variables	Involves all aspects of the product, position, etc. (methods, responsibilities, characteristics)	Comprehensive range of dimensions concerned with merit, worth, equity, and significance
Audience	Administrators, staff; connected closely to insiders	Stakeholders and other interested parties
Relationship between formative and summative evaluation	Often forms the basis for summative evaluations	Compiles and supplements previously collected formative evaluation information

[1] Table 2-1 is a modified version of Daniel Stufflebeam's publication, *Evaluation Theory, Models, and Applications* (2007, p. 5).

The remaining two uses of evaluation or principles shared by the evaluation theorists' are *dissemination* and *enlightenment*. Dissemination is the process of distributing to a wider audience the proven practices and other lessons learned from the evaluation process. Enlightenment fosters a new understanding arising from the evaluation process or practice. The intention is to contribute new insights in matters of interest to theorists and policymakers (Stufflebeam, 2007).

In summary, the insights and inspiration generated from these theories and models of practice are the lenses that contributed to this study and to thinking about what can be learned about effectively evaluating department chairs. The common themes from these approaches are applicable to both programs and people (evaluands). Evaluation efforts must be relevant, meaningful, and utilized to prove valuable to the end user and the evaluand.

Assessment and Evaluation in Higher Education

Assessment and evaluation are not new concepts in the world of higher education. The formal accreditation process for universities dates back to 1787. Accreditation is an external review process utilized in higher education to evaluate colleges, universities, and programs for quality assurance and program improvement purposes (Young, et al., 1983). The primary purpose of accreditation is to provide a means by which institutions of higher education may demonstrate and ensure that their programs meet standards of excellence and educational quality (Harcleroad, 1980; Ratcliff, et al., 2001; Young, et al., 1983).

The fundamental elements that guide this evaluative process continue to be applicable within the current context of the need for increased accountability and demand for excellence (Ratcliff, et al., 2001). These elements include:

1. Foster excellence through the development of criteria and guidelines for assessing effectiveness.

2. Encourage improvement through ongoing self-study and planning.

3. Ensure stakeholders and external entities that a program has clearly defined goals and appropriate objectives, maintains faculty and facilities to attain them, demonstrates it is accomplishing them, and demonstrates sustainability.

4. Provide advice and counsel in the establishment and development of institutions and programs.

5. Encourage diversity among American postsecondary institutions of education to allow them to achieve their goals and objectives.

6. Protect institutions against encroachments that jeopardize their educational effectiveness or academic freedom.

The importance and emphasis of accountability in higher education has heightened since the dissemination of the findings from the U.S. Department of Education Spelling's Commission report: "*A Test of Leadership: Charting the Future of the U.S. Higher Education*." This report outlines challenges and recommendations for improving higher education in regard to access and affordability, enhancing quality and innovation, and the need for transparency and accountability (USDE, 2006). Formalized assessment and evaluation of educational programs/departments are no longer an option, but rather a necessary process and essential function of improvement and accountability that should be institutionalized over time (Braskamp, 1987; Malik and Lee, 2009).

The ability to engage in effective assessment and evaluation requires mastering the professional knowledge and skills developed in these fields of study (Gardiner, 2000, 2007). In order to address the concept of assessment and evaluation, it is important to understand the operational definitions that guide the practice in the context of higher education.

Definition of Assessment

In higher education, faculty, administrators, and other stakeholders want evidence, qualitative or quantitative, from which to develop useful information about their students, faculty, programs, and institutions. Assessment is the process of defining variables to be measured, designing or selecting the metrics for gathering the information about those variables, and collecting credible data using appropriate methodology (Gardiner, 2007; Stufflebeam, 2004).

Assessment of outcomes does not by itself produce enough evidence to permit thorough understanding of programs, policies, and individuals in higher education. Evaluation uses information based on the credible evidence generated through assessment to make judgments of relative value. Assessment indicates what results have been produced, but does not determine causation, indicate how those results were achieved, or compare those results with accepted higher education standards. Therefore evaluators utilize accepted evaluation designs or established standards for the process of establishing the value and merit of the results. The methodologies utilized in assessments in higher education are diverse and must be appropriate to the purposes for which the assessment is being used. Whatever methods are employed, validity and reliability are essential to ensure that the results from the assessment will produce meaningful and trustworthy results (Gardiner, 2007). In assessment, validity is a term used to describe a 'measurement instrument' or 'test' that accurately measures what it is supposed to measure; reliability is the capacity of an assessment to perform consistently during successive uses (Gardiner, 2007; Vogt, 2005).

According to Miller (2006), assessment in higher education has had three distinct purposes: (1) to certify individual student achievement, (2) improve programs, and (3) hold higher education accountable to its constituencies. These three purposes take shape in regard to student assessments, program assessments, and institution assessments. Table 2.1 summarizes the type, purpose, measure, and evaluand (entity being evaluated) of these types of assessments.

Table 2-2

Types of Assessments in Higher Education

Type	Purpose	Measures	Evaluand
Student Assessment	• Measure student performance • Eligibility purposes • Financial Aid purposes • Comparison data • Common metrics for transfers	• College-entry and placement exams • Rising-junior tests • Licensure • Graduate admissions exams, ACT, SAT, GRE, etc.	*Primary[2]* - • Students • Entrants • Candidates *Secondary*- • High Schools • Prep Schools • Magnet Schools
Program and Institutional Assessments	• Ensure programs meet standards of excellence and educational quality • Determine the worth or merit of program for continuation or removal • Measure program to improve student learning	• Accreditation Entities • Licensure Entities • PART (Program Assessment Rating Tool) • Evidence of accountability • Programs of Study	*Primary* - • Accredited units • Departments • Programs • Services *Secondary* - • Administrators • Faculty/Students
Faculty Assessments	• Public's need to learn more about effectiveness and quality of the institution • Demonstrates accountability to constituents (legislators, taxpayers, consumers of education)	• Merit Review • Promotion & Tenure Process • Teaching Performance • Student Outcomes • Effective Agreements	*Primary* - • Faculty • Administrators • Dept. Chairs *Secondary* - • Provosts/Deans • Presidents • Students

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[2] Primary signifies the specific evaluand being evaluated, and secondary signifies the potential effect that an evaluation may have on other entities. For example, if students consistently perform poorly on college "entrance exams", the preparatory institution where he or she attended is potentially scrutinized for their inability to adequately prepare their students.

As articulated by Downey and Cox (2002), evaluations conducted on campus tend to focus on programs, students, and faculty; however there has been little concentration on evaluation efforts for administrative personnel, such as deans, department chairs, and other executive personnel. Given the important functions and responsibilities associated with these positions, evaluation of those holding them should play a more central role in universities' evaluation efforts (Downey and Cox, 2002).

Definition of Evaluation

Evaluation is the process of determining the value, merit, or worth of a program. It is a vibrant and engaging activity that leads to powerful learning and well-informed action (Hannum, Martineau, & Reinelt, 2007). Evaluation has two arms: accumulating and summarizing data, and making conclusions about the value or relevance of standards in a program (Scriven, 1991). The specific form and scope of an evaluation depend on its purposes and audience, the nature of the evaluand, and the organizational context within which the program/individual operates. Due to the inter-related nature of institutions, higher education presents a unique context in which to conduct assessment and evaluation.

Evaluation facilitates decision-making when it combines sound procedures with issues valued by stakeholders. The selection of variables to measure, the measurement tools, and the evaluation design depend on the types of decisions to be made. Therefore, an evaluator begins with questions such as: What is the purpose of the evaluation? What is the mission of the institution? What are the program or project goals? What are the expected outcomes? What are the criteria for success? What is the role of the individual in the institution and what are the expected competencies and attributes for that role? What decisions need to be made? (Hannum, Martineau, & Reinelt, 2007).

Based on Ruben's scholarly work outlined in *Pursuing Excellence in Higher Education* (2004), evaluation is defined as a critical element of a thriving learning organization. In higher education, stakeholders (i.e., individuals, groups or organizations that have a significant interest in how higher education functions) make judgments about students, faculty, and programs daily. A legislator votes on budget increases for a state's colleges and universities. A university president decides to make major changes in the institution's minority outreach programs. A dean or department chair makes decisions about faculty promotions. Faculty make decisions about the

quality of student learning. Ideally, these decisions are based on fair and accurate evaluation of the processes and programs within an institution. Important functions of evaluation include:

1. *Accountability*: Programs are accountable to their constituents, such as funders, and/or administrators. Evaluation provides answers to several questions: Is the program or organization doing what it says it is doing? Are the activities and outcomes of the organization congruent with its mission? Are students learning what instructor expect them to learn?

2. *Program / continuous improvement*: Evaluation data provide feedback to programs that informs modifications to better serve stakeholders or meet goals. Accrediting bodies want to know that faculty and administrator are continuously improving their program operations and outcomes.

3. *Dissemination / replication*: Evaluation can address the following important questions: Is a program ready to be disseminated to others? For example, is a faculty development program designed to improve teaching in sociology worth replicating in other years or in other colleges?

4. *External funding / continued support*: Can program organizers demonstrate why it is worthy of receiving external support from funders? For example, can faculty in the eco-genomics program demonstrate they are conducting their funded program as proposed and that it is making progress toward developing skilled and ethical scientists and researchers?

5. *Rationale for ongoing stakeholder support*: Stakeholders want to know that their needs are being met and that their time, expertise, and/or funds are being used to produce the outcomes they expect. For example, did the leadership institute produce enough expected changes in participants to warrant continued support by university administration?

6. *Build capacity within higher education institution for assessment and reflection*: Evaluation forces units and programs to begin developing their own resources to include ongoing evaluation. This contributes to a culture of accountability, the internal capacity to assess and evaluate programs and products, and a "more effective learning organization" as described by Ruben (2004).

These six functions of evaluation relate directly to issues of performance and effectiveness in higher education. Administrators, faculty, staff, and students are all subjects of evaluation and consumers of evaluation results (Scriven, 1991). Understanding how to appropriately evaluate "performance and effectiveness" is critical at every level within higher education institutions. All institutional components and functions (e.g. college, program, courses, students) are inter-related and serve a critical role in sustaining the health and vitality of the institution. As recommended in the U.S. Department of Education's Spellings Commission Report, "To meet the challenges of the 21st Century, higher education must change from a system primarily based on reputation to one based on performance" (USDE, 2006).

With a focus on improving performance and effectiveness, department chairs play a pivotal role in defining evaluation expectations to ensure that a "culture of evidence" is ongoing and a central aspect of enhancing accountability (Ewing and Crockford, 2008). To this end, department chairs need a comprehensive evaluation process grounded in theory to assess their own performance as well as the performance of their department, which ultimately will contribute to the pursuit of excellence in higher education.

Evaluating the Department Chair

Organization of Departments

Historically, universities were not always organized into discipline-based departments. In the mid 1800s, presidents served as leader, scholar, disciplinarian, registrar, provost, and department head over many disciplines (Tucker, 1993). Demands of governance, discipline, and academic growth led to the establishment of a defined organizational hierarchy for universities. This framework was designed to achieve a balance of power. The process of developing the framework was not smooth, but rather evolved out of tension from students, faculty, and

administrators as each tried to influence the course of action and direction of universities. Through this process of transition, "trustees, presidents, professors, and students were formalizing a host of relationships that defined responsibility, prestige, and power on the American campus" (Rudolph, 1990, p. 120). This foundation defined the roles of the various stakeholders and created a framework of power in order to function. These events shifted the focus of leadership from an autocratic system to giving students' a voice and creating a more "business-like" environment with established "governing boards" (Rudolph, 1990). The development of this framework designed to achieve a balance of power marks the creation of departments within universities and colleges.

According to Hecht et al. (1999), departments were often designated as either *pure* or *mixed*. A pure discipline department is one in which, "all its faculty members are trained, have common backgrounds, and teach in the same discipline. Pure departments, such as history, chemistry, English, and mathematics, are more apt to occur in large colleges and universities" (p. 15). Mixed departments are designed for administrative and economic efficiency, when the university is smaller or the disciplines are housed in the same department as other disciplines, such as sociology and anthropology, for example (Hecht, et al, 1999; Tucker, 1993).

By the early 1900s, departments were solidly established and academic administrative positions such as the "department chair" were created (Hecht, et al, 1999; Tucker, 1993). Traditionally, department chairs were appointed by the president to supervise faculty and administer programs, and they had special expertise in the given discipline (Tucker, 1993). Such appointments do still occur, as department chairs are sometimes appointed by the dean with or without the consultation and approval of the faculty. Alternatively, department chairs can be elected by faculty following either an internal or external search (Tucker, 1993). Terms are variable as chair positions may rotate through faculty or a chair may serve in the position indefinitely. In many cases, department chairs receive additional compensation and other perquisites for the position, such as a year round contract and a more prestigious office space (Tucker, 1993).

The term "department head" as an academic administrative leader has evolved over time and depending on the institutions' origins, the position title has evolved from "department head," "head," "chairman," "chairperson," and most commonly, "department chair" (Seagren, et al., 1993). For the purposes of this study, the term "department chair" will be used.

Roles and Responsibilities of the Department Chair

The roles and responsibilities of academic department chairs have always been a challenge because of the context in which they are expected to provide leadership. Providing leadership is especially difficult in institutions of higher education given the complexity of the chair's role as negotiator, facilitator, evaluator, and administrator of faculty who have a great deal of autonomy. In addition, most department chairs enter into these positions with little awareness of what the job really entails, and even less preparation for what awaits them in the position (Creswell et al., 1990; Christie, 2007; Chu, 2006; Gmelch and Miskin, 1993, 2007; Hecht et al., 1999; and Wheeler, et al., 2008).

Table 2.2 outlines a thorough list of the duties and responsibilities of the department chair's position developed by Tucker (1984, 1993). This list of roles and responsibilities is widely cited and serves as the foundational body of work that has helped department chairs to clarify their roles and tasks (Creswell, Seagren, and Henry 1980; Creswell, et al., 1990; Dressel et.al., 1970; Gmelch and Miskin, 1993, 2007; Hecht, et al., 1999; Lucas, 1994; Tucker, 1984, 1993).

Table 2-3

Responsibilities of Department Chairs[3]

Responsibilities and Duties of Department Chair by Category
Departmental governance
Conduct department meetings
Establish department committees
Use committees effectively
Develop long-range department programs, plans, goals, and policies
Prepare the department for accreditation and evaluation
Serve as an advocate for the department
Monitor library acquisitions
Delegate some department administrative responsibilities to individuals and committees

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[3] Table replicated from Allan Tucker's 3rd edition (1992) of, "Chairing the Academic Department: Leadership among Peers" (p. 28-29).

Responsibilities and Duties of Department Chair by Category

Encourage faculty members to communicate ideas for improving the department

Instruction

Schedule classes

Supervise off-campus programs

Monitor dissertations, prospectuses, and programs of study for graduate students

Supervise, schedule, monitor, and grade department examinations

Update department curriculum, courses, and programs

Faculty affairs

Recruit and select faculty members

Assign faculty responsibilities, such as teaching, research, committee work, and so forth

Monitor faculty service contributions

Evaluate faculty performance

Initiate promotion and tenure recommendations

Participate in grievance hearings

Make merit recommendations

Deal with unsatisfactory faculty and staff performance

Initiate termination of a faculty member

Keep faculty members informed of department, college, and institutional plans, activities, and expectations

Maintain morale

Reduce, resolve, and prevent conflict among faculty members

Encourage faculty participation

Student affairs

Recruit and select students

Advise and counsel students

Work with student government

External communication

Communicate department needs to the dean and interact with upper-level administrator

Improve and maintain the department's image and reputation

Responsibilities and Duties of Department Chair by Category

Coordinate activities with outside groups

Process department correspondence and requests for information

Complete forms and surveys

Initiate and maintain liaison with external agencies and institutions

Budget and resources

Encourage faculty members to submit proposals for contracts and grants to government

agencies and private foundations

Prepare and propose department budgets

Seek outside funding

Administer the department budget

Set priorities for use of travel funds

Prepare annual reports

Office management

Manage department facilities and equipment, including maintenance and control of inventory

Monitor building security and maintenance

Supervise and evaluate the clerical and technical staff in the department

Maintain essential department records, including student records

Professional development

Foster the development of each faculty member's special talents and interests

Foster good teaching in the department

Stimulate faculty research and publications

Promote affirmative action

Encourage faculty members to participate in regional and national professional meetings

Represent the department at meetings of learned and professional societies

Department chairs have become more influential as agents of change and more
accountable in terms of their effectiveness (Wheeler et al., 2008). The need to make departments
stronger, more effective, and efficient through department chair leadership is also increasing, as
is the need to understand how to assess these efforts (Leaming, 2007). Much research has been
conducted on the department chair's roles and responsibilities; however, there are few studies

that examine which of these roles and responsibilities are most important to the department chair's effectiveness.

Evaluation Tools for Department Chairs

Department chairs play a pivotal role in the process of changing evaluation expectations to ensure that a "culture of evidence" is ongoing and is a central aspect of assessing how well the department is performing (Ewing & Crockford, 2008). Although this statement is primarily geared toward evaluating faculty, department chairs need a comprehensive evaluation process to assess how well they and the department are performing. As articulated by Hecht et al. (1999):

> Accountability initiatives designed to monitor the quality and cost-effectiveness of higher education have increased the importance of the department chair's role. Institutions cannot respond to externally imposed mandates for accountability of such things as student learning outcomes assessment without the support and leadership of department chairs. Department chairs are the primary interpreter of externally imposed mandates for department faculty, and the tone with which the chair presents those initiatives influences faculty response (p. 30).

Despite the importance of accountability and evaluation of a department chair in his or her role, there are relatively few resources to draw from to inform this topic. Tucker (1993) outlines who evaluates the department chair, expectations of faculty, expectations of the dean and the types of performance that are evaluated: academic and political. Evaluation in this context is defined as: "Nothing more than the process by which others communicate with the chair about how well important messages are being received and acted upon" (Tucker, 1993, p. 538). Tucker supports the notion the evaluation is important and suggests that department chairs should "welcome good and frequent feedback as a source of information about how they can do their jobs better" (Tucker, 1993, p. 538).

In describing the essential roles and responsibilities of department chairs, Lucas (1994) asserts the need for evaluation and feedback is evident:

> More than 80 percent of the many chairs with whom I have worked have never participated in formal goal setting, and more than 90 percent have never been

evaluated in their role as chair. This lack of feedback increases role ambiguity for chairs, who often feel uncertain about how others perceive their performance and unsure about how far to go on their own in determining departmental direction. (p. 23)

Lucas (1994) addresses this issue by suggesting that department chairs need to become proactive leaders and take responsibility for their own professional development. Her work primarily focuses on leader and faculty developer, which require both conceptual knowledge and interpersonal skills. Lucas defined the issues or challenges most commonly faced by department chairs as the ability to proactively lead the department and concomitantly motivate faculty (Lucas, 1994).

In the monograph "Measuring the Performance of the Chair," Mitchell (2004) discusses performance evaluation from the department chair's perspective in regard to the nature of the process, the participants, and how to prepare for the evaluation. This work emphasizes the need to understand the job responsibilities of the position before one can aptly be evaluated. In determining how to evaluate the department chairs, Mitchell (2004) suggests that several issues need to be taken into consideration, such as how the department chair was selected, understanding the difference between faculty performance evaluation and department chairs' evaluations, and the process in which the evaluation will be conducted. As described previously, the selection process for a department chair varies per institution. In some cases, the department faculty elects the chair and in other cases the chair is appointed by the dean, typically with faculty input. Ultimately, the dean usually makes the final decision. Despite differences in how the department chair is selected there is usually some type of evaluation process to consider the department chair's effectiveness. The timeframe for this occurrence varies per institution based on their policies and procedures (Mitchell, 2004).

In regard to the difference between faculty and department chair evaluations, universities' have well described policies and procedures that outline in writing guidelines of the evaluation process for faculty. These guidelines typically include the process of the review and evaluation, the specific documents that are needed to be submitted by faculty, and the university committees responsible for the review process (e.g., peer committees, department chairs, and deans), (Mitchell, 2004).

Universities typically do not address department chair evaluations in the same fashion as faculty evaluation, nor do they have official procedures and guidelines that provide the same level of detail as the faculty process. Mitchell (2004) asserted:

Evaluation of department chairs is much less frequently addressed in official university guidelines and procedures. Few universities describe the processes by which these administrators are evaluated in much detail. If the department chair's evaluation is addressed in writing by the university at all, it is likely to be described in very general terms. Often a department chair has given little thought to his or her own evaluation process until the time arrives for his or her first evaluation as department chair. (p. 56)

Despite the lack of official guidelines, universities still conduct department chair evaluations; however the process is much less transparent than that of faculty. Provosts and/or deans typically provide informal guidelines that specify what is to be prepared by the department chair for the evaluation, which varies by university, college, or department. In general, department chairs are evaluated on his or her administrative performance rather than their academic performance. The primary focus is on the department chair's accomplishments in departmental operations and specific contributions that the department chair can credit as part of his or her contribution to the success of the department (Mitchell, 2004). Mitchell suggests that evaluation of department chairs should focus on job responsibilities and associated job skills. The job responsibilities demonstrate what has been accomplished, and the associated skills explain how they were accomplished.

According to Braskamp and Rath (1982) a useful approach to evaluating professionals in higher education is to document the critical tasks or activities of the specific job to define what will be evaluated. The list of responsibilities essentially serves as the basis for the evaluation and ensures that the critical aspects of the job are the central focus. This is known as an analytical approach to evaluation. In the analytic evaluation, job representation, validity, and reliability are stressed to increase fairness and usefulness. This approach to evaluation has elements of both formative and summative feedback and identifies strengths and weaknesses that the evaluand (department chair) can address (Braskamp and Rath, 1982).

The Individual Development and Educational Assessment (IDEA) Center's *Feedback for Department Chairs* System shares common merits of this approach in that it is objective and encompasses both aspects of formative and summative evaluation, and provides specific areas of strength and strategies for improvement.

The IDEA Feedback for Department Chairs System

History

The IDEA Center at Kansas State University has developed and published the IDEA *Feedback for Department Chairs* system for evaluating and developing department chairpersons. This system has been in operation for over 30 years. The instrument was first made available in 1977 and was named the *Departmental Evaluation of Chairperson Activities for Development* (DECAD). The rationale for developing the DECAD system was based on the need to provide a performance evaluation system for department chairs that was reliable and valid. The original development of the DECAD was based on consultations with department heads, faculty, and the limited literature on administration in higher education (Hoyt, et al., 1977). The DECAD system used two forms the *Chairperson Information* (CI) and the *Faculty Reaction to Chairpersons' Activities* (FRCA). The CI and the FRCA contained the same15 items in regard to administrative responsibilities, where the department chair rated the items by importance and the faculty rated the items by their perception of the department chairperson's performance. Additional items in the FRCA were categorized by administrative methods. Evidence of the DECAD's reliability and validity had been consistently demonstrated (Hoyt, et al., 1999; Hoyt and Spangler, 1977); along with several research studies that utilized the DECAD's data to contribute to the understanding of different aspects of leadership specific to department chairs (Coats, 1996, 2000; Ditchen, 1997; Knight and Holen, 1985; Knight, 1983; Stewart, 1993).

DECAD Revisions

In 1999, the DECAD instrument was revised to reflect the updated literature in regard to department chair leadership and effectiveness. Details of the revisions are found in the précis titled: "The IDEA System for Evaluating and Improving the Administrative Performance of Department Chairpersons: Revising the DECAD Form" (Hoyt, et al., 1999). Table 2.4 provides a

synthesis of the types of research that were conducted in regard to roles and responsibilities (Seagren, et al. 1993).

Table 2-4

Summary of Studies Conducted Between 1980 – 1992 of Department Chairs Roles and Responsibilities[4]

Author	Focus	Responsibility/ Role Examined	Specific Roles and Responsibility
Norton 1980	Responsibilities in a college of education	8 tasks areas	Internal administration, budgetary planning, personnel administration & communication, curriculum, student personnel, personal & professional development
Bragg 1981	Subroles emphasized by department chairs	Faculty, externally, program, management-oriented	Recruiting, evaluation, negotiation, enhancement of department's image, program development
Jennerich 1981	Competencies of chairs	14 skills and competencies	Character/integrity, leadership ability, interpersonal ability, communication, decision making, organization
Tucker 1984, 1992, 1993	Diversity of roles	28 possible roles	Governance of department, instruction, faculty affairs, student affairs, external communication, budget & resources, office management, professional development
Moses & Roe 1990	Headship functions	40 functions	Staff & student affairs, professional development, administration, one's own academic activities, budget & resources
Seagren & Filan 1992	Roles, tasks, competencies	18 roles, 32 tasks, 12 competencies	Motivator, integrate unit plans, decisiveness
Carroll & Gmelch 1992	Leader, Scholar, Faculty Developer, and Manager	26 duties	Leader, Scholar, Faculty Developer, and Manager

Along with the revision the DECAD, the IDEA Center chose to change the name of the system to the *Feedback for Department Chairs* system. This system is comprised of two

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[4] Table modified from Seagren, et al., (1993) monograph, "The Department Chair: New Roles, Responsibilities and Challenges" (p. 6).

instruments and a summary feedback report. The first instrument is the *Faculty Perceptions of Department Head/Chair Survey* (FPDHS), and the second instrument is the *Chair Information Form* (CIF), which are described in detail in Chapter Three. In constructing the revised forms for evaluating and improving the administrative performance of department chairs, the IDEA Center deliberated several important points central to the revision process. These considerations were outlined by Hoyt, et al. (1999: p. 46), and are as follows:

1. The rationale and purposes of the program should be retained. It should continue to offer both summative and formative evaluative information.
2. It should provide and "overall" measure of effectiveness, as well as measures of effectiveness in performing specific responsibilities.
3. It should cover administrative purposes and processes which authorities in the field have identified as central to effective functioning.
4. Insofar as practicable, it should take into account factors which influence ratings but which are beyond the control of the department chair.
5. It should be somewhat shorter than the original form (70 items).

The end results from these considerations and the incorporation of items that would reflect the current literature at the time resulted in the following changes: (a) adding five additional responsibilities; (b) adding a "personal characteristics" section; (c) removing 12 redundant "administrative behavior" items from the old instrument (DECAD) and adding 12 new items based on literature (Hoyt, et al., 1999). The full description of the instruments, items, and corresponding scales is presented in the "Instrumentation" description on the IDEA Center's *Feedback for Department Chair* system found in Chapter Three.

Current research continues to support the survey items maintained in the FPDHS instrument. For example, the results from Cipriano and Riccardi's (2008) survey of department chairs further validates the importance of the items under personal characteristics and traits found in the FPDHS Items 21-30. Cipriano and Riccardi's (2008) survey was designed to elicit responses about: (1) degree of satisfaction in the role as department chair; (2) plans after term is over; (3) perceptions of the skills and competencies, based on a list of 16, needed to function effectively as department chair. The results pertinent to this study are the top ten

competencies/skills rated by the respondents. The competencies are: (1) Ability to communicate effectively; (2) Interpersonal skills; (3) Organizational ability; (4) Problem-solving ability; (5) Character/integrity; (6) Decision-making ability; (7) Trustworthiness; (8) Planning skills; (9) Leadership skills; and (10) Professional competency.

Features of the System

The IDEA Center's *Feedback for Department Chair* system is comprised of two instruments and a summary feedback report. The first instrument is the *Faculty Perceptions of Department Head/Chair Survey* (FPDHS), and the second instrument is the *Chair Information Form* (CIF). The FPDHS and CIF are discussed in detail in the methods section of this study and are found in appendix A and B, respectively. The system is designed to measure effectiveness for both summative evaluation (i.e., recommendations regarding merit salary, promotion, and other administrative decisions) and formative evaluation (i.e., improving administrative performance). This is accomplished by soliciting faculty input on how well the department chair has used different administrative methods to fulfill responsibilities he or she identifies as important or essential for the department. Results from the two instruments (CIF and FPDHS) are analyzed and the department chair receives a summarized feedback report named the IDEA Feedback for Department Chair Report. An example is found in appendix C.

The feedback report provides individualized statistics along with national comparisons that provide direction on specific areas of strength and strategies for improvement. The information can, therefore, be used for both criterion- and norm-referencing. The report also provides both summative and formative feedback. The summative portion of the feedback report is designed to accommodate differences among departments by developing individualized "priority profiles." The priority profiles are based on the ratings of the relative importance of responsibilities commonly stressed by academic departments. These standards are used to weight faculty ratings of how well each responsibility was performed. The weighted averages are used as the principal measure of administrative effectiveness (Hoyt, et. al. 1999). In order to provide assistance in improving performance, strengths and weaknesses are diagnosed by comparing ratings from the national database in regard to "relevant administrative behaviors" with the ratings from the faculty respondents from that specific department. This approach allows for a national comparison in addition to understanding the department's relevant context.

According to the IDEA Center Web site (http://www.idea.ksu.edu/DC/index.html) the IDEA Feedback for Department Chairs system provides the only nationally available data-based tool for evaluating and developing department chairpersons at colleges and universities. This system is intended for use early in one's appointment to provide formative feedback (at the conclusion of the third or beginning of the fourth semester), as well as later to develop an overall summary evaluation. Both the CIF and the FPDHS are administered online to ensure speed, efficiency, and confidentiality.

The IDEA Feedback for Department Chairs system assesses the effectiveness of the academic chairperson or department head, recognizing that to be effective, different management styles and strategies need to be employed, depending on the goals of the department. Features of the system include (IDEA, 2009):

- The chairperson identifies the importance of 20 responsibilities in his or her role as chair
- Provides faculty ratings of five types of administrative responsibilities
- Provides details on 20 specific duties within these five types
- Assesses strengths and weaknesses associated with success for each duty
- Highlights specific recommendations for areas of improvement
- Includes detailed statistical information about how faculty responded to each question, permitting an in-depth analysis of specific concerns
- Summarizes faculty ratings of overall effectiveness

Given that the IDEA Feedback for Department Chairs system has been in operation for over 30 years and that the IDEA Center maintains a confidential data base, this evaluation system was the focus of this study. As outlined by Mitchell (2004), evaluators generally have the same features in common when evaluating department chairs: (1) consider a department chair's goals, accomplishments, and contributions for a given period of time; (2) provide feedback on performance and accomplishments; (3) discuss the department chair's strengths and weaknesses; and (4) set goals for the future. The IDEA Feedback for Department Chairs System emulates these important features because it is objective and encompasses both aspects of formative and summative evaluation, and it provides specific recommendations about areas of strength and strategies for improvement. This research is aimed at learning more about what

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those essential administrative responsibilities and operations are from the perspective of the department chairs and the faculty.

Summary

This chapter has provided a literature review which included: (1) an overview of evaluation theory and principles, (2) the purpose and types of evaluation in higher education; (3) an in-depth look at the role of the department chair; and finally (4) literature relevant to evaluating department chairs. Results from this study will contribute to the understanding of which roles and responsibilities department chairs view as most important. In addition, this study will provide insight into faculties' perceptions of department chair's effectiveness in regard to these responsibilities. The next chapter covers the research methods and procedures applied in the study.

CHAPTER 3 -
Method

This chapter covers the research methods and procedures applied in the study. The chapter begins by reviewing the research questions and hypotheses proposed in the previous chapters. Next, the data source is described along with the population and the exclusion criteria applied in selecting the sample for the analyses. This is followed by a description of the survey instruments in the IDEA Center's *Feedback for Department Chairs* system. Finally, the data analysis procedures used in answering the research questions are described.

Research Questions

The IDEA Center's *Feedback for Department Chairs* system is designed to provide a comprehensive assessment of the effectiveness of academic chairpersons or department heads. The system measures effective management by obtaining faculty views of how well departmental goals are being met, and the degree to which different administrative methods are used. The system combines ratings by both faculty members and the department chair to yield reliable and relevant information. The purpose of this study was to examine the survey instruments in the system from an evaluation-theory perspective and to answer the following research questions:

1. What is the underlying factor structure of the department chairs' importance ratings of administrative responsibilities?

2. How reliable are any scales derived from exploratory factor analysis (EFA) of the department chairs' importance ratings of administrative responsibilities?

3. Do department chairs rate some scales higher than others in terms of importance?

4.   What is the underlying factor structure of faculty ratings of the department chair's performance of administrative responsibilities?

5.   What is the underlying factor structure of faculty ratings of the department chair's personal characteristics?

6.   What is the underlying factor structure of faculty ratings of the department chair's performance of administrative methods?

7.   How reliable are any scales derived from the EFAs performed on faculty data?

8.   Are the scales for faculty ratings of the department chair's performance of responsibilities, personal characteristics, and administrative methods related to faculty members' overall judgment of the department chair's effectiveness?

9.   Are the scales for faculty ratings, based on those derived from the EFA performed on department chairs' importance ratings of administrative responsibilities, related to faculty members' overall judgment of the department chair's effectiveness?

Because this study is primarily descriptive, in most cases no hypotheses are specified for the research questions. However, the following hypotheses are proposed for Questions 8 and 9:

Hypothesis 1: Faculty ratings of the department chair's performance of responsibilities, personal characteristics, and administrative methods will be positively related to faculty members' overall judgment of the department chair's effectiveness.

Hypothesis 2: Faculty ratings, based on those derived from the EFA performed on department chairs' importance ratings of administrative responsibilities, will be positively related to faculty members' overall judgment of the department chair's effectiveness.

Data Source

The data for this study were secondary and were obtained from the Individual Development and Education Assessment (IDEA) Center. The IDEA Center is a nonprofit organization in Manhattan, Kansas "whose mission is to serve colleges and universities committed to improving learning, teaching, and leadership performance" (The IDEA Center, 2009). The Center supports the evaluation and development of a number of programs that focus on students, faculty, department chairs, deans and administrators in general. Permission to access the data from the *Faculty Perceptions of Department Chair Survey* (FPDHS) system was obtained from the President of the IDEA Center. The data used for the analyses did not contain identifying information regarding the participants, and all data were aggregated. In addition, the data for this study was secondary, and therefore did not involve any variable manipulation or treatment intervention of any kind.

Population and Sample

From 2003 to 2007, 19,083 faculty members were invited to rate their respective department chair, using the *Faculty Perceptions of Department Chair Survey* (FPDHS) instrument in the IDEA Center's *Feedback for Department Chairs* system. Of those invited, 14,479 completed at least one item on the FPDHS (75.9% response rate). A total of 644 different department chairs were rated.

To obtain the final sample for this study, several exclusion criteria were enacted. First, if fewer than four[5] faculty members rated a specific department chair in a particular year, this department chair entry was removed from the final sample. Second, if there were multiple entries for a department chair across the years 2003 to 2007, only one of these entries was retained by random selection. Third, only faculty members who responded to at least 50% of the items on the FPDHS were retained. The final sample consisted of 9,125 faculty members rating 604 different

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[5] Criterion of 4 faculty members recommended by two statisticians in the Department of Statistics at Kansas State University.

chairs. Data were aggregated for each department chair, and mean faculty ratings were computed on each item for each of the 604 department chairs.

As illustrated in Table 3.1, the vast majority (71%) of the department chairs were appointed by a dean with consultation and approval of the faculty. Years of service varied, but the majority of the department chairs (63%) had served fewer than five years. The majority of the department chairs (91%) had not been challenged in a grievance procedure or a lawsuit during the previous five years. The percent of full-time tenured faculty in the department also varied. Fifty-eight percent (58%) of departments had at least 50% or more tenured faculty, while 42% had less than 50% tenured faculty.

Table 3-1

Number and Percentage Breakdown of FPDHS Respondents (*n*=604)

	Sample	
Category	(*n*)	(%)
Nature of Appointment		
Appointed by the dean with consultation and approval of the faculty	424	70.8
Appointed by the dean without meaningful faculty consultation/approval	69	11.5
Elected by the faculty to serve a definite term	33	5.5
Elected by the faculty to serve an indefinite term.	23	3.8
Other	50	8.3
Total	604	100.0
Length of time served as chair		
One year	81	13.5
Two or three years	177	29.5
Four or five years	117	19.5
More than five years	224	37.4
Total	604	100.0
Challenged in a grievance or lawsuit		
No	544	91.0
Yes, once	47	7.9
Yes, more than once	7	1.2

Total	604	100.0
Percent of full-time faculty in the department are tenured		
Less than 35%	152	25.8
35 - 49%	94	15.8
50 – 66%	132	22.1
67 – 84%	146	24.5
> 85%	70	11.7
Total	604	100.0

The sample included 58% research universities, 33% master's level universities, and 9% associate/bachelors level institutions. Table 3.2 provides the distribution of departments by institutional type and Carnegie Classification (private vs. public). The sample was more representative of public universities (72%) than private universities (26%).

Table 3-2

Number and Percentage Breakdown of FPDHS Departments (n=604[α])

	Sample	
Category	(n)	(%)
Institutional Type		
Associates of Arts	15	2.5
Bachelors	40	6.6
Masters	198	32.8
Doctoral	350	58.0
Total	603	100.0
Carnegie Classification		
Public	446	74.0
Private	157	26.0
Total	603	100.0
[α] Valid percents are presented, data are missing from one institution		

Instrumentation

Characteristics of the IDEA system

The IDEA Center's *Feedback for Department Chair* system is comprised of two instruments and a summarized feedback report. The first instrument is the FPDHS, and the second instrument is the *Chair Information Form* (CIF). The system is designed to measure effectiveness for both summative evaluation (i.e., recommendations regarding merit salary, promotion, and other administrative decisions) and formative evaluation (i.e., improving administrative performance). This is accomplished by soliciting faculty input on how well the department chair has used different administrative methods to fulfill responsibilities he/she identifies as important or essential for the department. Results from the instruments are analyzed, and the department chair receives a summarized feedback report that provides individualized data along with national comparisons that provide direction on specific areas of strength and strategies for improvement.

The FPDHS is a 70-item instrument containing 67 objectively worded items and 3 short-answer written-response items. All objective items were constructed using a Likert-type format with five possible responses ranging from 1 to 5 (1=low; 5=high); however the wording of the scale anchors varies, depending on the subscales. In the first 20 items on the FPDHS instrument, the faculty rate their respective department chair's *performance* on various administrative responsibilities. Five a-priori subscales are assumed for administrative responsibilities (Administrative Support, Personnel Management, Program Leadership/Support, Building Image/Reputation, and Developing Positive Climate). The scale for these items ranges from "Poor" (scored as "1") to "Outstanding" (scored as "5"). Table 3.3 provides the a-priori structure of the administrative responsibilities outlined in the IDEA *Feedback for Department Chair Repo*rt for items 1-20 in both the FPDHS, referring to performance, and the CIF, referring to importance.

Table 3-3

Structure of the Administrative Responsibilities A-priori Subscales

Item	Label
A. Administrative Support	
7.	Communicates department's needs (personnel, space, monetary) to the dean
11.	Guides the development of a sound organizational plan to accomplish departmental programs
3.	Attends to essential administrative details (e.g., class scheduling, budget preparation, promotion, and tenure documentation)
B. Personnel Management	
1.	Guides the development of sound procedures for assessing faculty performance
2.	Takes the lead in recruiting promising faculty
13.	Fosters development of each faculty member's special talents or interests
20.	Recognizes and rewards faculty in accordance with their contributions to the department
C. Program Leadership/Support	
4.	Fosters good teaching in the department (e.g. encourages course updating, use of appropriate technology, attending to student feedback
9.	Encourages an appropriate balance among academic specializations within the department
10.	Stimulates research and/or scholarly activity in the department
15.	Understands and communicates expectations of the campus administration to the faculty
17.	Guides curriculum development
6.	Leads in establishing and monitoring progress on annual or biannual department goals
D. Building Image/Reputation	
5.	Facilitates obtaining grants and contracts from external sources
12.	Improves the department's image and reputation within the campus community
19.	Improves the department's image and reputation with off-campus constituencies
E. Developing Positive Climate	
8.	Develops collegiality/cooperation among departmental faculty members
14.	Sees to it that new faculty and staff are acquainted with departmental procedures, priorities, and expectations
16.	Stimulates or rejuvenates faculty vitality/enthusiasm
18.	Establishes trust between members of the faculty and myself

FPDHS = Faculty Rating of Department Chair performance based on 5-point scale: 1=Poor; 2=Only so-so; 3=In between; 4=Good; 5=Outstanding

CIF = Department Chair rating of importance based on 5-point scale:
1=Not important; 2=Only so-so; 3=Fairly important; 4=Quite important; 5=Essential

On the next set of items, 21-30, the faculty rate their respective department chair's strengths and weaknesses on personal characteristics. Five a-priori subscales are assumed for personal characteristics (Ability to Resolve Issues, Communication Skills, Steadiness, Trustworthiness, and Openness). The scale for these items ranges from "Definite Strength" (scored as "5") to "Definite Weakness" (scored as "1"). Table 3.4 provides the a-priori structure of the personal characteristics found in the IDEA *Feedback for Department Chair Report* for items 21-30 in the FPDHS.

Table 3-4

Structure of the Personal Characteristics A-priori Subscales

Item	Label
Trait A. Ability to Resolve Issues	
22.	Problem solving ability
26.	Practical judgment
Trait B. Communication Skills	
21.	Interpersonal skill
27.	Willingness to listen
Trait C. Steadiness	
23.	Appreciation for department's history
24.	Patience in implementing change
Trait D. Trustworthiness	
25.	Honesty
30.	Fairness
Trait E. Openness	
28.	Flexibility/adaptability in dealing with individuals/situations
29.	Accessibility to faculty

Faculty also indicate how frequently their department chair performed administrative behaviors associated with five a-priori subscales (Democratic/Humanistic, Goal-Oriented/Structured, Supports Faculty, Promotes Positive Climate, Promotes Department Advancement). These scales include subsets of Items 31 -60; the scale for these items ranges from "Almost Always" (scored as "5") to "Hardly Ever" (scored as "1"). The last items in the FPDHS instrument, 61-65, refer to financial, bureaucratic, and faculty impediments to the chair's

effectiveness. The scale for these items ranges from "Definitely True" (scored as "5") to "Definitely False" (scored as "1"). Table 3.5 provides the a-priori structure of the administrative methods found in the IDEA *Feedback for Department Chair Report* for items 31-60 in the FPDHS.

Table 3-5

Structure of the Administrative Methods A-priori Subscales

Item	Label
Scale A. Democratic/Humanistic	
38.	Acts as though high faculty morale is vital to him/her
39.	Is easy to understand
41.	Does little things that make it pleasant to be a member of department
45.	Looks out for the personal welfare of individual faculty members
47.	Treats all faculty members as her/his equal
48.	Gains input from faculty on important matters
50.	Explains the basis for his/her decisions
51.	Lets faculty members know when they have done a good job
55.	Puts faculty suggestions into action
Scale B. Goal-Oriented/Structured	
40.	Tries out new ideas with the faculty
42.	Sees to it that faculty members are working up to capacity
43.	Is more a reactor than an initiator
44.	Works without a plan
46.	Lets faculty members know what is expected of them
49.	Sees to it that the work of the faculty is coordinated
52.	Makes sure her/his part in the department is understood by all members
53.	Acts as though visible department accomplishment were vital to him/her
54.	Maintains definite standards of performance
Scale C. Supports Faculty	
34.	Assists faculty in developing their own goals and priorities
59.	Provides feedback to faculty on their major activities
60.	Tries to learn about each faculty member's interest, talents, and aspirations
Scale D. Promotes Positive Climate	
32.	Supports and protects academic freedom

33. Reduces, resolves, and/or prevents conflict among departmental faculty members
37. Maintains steadiness in the face of crisis or unanticipated frustrations
56. Facilitates positive relationships between faculty and the clerical/technical staff
57. Encourages teamwork among members of the faculty
58. Encourages faculty ownership of a vision for the department

Scale E. Promotes Department Advancement
31. Allocates faculty responsibilities in an effective and equitable manner
35. Makes sound suggestions for developing/changing departmental directions/priorities
36. Is willing to stand up to higher authority when departmental interests are threatened

The last two items in the FPDHS instrument, Item 66, "I believe the department would be better off if we replaced the current department chair," and Item 67, "I have confidence in the department chair's ability to provide leadership to the department," are designed to provide a summary judgment of the department chair from the faculty ratings. The entire FPDHS instrument is found in Appendix A.

The CIF is comprised of 30 items, including a section that asks department chairs to rate the *importance* of the same 20 administrative responsibilities that appear on the FPDHS. The department chairs use a scale ranging from 1 "Not Important" to 5 "Essential." An additional 10 items query chairs about various departmental characteristics. For the purposes of this research, Items 1-60, 66, and 67 on the FPDHS and items 1-20 on the CIF were the primary sources of data analyzed to answer the posed research questions. The entire CIF instrument is found in Appendix B.

Data Analysis Procedures

In order to address the research questions and to ultimately better understand the FPDHS system and its utility, several data analytic procedures were conducted. As previously mentioned, data for this study were secondary, and they therefore did not involve any variable manipulation or treatment intervention of any kind. The primary sources of data analyzed for the purposes of this research were the mean aggregated responses from faculty ratings of Items 1-60,

66, and 67 on the FPDHS and responses from department chairs on Items 1-30 in the CIF. The procedure for obtaining the final sample (N = 604) is described in detail in the population and sample section of this chapter.

All statistical data analyses were conducted with the statistical software package SPSS 16.0. Descriptive statistics, including measures of central tendency and measures of dispersion, were used to analyze the composition of the sample. Exploratory factor analyses (EFA) were conducted to assess construct validity of the instruments. EFA was used to determine how many factors were necessary to explain the inter-relationships among the items (Gorsuch, 1983; Pedhazur & Schmelkin, 1991; Tabachnick & Fidell, 2001). Specifically, EFAs were performed on department chair importance ratings of the 20 administrative responsibilities to determine the underlying dimensions of administrative responsibilities that department chairs deemed most important. Then, EFAs were conducted on the faculty ratings of the chair's performance of responsibilities, methods, and personal characteristics on the FPDHS.

The steps that were followed in conducting the EFAs included, (1) identifying the items to include in the EFA; (2) calculating a correlation matrix; (3) examining the correlation matrix in regard to the level of significance, inverse of the correlation matrix, Bartlett's test of sphericity, anti-image covariance matrix, Kasier-Meyer-Olkin (KMO) criteria; (4) choosing a factor extraction method, (5) choosing the rotation method, and (6) interpreting the results (Field, 2005). Data screening, assumption testing, and sampling adequacy were examined. The means and standard deviations were calculated for each variable, along with a correlation matrix of variables to analyze significance levels, tests for multicollinearity, and the KMO and Bartlett's test of sphericity. The extraction method chosen for these analyses was principal components analysis (PCA). The rotation method was an orthogonal rotation, using varimax with Kaiser normalization. The goal of varimax is to simplify the columns of the unrotated factor-loading matrix. To accomplish this goal, varimax maximizes the variances of the loadings within the factors while also maximizing differences between the high and low loadings on a particular factor. Essentially, higher loadings on a factor are made higher and lower loadings are made lower (Field, 2005; Pett, Lackey, & Sullivan, 2003; Tabachnick & Fidell, 2001).

Cronbach's alpha coefficients were calculated for all scales derived from EFAs to establish scale reliabilities. Cronbach's alpha (α) is a commonly used measure for assessing the internal consistency of a set of items with respect to a specific sample (Cronbach, 1954, 1984;

Field, 2005; Kline, 2000). The measure of reliability represents the proportion of total variance in a given scale that can be attributed to a common source (DeVellis, 1991; Pett, et.al., 2003). Values range between 0 and 1.0, with higher values indicating higher reliability among the indicators. It is commonly suggested that a coefficient alpha of .70 is a generally accepted standard.

Following EFA analyses, factor scales were computed for faculty ratings of the department chair's (a) performance related to the administrative responsibilities (FPDHS items 1-20), (b) frequency of carrying out the administrative behavior (FPDHS items 31-60), and (c) strength of the personal characteristics (FPDHS items 21-30). Then, multiple regression analyses were conducted to ascertain which factors from the overall faculty perceptions of the department chair's performance on administrative responsibilities, administrative behavior, and personal characteristics were most predictive of Items 66, "I believe the department would be better off if we replaced the current department chair," and 67, "I have confidence in the department chair's ability to provide leadership to the department."

Summary

This chapter provided an explanation of the research methods and procedures for the study. The chapter reviewed the research questions and hypotheses proposed in the previous chapters; described the data source, population, and exclusion criteria for the sample; described the survey instruments in the IDEA Center's *Feedback for Department Chairs* system; and described the data analysis procedures used in answering the research questions. The next chapter reports the results of the statistical analyses described in this chapter.

CHAPTER 4 -

Results

This chapter reports the results of the statistical analyses described in Chapter Three. The chapter is organized around the research questions and hypotheses presented in previous chapters. Several tables pertaining to the statistical analyses are presented. The chapter concludes with a summary of the findings.

Research Question One

What is the underlying factor structure of the department chairs' importance ratings of administrative responsibilities?

To identify the underlying factor structure of the department heads'/chairs' importance ratings on the 20 administrative responsibilities, an exploratory factor analysis (EFA) was conducted. Initially, the factorability of the 20 items was examined. Several standard criteria for the factorability of a correlation were used. All items correlated at least .3 with at least one other item, suggesting reasonable factorability. The inter-item correlation matrix for the CIF items 1-20 are presented in Appendix D. Examination of the correlation matrix indicated that all items correlated $\geq |.3|$ with at least seven other items in the matrix (range: 7-19).   Eighteen of the 20 items (90%) had 11 or more shared correlations that exceeded $\geq |.3|$. No inter-item correlation exceeded $r = .64$, thus indicating problems with multicollinearity were unlikely.

Secondly, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were used to evaluate the strength of the linear association among the 20 items in the correlation matrix. The KMO statistic (.93) which is an index that compares the magnitude of the observed correlations with the magnitude of the partial correlation coefficients, was above the commonly recommended value of .6. Bartlett's test of sphericity was significant ($\chi^2 = $ 4945.998, $p = .000$), which indicated that the correlation matrix was not an identity matrix (Pett, Lackey, and Sullivan, 2003). These results are also presented in Table 4.1. The diagonals of the

anti-image correlations matrix were also all over .5 with the exception of three items. Finally, the communalities were all above .3 as illustrated in Table 4.2, further confirming that each item shared some common variance with other items. Given these overall indicators, factor analysis was deemed to be appropriate with all 20 items (Field, 2005).

Table 4-1

Sample Adequacy Statistics for the CIF Items 1-20

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.928
Bartlett's Test of Sphericity	Approx. Chi-Square	4945.998
	df	190
	Sig.	.000

Principal components analysis with varimax (orthogonal) rotation was applied. In determining the final number of factors to extract, two criteria were applied: (a) a rotated pattern matrix coefficient of at least .40 with cross loadings no greater than .40 on any factor, and (b) a minimum of three items per factor. Four factors emerged, the first explaining 38.32% of the variance (eigenvalue = 7.66). The Scree test revealed a large drop-off to a second factor, which explained 8.10% of the variance (eigenvalue = 1.62), a third factor that explained 6.07% of the variance (eigenvalue = 1.21) and a fourth factor that explained 5.5% of the variance (eigenvalue = 1.10). At this point and beyond, a leveling off could be observed. The output of the total variance explained by the four factors along with the eigenvalues associated with each linear component before extraction, after extraction, and after rotation is found in Appendix E.   The Scree plot from these analyses is found in Appendix F.

Because the fourth factor contained only two items, which failed to meet the criteria of at least three items, the analysis was run again, forcing a three-factor solution. Table 4-2 presents the total variance explained by the three extracted factors of the CIF items 1-20.

Table 4-2

Initial Eigenvalues and Sums of Squares Loadings for the Three Extracted Factors of the CIF Items 1-20

Factor	Initial Eigenvalues			Extracted Sums of Squares Loadings		
	Total	% Variance	Cumulative %	Total	% Variance	Cumulative %
I	7.66	38.32	38.32	7.66	38.32	38.32
II	1.62	8.10	46.42	1.62	8.10	46.42
III	1.21	6.07	52.49	1.21	6.07	52.49

For this solution, each factor contained at least four items. The first factor shared in common five items that primarily concerned stimulating research/grants and contracts, and guiding the development of sound procedures for assessing faculty performance. Each of the five items had a relatively high item-total correlations ($rs > .45$) with the total scale score and contributed to the overall scale reliability (Cronbach's $\alpha = .80$). This factor was named Research and Assessment. The second factor consisted of four items that primarily concerned fostering faculty talents or interests, rejuvenating faculty vitality/enthusiasm, developing collegiality, and improving the department's campus reputation. Each of the four items had a high item-total correlations ($rs > .50$) with the total scale score and contributed to the overall scale reliability (Cronbach's $\alpha = .79$). This factor was named Faculty Enhancement. The third factor, which was comprised of five items, mainly concerned attending to essential administrative details, understanding and communicating expectations of the campus administration to the faculty, and acquainting new faculty and staff to departmental procedures. Each of the five items had a high item-total correlations ($rs > .45$) that contributed to the overall scale reliability (Cronbach's $\alpha = .72$). This factor was named Departmental Operations.

Based on these results, the three factors (Research and Assessment, Faculty Development, and Departmental Operations) were considered the underlying dimensions of the department heads'/chairs' importance ratings of administrative responsibilities. Table 4.3 presents factor loadings and common variance for the three factors resulting from the varimax

rotation; Table 4.3 presents means and standard deviations for selected high loading items; and Table 4.4 presents the eigenvalues and percentages of total variance explained by the three extracted factors of the CIF Items 1-20.

Table 4-3

Rotated Component Matrix Coefficients for CIF Instrument Items 1-20[a]

	Factor			
Variable	I	II	III	Communality
CIF Instrument				
Item 1 Guides evaluation	**.718**	.083	.255	.587
Item 2 Leads recruiting	**.532**	.115	.281	.376
Item 3 Attends to admin. detail	.126	-.137	**.755**	.604
Item 4 Foster good teaching	.150	.400	.556	.491
Item 5 Facilitates funding	**.731**	.316	-.139	.654
Item 6 Leads planning	.515	.180	.427	.480
Item 7 Communicates needs	.227	.202	**.550**	.394
Item 8 Fosters collegiality	.104	**.678**	.343	.588
Item 9 Balanced faculty	.430	.363	.298	.406
Item 10 Stimulates res/work	**.784**	.302	.040	.707
Item 11 Guides org. plans	.498	.227	.487	.536
Item 12 On-campus image	.230	**.665**	.146	.516
Item 13 Fosters development	.265	**.684**	.209	.582

	Factor			
Variable	I	II	III	Communality
Item 14 Orients new faculty	.127	.359	**.564**	.463
Item 15 Shares expectations	.224	.313	**.581**	.486
Item 16 Stimulates vitality	.328	**.680**	.234	.624
Item 17 Guides curriculum	.003	.364	**.533**	.417
Item 18 Establishes trust	.197	.508	.482	.529
Item 19 Off-campus image	.401	.631	.030	.560
Item 20 Rewards faculty	**.578**	.250	.316	.497

Note. Coefficients that met the "loading" criteria are bolded.

ªEigenvalue: I, 7.66; II, 1.62; III, 1.21. Proportion of total variance: I, 38.32; II, 8.10; III, 6.07. Proportion of common variance: I, 17.89; II, 17.77; III, 16.82.

Table 4-4

Means and Standard Deviations for Selected High Loading Items

Item	Factor Loadings	*M*	*SD*
Research and Assessment (Factor 1)			
Item 10 - Stimulates research and/or scholarly activity in the department	.784	3.93	1.079
Item 5 – Facilitates obtaining grants and contracts from external sources	.731	3.29	1.298
Item 1- Guides the development of sound procedures for assessing faculty performance	.718	4.07	1.042

Item	Factor Loadings	*M*	*SD*
Item 20 – Recognizes and rewards faculty in accordance with their contributions to the department	.578	4.41	.816
Item 2 – Takes the lead in recruiting promising faculty	.532	4.28	.933
Faculty Enhancement (Factor 2)			
Item 13 – Fosters development of each faculty member's special talents or interests	.684	4.24	.809
Item 16 – Stimulates or rejuvenates faculty vitality/ enthusiasm	.680	4.00	.927
Item 8 – Develops collegiality/cooperation among departmental faculty members	.678	4.43	.784
Item 12 – Improves the department's image and reputation within the campus community	.665	4.29	.845
Departmental Operations (Factor 3)			
Item 3 – Attends to essential administrative details (e.g., class scheduling, budget preparation, promotion and tenure) documentation)	.755	4.59	.738
Item 15 – Understands and communicates expectations of the campus administration to the faculty	.581	4.33	.793
Item 14 – Sees to it that new faculty and staff are acquainted with departmental procedures, priorities, and expectations	.564	4.22	.858
Item 7 – Communicates the department's needs (personnel, space, monetary) to the dean	.550	4.76	.583
Item 17 – Guides curriculum development	.533	3.84	.959

Research Question Two

How reliable are any scales derived from exploratory factor analysis (EFA) of the department chairs' importance ratings of administrative responsibilities?

In order to determine the scale reliabilities for the factors derived from the EFA of the department chairs' importance rating of administrative responsibilities, Cronbach's alpha (α) coefficients were calculated for each factor (see Table 4-5). The coefficient alpha values were moderate to high. Items loading on Research and Assessment (α = .80) and Departmental Operation (α = .72) had at least moderate inter-item correlations (rs > .45) with the total scale score and contributed to the overall scale reliability. Items loading on Faculty Enhancement (α = .79) each had moderate correlations (rs > .50) with the total scale score which also contributed to the overall scale reliability.

Table 4-5

Cronbach's Reliability Coefficients for the Factor Scales on the CIF Instrument

Factor Scale	Number of Items	Cronbach's Alpha (α)
1. Research and Assessment	5	.80
2. Faculty Enhancement	4	.79
3. Departmental Operations	5	.72

Research Question Three

Do department chairs rate some scales higher than others in terms of importance?

The factor means presented in Table 4-6 indicate department chairs rated some responsibilities more important than others. Department chairs assigned the highest importance

ratings to items dealing with Departmental Operations (*M* = 4.35, *SD* = 0.54), followed by Faculty Enhancement (*M* = 4.24, *SD* = 0.66), and Research and Assessment (*M* = 4.00, *SD* = 0.77). However, the mean scores on each factor indicated department chairs viewed all three responsibilities as "quite important."

Table 4-6

***Descriptive Statistics for Three Factor Scales* (*n* = 604)**

Factor Scale	Number of Items	Minimum	Maximum	*M*	*SD*
1. Research and Assessment	5	3.29	4.41	4.00	.77
2. Faculty Enhancement	4	4.00	4.43	4.24	.66
3. Departmental Operations	5	3.84	4.76	4.35	.54

In addition to examining the means and standard deviations of the three factor scales, an examination of the frequency distribution of all 20 items in the CIF instrument was conducted. Appendix G includes the frequencies and percentages of all 20 items in the CIF instrument, along with the standard deviations and standard error. On a 5-point scale, where 1 = *Not important* to 5 = *Essential*, the means ranged from 3.29 (Item 5) to 4.76 (Item 7). The combined ratings of "*Essential*" and "*Quite Important*" that equaled 90 percent or more of the total ratings on that item are included in Table 4.7 and are considered the items that the department chairs rated higher than other items. The combined ratings of "*Not important*" and "*Only So-So*" that equaled 10 percent or more are included in Table 4.7 and are considered the items that the department chairs rated lower than other items in terms of importance. The item that received the highest rating for importance was Item 7: *Communicates the department's needs to the dean*. The item that was rated the lowest in terms of importance was Item 5: *Facilitates obtaining grants and contracts from external sources*.

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Table 4-7

Highest and Lowest Frequency and Percentages from the CIF 1-20 Items[α]

CIF Item	M	SD	Not important and Only So-So (combined) Frequency Percentage	Quite Important and Essential (combined) Frequency Percentage
Item 7 – Communicates the department's needs (personnel, space, monetary) to the dean	4.76	.58	8 1.4%	584 96.9%
Item 18 – Establishes trust between members of the faculty and myself	4.62	.66	6 1%	566 93.9%
Item 3 – Attends to essential administrative details (e.g., class scheduling, budget preparation, promotion and tenure)	4.59	.74	11 1.8%	548 91.0%
Item 5 – Facilitates obtaining grants and contracts from external sources	3.29	1.3	165 27.4%	295 48.9%
Item 10 - Stimulates research and/or scholarly activity in the department	3.93	1.08	66 10.9%	429 71.2%

[α] Values were included if combined responses for "Quite Important" and "Essential" equaled 90% or higher. Values were included if combined responses for "Not important" and "Only So-So" equaled 10% or higher.

Research Question Four

What is the underlying factor structure of faculty ratings of the department chair's performance of administrative responsibilities?

To identify the underlying factor structure of faculty ratings of the department chairs' performance on the 20 administrative responsibilities, an EFA was conducted. The 20 Items from the FPDHS were examined and the same standard criteria for the factorability of a correlation were used. The item means, standard deviations, and the inter-item correlation matrix for the FPDHS Items 1-20 are found in Appendix H. On a 5-point scale, where 1 = *Poor* to 5 =

Outstanding, the means ranged from 3.6 (Item 16: *Stimulates or rejuvenates faculty vitality/enthusiasm*) to 4.23 (Item 7: *Communicates the department's needs [personnel, space, monetary] to the dean*). Examination of the correlation matrix indicated that all items correlated $\geq |.5|$ with at least one other item, suggesting acceptable factorability. Nineteen of the 20 items (95%) had 11 or more shared correlations that exceeded $\geq |.6|$. Eighteen of the 20 items had an inter-item correlation below $r = .90$. Two items had a moderately high correlation with one other item (rs = .90 and .92 respectfully) indicating a potential minor problem with multicollinearity.

The KMO measure of sampling adequacy and Bartlett's test of sphericity were also used to evaluate the strength of the linear association among the 20 items in the correlation matrix. The KMO statistic (.97) was above the commonly recommended value of .6. Bartlett's test of sphericity was significant ($\chi^2 = 17037.066$, $p = .000$), as presented in Table 4-8. The diagonals of the anti-image correlations matrix were all $> .5$. Finally, the communalities were all above .5, which further confirmed each item shared some common variance with other items. Given these overall indicators, factor analysis was deemed to be appropriate with all 20 items from the FPDHS.

Table 4-8

Sample Adequacy Statistics for FPDHS Items 1-20

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.973
Bartlett's Test of Sphericity	Approx. Chi-Square	17037.066
	df	190
	Sig.	.000

Principal components analysis with varimax (orthogonal) rotation was applied. In determining the numbers of factors to extract the same two criteria were applied: (a) a rotated pattern matrix coefficient of at least .40 with cross loadings no greater than .40 on any factor, and (b) a minimum of three items per factor. Applying principal components analysis with varimax rotation, one underlying factor emerged, explaining 76.40% of the variance (eigenvalue = 15.28). Because only one component (factor) was extracted the solution could not be rotated. The output

for the Total Variance Explained for the FPDHS Items 1-20 are found in Appendix I. The output lists the eigenvalues associated with the linear component (factor) before and after extraction which is essentially the same given that a rotation was not possible The Scree plot from these analyses is found in Appendix J.

The factor extracted primarily concerned stimulating or rejuvenating faculty vitality or enthusiasm, fostering development of each faculty member's special talents or interests, and guiding the development of sound organizational plan to accomplish departmental goals. This factor was named Faculty Enhancement. Table 4.9 presents the items that had component matrix coefficients greater than .90 to illustrate the rationalization of the factor name. Table 4.9 also presents the communalities, means, and standard deviations of these items. Descriptives for all 20 items in the FPDHS are found in Appendix K.

Table 4-9

Component Matrix Coefficients >.90 and Communalities for FPDHS Instrument Items 1-20[α]

	Factor: *Faculty Development*			
Variables from FPDHS Instrument (N = 603)	Loadings	Communality	*M*	*SD*
Item 16. Stimulates or rejuvenates faculty vitality/enthusiasm	.931	.866	3.60	.71
Item 13. Fosters development of each faculty member's special talents or interests	.927	.859	3.86	.61
Item 11. Guides the development of a sound organizational plan to accomplish departmental goals	.924	.853	3.88	.64
Item 1. Guides the development of sound procedures for assessing faculty performance	.905	.820	3.81	.59
Item 15. Understands and communicates expectations of the campus administration to the faculty	.903	.816	4.06	.55
Item 12. Improves the department's image and reputation within the campus community	.901	.812	4.04	.64

[α]Eigenvalue = 15.28; Proportion of total variance = 76.41

Research Question Five

What is the underlying factor structure of faculty ratings of the department chair's personal characteristics?

To identify the underlying factor structure of faculty ratings of the department heads'/chairs' personal characteristics, an EFA was conducted. Items 21-30 of the FPDHS were examined, and the standard criteria for the factorability of a correlation were used. The item means, standard deviations, and the inter-item correlation matrix for the FPDHS Items 21-30 are found in Appendix L. On a 5-point scale, where 1 = *Definite Weakness* to 5 = *Definite Strength*, the means ranged from 3.98 (Item 21: *Interpersonal skill*) to 4.38 (Item 29: *Accessibility*). Examination of the correlation matrix indicated that all items correlated $\geq |.6|$ with at least one other item, suggesting acceptable factorability. Eight of the 10 items (80%) had 9 or more shared correlations that exceeded $\geq |.6|$. The majority of the items had an inter-item correlation that did not exceed .90. Three items had a high correlation with one other item (rs = .90 and .92 respectfully) indicating a potential problem with multicollinearity.

The KMO measure of sampling adequacy and Bartlett's test of sphericity were also used to evaluate the strength of the linear association among the 10 items in the correlation matrix. The KMO statistic (.94) was above the commonly recommended value of .6. Bartlett's test of sphericity was significant (χ^2 = 7913.216, p = .000). The diagonals of the anti-image correlations matrix were all > .6. Finally, the communalities were all above .6, further confirming that each item shared some common variance with other items. Given these overall indicators, factor analysis was deemed to be appropriate for Items 21-30 in the FPDHS.

Principal components analysis with varimax (orthogonal) rotation was applied. In determining the numbers of factors to extract two criteria were applied: (a) a rotated pattern matrix coefficient of at least .40 with cross loadings no greater than .40 on any factor, and (b) a minimum of three items per factor. Applying principal components analysis with varimax rotation, one underlying factor emerged which explained 78.87% of the variance (eigenvalue = 7.89). Because only one factor was extracted the solution could not be rotated. The output for the Total Variance Explained for the FPDHS Items 21-30 are found in Appendix M. The output lists the eigenvalues associated with the linear component before and after extraction.

The extracted factor primarily concerned flexibility in dealing with individuals and situations, fairness, practical judgment, and willingness to listen. This factor was named Flexibility/Adaptability. Table 4.10 presents the items that had component matrix coefficients to illustrate the rationalization of the factor name. Table 4.10 also presents the communalities, means, and standard deviations of these items.

Table 4-10

Component Matrix Coefficients and Communalities for FPDHS Instrument Items 21-30[α]

Variables from FPDHS Instrument (N = 604)		Factor: *Flexibility/Adaptability*		
	Loadings	Communality	*M*	*SD*
Item 28. Flexibility/dependability in dealing with individuals/situations	.949	.901	4.09	.60
Item 30. Fairness	.944	.891	4.18	.58
Item 26. Practical judgment	.930	.865	4.13	.59
Item 27. Willingness to listen	.929	.862	4.23	.59
Item 25. Honesty	.897	.804	4.30	.60
Item 24. Patience in implementing change	.890	.792	4.07	.58
Item 21. Interpersonal skill	.877	.769	3.98	.68
Item 22. Problem solving ability	.874	.763	4.13	.57
Item 29. Accessibility to faculty	.789	.622	4.38	.52
Item 23. Appreciation for department's history	.785	.616	4.16	.60

[α]Eigenvalue = 7.89; Proportion of total variance = 78.87

Research Question Six

What is the underlying factor structure of faculty ratings of the department chair's performance of administrative methods?

To identify the underlying factor structure of faculty ratings of the department heads'/chairs' performance of administrative methods, an EFA was conducted. Items 31-60 from the FPDHS were examined, and the standard criteria for the factorability of a correlation were used. The item means, standard deviations, and the inter-item correlation matrix for the FPDHS Items 31-60 are found in Appendix N. On a 5-point scale, where 1 = *Hardly Ever* to 5 = *Almost Always*, the means ranged from 3.32 (Reverse coded- Item 43: *Is more a reactor than an initiator*) to 4.42 (Item 32: *Supports and protects academic freedom*). Examination of the correlation matrix indicated that all items correlated ≥ |.3| with at least one other item, suggesting acceptable factorability. Twenty-seven of the 30 items (90%) had 27 or more shared correlations that exceeded ≥ |.4|. No inter-item correlation exceeded $r = .83$, thus indicating problems with multicollinearity were unlikely.

The KMO measure of sampling adequacy and Bartlett's test of sphericity were also used to evaluate the strength of the linear association among the 30 items in the correlation matrix. The KMO statistic (.98) was above the commonly recommended value of .6. Bartlett's test of sphericity was significant ($\chi^2 = 26088.732$, $p = .000$). The diagonals of the anti-image correlations matrix were all greater than .5. Finally, the communalities were all above .59, further confirming that each item shared some common variance with other items. Given these overall indicators, factor analysis was deemed to be appropriate with all 30 items from the FPDHS.

Principal components analysis with varimax (orthogonal) rotation was applied. In determining the numbers of factors to extract the same two criteria were applied: (a) a rotated pattern matrix coefficient of at least .40 with cross loadings no greater than .40 on any other factor, and (b) a minimum of three items per factor. Applying principal components analysis with varimax rotation, two underlying factors emerged, the first explaining 75.46% of the variance (eigenvalue = 22.64). The Scree test revealed a steep drop-off to a second factor, which explained 4.49% of the variance (eigenvalue = 1.35). At this point and beyond, a leveling off

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could be observed. The output of the total variance explained by the two factors is found in Appendix O. The Scree plot from these analyses is found in Appendix P.

After examination of loadings on factors it was clear that the second factor failed to meet the minimum criteria. This factor contained only two items, and several items cross loaded with other items in the first factor. In addition, the two items (Item 43: *Is more a reactor than an initiator*, and Item 44: *Works without a plan*) did not appear to contribute meaningfully to the solution. Therefore, the items were removed, and the EFA analysis was run again. This solution extracted only one factor that explained 78.35% of the variance (eigenvalue = 21.94). The output for the total variance explained for the FPDHS Items 31-60 without Items 43 and 44 are found in Appendix Q.

The factor extracted primarily concerned the need for the department chair to ensure that his/her role is understood by the faculty, and that he/she (a) acts as though faculty morale is vital,(b) puts faculty suggestions into action, (c) coordinates work, and (d) encourages teamwork. This factor was named Communication and Coordination. Table 4.11 presents the items that had component matrix coefficients greater than .92 to illustrate the rationalization of the factor name. Table 4.11 also presents the communalities, means, and standard deviations of these items. Descriptives for all 28 items in the FPDHS are found in Appendix R.

Table 4-11

Component Matrix Coefficients >.92 and Communalities for FPDHS Instrument Items 31-60

	Factor: *Communication and Coordination*			
Variables from FPDHS Instrument (N = 604)	Loadings	Communality	*M*	*SD*
Item 52. Makes sure her/his part in the department is understood by all members	.930	.864	3.99	.58
Item 38. Acts as though high faculty morale is vital	.928	.862	3.95	.68
Item 55. Puts faculty suggestions into action	.927	.859	3.93	.57
Item 49. Sees to it that the work of the faculty is coordinated	.918	.843	3.89	.62
Item 57. Encourages teamwork among members of the faculty	.918	.842	4.00	.63
Item 35. Makes sound suggestions for developing/changing departmental directions	.918	.842	4.00	.64

How reliable are any scales derived from the EFAs performed on faculty data?

In order to determine the scale reliabilities for the factors derived from the EFAs performed on the faculty data, Cronbach's alpha (α) coefficients were calculated for each factor. As indicated in Table 4.12, the coefficient alpha values for each factor were high. The Cronbach alpha coefficients for these scales were as follows: Faculty Development (20 items, α = .98), Flexibility/Adaptability (10 items, α = .97), and Communication and Coordination (28 items, α = .99). All items within each factor had high inter-item correlations (*r*s > .69) with the total scale score which also contributed to the overall scale reliability.

Table 4-12

Cronbach's Reliability Coefficients for Factor Scales on the FPDHS Instrument

Factor Scale	Number of Items	Cronbach's Alpha (α)
1. Faculty Development	20	.98
2. Flexibility/Adaptability	10	.97
3. Communication & Coordination	28	.99

Research Question Eight and Hypothesis 1

Are the scales for faculty ratings of the department chair's performance of responsibilities, personal characteristics, and administrative methods related to faculty members' overall judgment of the department chair's effectiveness?
The following hypothesis is proposed for Question 8.

Hypothesis 1: Faculty ratings of the department chair's performance of responsibilities, personal characteristics, and administrative methods will be positively related to faculty members' overall judgment of the chair's effectiveness.

To test this hypothesis Pearson product-moment coefficients were generated and a multiple regression analysis was conducted. The predictor variables were the scales for faculty ratings of the department chair's performance of responsibilities, personal characteristics, and administrative methods. The dependent variable was the faculty members' overall judgment of the department chair's effectiveness. Two items were intended to assess overall effectiveness: Item 66, "I believe the department would be better off if we replaced the current department chair," and Item 67, "I have confidence in the department chair's ability to provide leadership to the department."

Prior to conducting the regression analyses, the distributions of the responses to Items 66 and 67 (the dependent variables) as well as their correlation were examined. Histograms indicated Item 66 was somewhat positively skewed (sk = 1.20), with less than 1% (n = 4) of the cases having absolute z-score values greater than 3.29. In contrast, Item 67 was negatively skewed (sk = -0.91), but it also had less than 1% (n = 3) of its cases with absolute z-score values greater than 3.29. The scores for outlying cases were identified by boxplots and were found to all have values within the acceptable scale range (i.e., 1 to 5). Therefore, the regression analyses were conducted without performing data transformations to the dependent variables. In addition, the Pearson-product moment correlation between items 66 and 67 was significant (p < .001) with the absolute value of r = .90. Given the high correlation between the items, coupled with the understanding that the two items were designed to provide a summary judgment of department chair performance, an average score was calculated which created one dependent variable for the regression analyses. This variable (the mean of Items 66 and 67), represents retention and confidence of the department chair. The variable was labeled "overall judgment" for the purposes of the analyses.

The results from the correlation between the overall judgment (the mean of Items 66 and 67) and the faculty subscales (Faculty Development, Flexibility/Adaptability, and Communication and Coordination) produced high correlations, providing strong evidence for internal consistency and concurrent validity. Table 4-13 displays the correlations between the

overall judgment and the faculty subscales. All items were statistically significant at $p < .001$, and the correlations were $r = .88$ or above.

Table 4-13

Descriptive Statistics for and Correlations between the Overall Judgment and the FPDHS Subscales

Variables	Correlation	*p*-value	*M*	*SD*
Faculty Development	.910	.000	3.92	.55
Flexibility/Adaptability	.882	.000	4.17	.52
Communication and Coordination	.909	.000	4.03	.53

The results from the regression analyses performed on the dependent variable (Overall Judgment: Item 66 & 67) with the independent variables (Faculty Development, Flexibility/Adaptability, and Communication & Coordination) produced several problems with collinearity. If the largest variance inflation factor (VIF) is greater than 10 then there is cause for concern (Bowerman & O'Connell, 1990; Myers, 1990). In addition, a tolerance level below .1 indicates a serious problem, (Field, 2005; Menard, 1995). The highest VIF value for this model was 25.35 and the lowest tolerance level was .039; therefore, the results of the regression model would not be meaningful. Due to these collinearity issues, multiple variations of including and excluding the three factors were performed. The solution that was satisfactory included conducting the regression with Communication and Coordination (administrative methods) and Flexibility/Adaptability (personal characteristics) as the independent variables.

Because of the significant correlations, collinearity diagnostics were again computed to estimate redundancy. Tolerance and variance inflation factors (VIF) indicated some collinearity existed among the predictors. The average VIF exceeded 8.0 and tolerance levels were less than .12. However, neither of the VIFs exceeded 10 and none had tolerance levels below .1, indicating multicollinearity was not a serious problem (Bowerman & O-Connell, 1990).

The multiple regression model with Communication and Coordination and Flexibility/Adaptability as predictors produced an $R^2 = .833$, $F(2, 601) = 1504.19$, $p > .001$, which explained a significant amount of variance (83%). As illustrated in Table 4-14, the predictor with the highest standardized beta coefficient was Communication and Coordination ($\beta = .69$, $p < .001$), followed by Flexibility/Adaptability ($\beta = .24$, $p < .001$). A restricted model was tested employing backward elimination. No predictor variables were removed, which indicated each contributed significantly to the overall model.

Table 4-14

Summary of Multiple Regression Analysis for the FPDHS Subscales, Communication & Coordination and Flexibility/Adaptability (n =604)

Variable	*B*	SE *B*	β
Communication/Coordination	.879	.062	.688*
Flexibility/Adaptability	.307	.063	.236*

Note. *p < .001

Scatterplots indicated the linearity assumption had been met for all relationships. Communication/Coordination had the highest zero-order correlation ($r = .91$, $p < .001$), which suggested faculty had more confidence in the department chair's overall performance if they perceived him or her as supporting faculty, promoting a positive environment, and focusing on democratic and goal-oriented behaviors in the position. Flexibility/Adaptability was also highly correlated with the criterion ($r = .88$, $p < .001$), which implied faculty had confidence in the department chair's overall performance if they perceived that he or she demonstrated the ability to resolve issues, communicated effectively, and demonstrated traits of trustworthiness, openness, and patience in implementing change. Overall, these two predicators shared 29% explained variance and uniquely predicted 54% of the variance.

Research Question Nine and Hypothesis 2

Are the scales for faculty ratings, based on those derived from the EFA performed on department heads'/chairs' importance ratings of administrative responsibilities, related to faculty members' overall judgment of the chair's effectiveness?

The following hypothesis is proposed for Question 9.

Hypothesis 2: Faculty ratings, based on those derived from the EFA performed on department heads'/chairs' importance ratings of administrative responsibilities, will be positively related to faculty members' overall judgment of the chair's effectiveness.

To address this research question and the corresponding hypothesis, Pearson product-moment coefficients were generated and a multiple regression analysis was conducted. The predictor variables for this analysis were based on mean faculty ratings on factors derived from the EFA performed on department chair's importance ratings of administrative responsibilities. The administrative experience department chairs possess makes them uniquely qualified to distinguish the underlying dimensions of the 20 responsibilities in the CIF. Knowing how faculty rated chairs on these dimensions and how those ratings correlate with the overall judgment variable (mean of Items 66 and 67) seemed worthy of investigation.

With this rationale, new variables were created from the faculty ratings on the items derived from the EFA performed on the department chair's importance ratings of administrative responsibilities. Reliabilities for faculty responses on the three responsibility scales established from the department chair data were as follows: Research and Assessment ($\alpha = .92$), Faculty Enhancement ($\alpha = .96$), and Departmental Operations ($\alpha = .95$). Table 4-15 presents the reliabilities for these responsibility scales.

Table 4-15

Cronbach's Reliability Coefficients for Faculty Ratings on the Factor Scales of the CIF Items 1-20

Factor Scale	Number of Items	Cronbach's Alpha (α)
1. Research and Assessment	5	.92
2. Faculty Enhancement	4	.96
3. Departmental Operations	5	.95

The results from the correlation between the overall judgment (mean of Items 66 and 67) and the responsibility scales (Research and Assessment, Faculty Enhancement, and Departmental Operations) produced high reliability and high correlations, providing strong evidence for internal consistency and concurrent validity. Table 4-15 displays the correlations between the overall judgment and the subscales. All items were statistically significant at $p < .001$, and the correlations were $r = .84$ or above.

Table 4-16

Pearson Correlations between the Overall Judgment and Responsibility Scales

Variables	Correlation	p-value	M	SD
Research and Assessment	.843	.000	3.81	.56
Faculty Enhancement	.898	.000	3.84	.63
Departmental Operations	.862	.000	4.04	.54

The results of the regression analyses performed on the dependent variable with the identified factors, Research and Assessment, Faculty Enhancement, and Departmental

Operations, are summarized in Table 4-16. Because of the significant correlations, collinearity diagnostics were computed to estimate redundancy. Tolerance and variance inflation factors (VIF) indicated some collinearity existed among the predictors. The average VIF exceeded 5.9, and tolerance levels were less than .19. However, none of the VIFs exceeded 10 and none had tolerance levels below .1, indicating multicollinearity was not a serious problem (Bowerman & O-Connell, 1990).

The multiple regression model with all three predictors entered into the equation produced an $R^2 = .827$, $F(3, 600) = 960.40$, $p > .001$, which indicated a substantial amount of variance in overall judgment scores was explained (83%). As illustrated in Table 4-16, the predictor with the highest standardized beta coefficient was Faculty Enhancement ($\beta = .58$, $p < .001$), followed by Administrative Operations ($\beta = .27$, $p < .001$); Research and Assessment ($\beta = 09$, $p < .05$) accounted for the least amount of variance in the model. Together, these three predicators shared 30% explained variance and uniquely predicted 53% of the variance. A restricted model was also tested, employing backward elimination. No predictor variables were removed, which indicated each contributed significantly to the overall model.

Table 4-17

Summary of Multiple Regression Analysis for Responsibility Scales (*n* = 604)

Variable	*B*	SE *B*	β
Research and Assessment	.110	.050	.091*
Faculty Enhancement	.624	.048	.576**
Departmental Operations	.346	.051	.271**

Note. * $p < .05$, **$p < .001$

Homoscedasticity was examined via several scatterplots, and these indicated reasonable consistency of spread through the distributions. Factor 2 (Faculty Enhancement) had the highest zero-order correlation ($r = .90$, $p < .001$) with the dependent variable, which suggested faculty had more confidence in the department chair's overall effectiveness if they perceived him or her as developing collegiality, fostering faculty talents, and improving the department's campus

reputation. Factor 3 (Departmental Operations) had the second highest zero-order correlation (r = .86, $p < .001$), indicating the faculty had somewhat more confidence if they perceived that the department chair attended to administrative operations such as communicating departmental expectations, orienting new faculty, and guiding curriculum development. Finally, Factor 1 (Research and Assessment) was highly correlated with the criterion (r = .84 , $p < .05$), which implied faculty had more confidence in the department chair's overall effectiveness/performance if they perceived that he or she supported the stimulation of research/grants and contracts, and provided guidance for the development of sound procedures for assessing faculty performance.

Chapter Summary

This chapter reported the results of the statistical analyses conducted to address the research questions and hypotheses presented in previous chapters. The statistical analyses and results pertaining to each research question were presented along with the accompanying tables and charts. Additional data to support the results are found in Appendices D-R. The data from this study were secondary and were obtained from the IDEA Center's data set. The mean aggregated responses from faculty ratings of Items 1-60, 66, and 67 on the FPDHS and responses from department chairs on Items 1-30 in the CIF were the primary source for the analyses. The procedure for obtaining the final sample (n = 604) is described in detail in the population and sample section in Chapter Three.

Several key results provided in this chapter lay the foundation for the discussion portion of this study. The highlights are as follows:

1. The study identified three underlying dimensions of administrative responsibilities that department chairs deemed important. These dimensions or factors were labeled: Research and Assessment, Faculty Development, and Departmental Operations.

2. The factor labeled Departmental Operations was deemed the most important of the three factors; however the mean and standard deviation for each factor indicated that all factors were rated "quite important" to "essential," (Departmental Operations, *M*

= 4.35, *SD* = .54; Faculty Enhancement, *M* = 4.24, *SD* = .66; and Research and Assessment, *M* = 4.00, *SD* = .77).

3. The underlying factor structure of faculty ratings of the department chair's performance of administrative responsibilities, personal characteristics, and administrative methods from the FPDHS instrument were identified as Faculty Enhancement, Flexibility/Adaptability, and Communication and Coordination, respectively.

4. Cronbach's alphas for all factor scales from the EFAs for both the CIF Items and the FPDHS Items were moderate to high indicating that all scales related to the current sample (Research and Assessment, Faculty Development, Departmental Operations, Faculty Enhancement, Flexibility/Adaptability and Communication and Coordination) had adequate reliability.

5. Results from the multiple regressions conducted with the scales for faculty ratings of the department chair's performance of personal characteristics and administrative methods indicated that the single best predictor was Communication and Coordination. All factor scales were positively related to faculty members' overall judgment of the department chair's effectiveness.

6. Results from the multiple regression conducted with the scales for faculty ratings based on those derived from the EFA performed on department chairs' importance ratings of administrative responsibilities indicated that the single best predictor from the model was the factor identified as Faculty Development. All factor scales were positively related to faculty members' overall judgment of the department chair's effectiveness.

CHAPTER 5 -

Discussion, Implications, and Recommendations

Purpose of the Study

The purpose of this study was to gain a more thorough understanding of how faculty's perceptions of department chair's overall effectiveness is related to their ratings of the department chairs performance. The study sought to understand which aspects of department chair's responsibilities are viewed as more important in their administrative roles. Therefore, this study examined the underlying dimensions of department chair's responsibilities, methods/strategies, and personal characteristic, and investigated how faculty perceptions of their department chair performance of these dimensions are related to their overall ratings of the department chair's effectiveness. In this chapter, the results from this study are discussed along with the specific questions and hypotheses that guided the research.

Overview of the Methodology

The data analysis procedures used to address the research questions and to ultimately better understand the FPDHS system and its utility are outlined as follows. As previously mentioned, data for this study were secondary, and they therefore did not involve any variable manipulation or treatment intervention of any kind. The primary sources of data analyzed for the purposes of this research were the mean aggregated responses from faculty ratings of Items 1-60, 66, and 67 on the FPDHS and responses from department chairs on Items 1-30 in the CIF. The procedure for obtaining the final sample ($n = 604$) is described in detail in the population and sample section in Chapter Three.

All statistical data analyses were conducted with the statistical software package SPSS 16.0. Descriptive statistics, including measures of central tendency and measures of dispersion, were used to analyze the composition of the sample. Exploratory factor analyses (EFA) were conducted to assess construct validity of the instruments. EFA was used to determine how many factors were necessary to explain the inter-relationships among the items. Specifically, EFAs

were performed on department chair importance ratings of the 20 administrative responsibilities to determine the underlying dimensions of administrative responsibilities that department chairs deemed most important. Then, EFAs were conducted on the faculty ratings of the chair's performance of responsibilities, methods, and personal characteristics on the FPDHS.

The steps in conducting the EFAs included the following: (1) identifying the items to include in the EFA; (2) calculating a correlation matrix; (3) examining the correlation matrix in regard to the level of significance, inverse of the correlation matrix, Bartlett's test of sphericity, anti-image covariance matrix, Kasier-Meyer-Olkin (KMO) criteria; (4) choosing a factor extraction method; (5) choosing the rotation method; and (6) interpreting the results (Field, 2005). Data screening, assumption testing, and sampling adequacy were examined. The means and standard deviations were calculated for each variable, along with a correlation matrix of variables to analyze significance levels, tests for multicollinearity, and the KMO and Bartlett's test of sphericity. The extraction method chosen for these analyses was principal components analysis. The rotation method was an orthogonal rotation, using varimax with Kaiser normalization. Cronbach's alpha coefficients were calculated for all scales derived from EFAs to establish scale reliabilities.

Following EFA analyses, factor scales were computed for faculty ratings of the department chair's (a) performance related to the administrative responsibilities (FPDHS items 1-20), (b) frequency of carrying out the administrative behavior (FPDHS items 31-60), and (c) strength of the personal characteristics (FPDHS items 21-30). Then, multiple regression analyses were conducted to ascertain which factors from the overall faculty perceptions of the department chair's performance on administrative responsibilities, administrative behavior, and personal characteristics were most predictive of Items 66, "I believe the department would be better off if we replaced the current department chair," and 67, "I have confidence in the department chair's ability to provide leadership to the department."

Summary of Results

The results of the statistical analyses conducted to address the research questions and hypotheses are summarized below. The statistical analyses and results pertaining to each research question were presented along with the accompanying tables and charts. Additional

data to support the results are found in Appendices D-R. The data from this study were secondary and were obtained from the IDEA Center's data set. The procedure for obtaining the final sample ($n = 604$) is described in detail in the population and sample section in Chapter Three. Several key results provided in this chapter lay the foundation for the discussion portion of this study. The highlights are as follows:

1. The study identified three underlying dimensions of administrative responsibilities that department chairs deemed important. These dimensions or factors were labeled: Research and Assessment, Faculty Development, and Departmental Operations.

2. The factor labeled Departmental Operations was deemed the most important of the three factors; however the mean and standard deviation for each factor indicated that all factors were rated "quite important" to "essential."

3. The underlying factor structure of faculty ratings of the department chair's performance of administrative responsibilities, personal characteristics, and administrative methods from the FPDHS instrument were identified as Faculty Enhancement, Flexibility/Adaptability, and Communication and Coordination, respectively.

4. Cronbach's alphas for all factor scales from the EFAs for both the CIF Items and the FPDHS Items were moderate to high indicating that all scales related to the current sample (Research and Assessment, Faculty Development, Departmental Operations, Faculty Enhancement, Flexibility/Adaptability and Communication and Coordination) had adequate reliability.

5. Results from the multiple regressions conducted with the scales for faculty ratings of the department chair's performance of personal characteristics and administrative methods indicate that the single best predictor from the model was the factor identified as Communication and Coordination. All factor scales were positively

related to faculty members' overall judgment of the department chair's effectiveness.

6. Results from the multiple regression conducted with the scales for faculty ratings based on those derived from the EFA performed on department chairs' importance ratings of administrative responsibilities indicate that the single best predictor was Faculty Development. All factor scales were positively related to faculty members' overall judgment of the department chair's effectiveness.

Discussion of the Results

The findings from this study provide useful insight into better understanding the FPDHS system and its utility. In addition, this study addressed the following questions: Which roles and responsibilities do department chairs view as most important? Furthermore, which department chair behaviors, as perceived by faculty, are most strongly related to fulfilling those responsibilities? Are the strengths of the department chair's personal characteristics or the frequency of various administrative behaviors most highly correlated with the department chair's performance?

To address these inquiries the results from the specific research questions are grouped in the following categories: (a) department chair ratings; (b) faculty ratings; and results from (c) Hypotheses 1 and 2.

Department Chair Ratings of Importance

Factor Structure

What is the underlying factor structure of the department chairs' importance ratings of administrative responsibilities?

The study identified three underlying dimensions of administrative responsibilities that department chairs deemed most important. These dimensions or factors were labeled *Research and Assessment*, *Faculty Enhancement*, and *Departmental Operations*. Each factor contained at

least four items, and the coefficient alpha values were moderate to high. Details of scale reliabilities are discussed in the next section.

Research and Assessment shared in common five items that primarily concerned stimulating research/grants and contracts, and guiding the development of sound procedures for assessing faculty performance. The second factor, *Faculty Enhancement*, consisted of four items that primarily concerned fostering faculty talents or interests, rejuvenating faculty vitality/enthusiasm, developing collegiality, and improving the department's campus reputation. The final factor, *Departmental Operations*, mainly concerned attending to essential administrative details, understanding and communicating expectations of the campus administration to the faculty, and acquainting new faculty and staff to departmental procedures.

The items that are represented in each factor reflect literature focused on roles and responsibilities of department chairs. Based on research from Gmelch and Miskin (1993), faculty development, or "enhancement" as this researcher defines it, is perceived by department chairs to be the most important responsibility. Day-to-day operations that keep a department functioning represented in the *Departmental Operations* factor are also important aspects of the department chair's role (Czech, 2007; Lucas, 1994).

Reliability of Scales

Cronbach's alpha coefficient was used to establish scale reliabilities as indicants of internal consistency. Cronbach's alpha is a measure of the inter-correlation of the items and estimates the proportion of the variance in all the items that is accounted for by a common factor. Scores that range between .7 or above suggest that the items in the index are in fact measuring the same thing (Vogt, 2005). The results from the analyses indicate that scales reliabilities for all factors are moderate to high, providing strong evidence for internal consistency.

Importance of Responsibilities

Once the underlying dimensions were established based on the EFA, the question arose as to which of these factors department chairs rated the highest. Department chairs assigned the highest importance ratings to items dealing with Departmental Operations, followed by Faculty Enhancement, and Research and Assessment. However, the mean scores on each factor indicated department chairs viewed all three responsibilities as "quite important."

In addition to examining the means and standard deviations of the three factor scales, an examination of the frequency distribution of all 20 items in the CIF instrument was conducted. Appendix G includes the frequencies and percentages of all 20 items in the CIF instrument, along with the standard deviations and standard error. The item that received the highest rating for importance was Item 7: *Communicates the department's needs to the dean*. The item that was rated the lowest in terms of importance was Item 5: *Facilitates obtaining grants and contracts from external sources*.

Faculty Ratings of Department Chairs Performance

This section of the discussion focuses on the FPDHS from the IDEA Center's *Feedback for Department Chairs* system. This system maintains a confidential data base of perceptions from faculty related to the department chair's performance of administrative responsibilities, personal characteristics, and administrative methods. An EFA was conducted on each set of a-priori subscales to gain an understanding of the underlying factor structure of faculty ratings of the department chair's performance on each of these subscales.

Administrative Responsibilities

The a-priori subscale structure in the FPDHS administrative responsibilities included: (a) Administrative Support; (b) Personnel Management; (c) Program Leadership/Support; (d) Building Image/Reputation; and (e) Developing Positive Climate. Applying principal components analysis with varimax rotation, only one underlying factor emerged.

This factor, labeled *Faculty Enhancement*, primarily concerned stimulating or rejuvenating faculty vitality or enthusiasm, fostering development of each faculty member's special talents or interests, and guiding the development of sound organizational plan to accomplish departmental goals. At least one item in each of the a-priori subscales for administrative responsibilities in the FPDHS instrument was found to have high component matrix coefficients. The responsibilities described in Items 16, 13, 11, 1, 15, and 12 on the FPDHS instrument form the basis of the factor name.

Personal Characteristics

The a-priori subscale structure in the FPDHS personal characteristics traits included: (a) Ability to Resolve Issues; (b) Communication Skills; (c) Steadiness; (d) Trustworthiness; and (e) Openness. Applying principal components analysis with varimax rotation, only one underlying factor emerged.

This factor, labeled *Flexibility/Adaptability*, primarily concerned flexibility in dealing with individuals and situations, fairness, practical judgment, and willingness to listen. The traits labeled trustworthiness and openness were the a-priori subscales that had items with the highest component matrix coefficients. These were Item 28: *Flexibility/ adaptability in dealing with individuals/situations*, and Item 30: *Fairness*.

Cipriano and Riccardi's (2008) work supports these constructs based on the results from their survey of department chairs designed to elicit responses about: (1) degree of satisfaction in the role as department chair; (2) plans after term is over; (3) perceptions of the skills and competencies, based on a list of 16, needed to function effectively as department chair. The results pertinent to this study are the top ten competencies/skills rated by the respondents. The competencies are: (1) Ability to communicate effectively; (2) Interpersonal skills; (3) Organizational ability; (4) Problem-solving ability; (5) Character/integrity; (6) Decision-making ability; (7) Trustworthiness; (8) Planning skills; (9) Leadership skills; and (10) Professional competency (Cipriano and Riccardi, 2008).

Administrative Methods

The a-priori subscale structure in the FPDHS administrative methods included: (a) Democratic/Humanistic; (b) Goal-Oriented/Structured; (c) Supports Faculty; (d) Promotes Positive Climate; and (e) Promotes Department Advancement. After applying the criteria for determining the number of factors to extract, only one underlying factor emerged from the principal components analysis.

This factor primarily concerned the need for the department chair to ensure that his/her role is understood by the faculty, and that he/she (a) acts as though faculty morale is vital,(b) puts faculty suggestions into action, (c) coordinates work, and (d) encourages teamwork. This factor was, therefore, named *Communication and Coordination*. All of the a-priori subscales were represented by items with high component matrix coefficients.

Reliability of Scales

Scale reliabilities from the EFAs of faculty ratings of the chair's performance of administrative responsibilities, personal characteristics, and administrative methods were high. All items within each factor had high inter-item correlations with the total scale score, which also contributed to the overall scale reliability.

Research Question Eight and Hypothesis 1

Are the scales for faculty ratings of the chair's performance of responsibilities, personal characteristics, and administrative methods related to faculty members' overall judgment of the chair's effectiveness?

Hypothesis 1: Faculty ratings of the chair's performance of responsibilities, personal characteristics, and administrative methods will be positively related to faculty members' overall judgment of the chair's effectiveness.

To test this hypothesis Pearson product-moment coefficients were generated and a multiple regression analysis was conducted. The predictor variables were the scales for faculty ratings of the department chair's performance of responsibilities, personal characteristics, and administrative methods. The dependent variable was the faculty members' overall judgment of the department chair's effectiveness. Two items were intended to assess overall effectiveness: Item 66, "I believe the department would be better off if we replaced the current department chair," and Item 67, "I have confidence in the department chair's ability to provide leadership to the department." In addition, the Pearson-product moment correlation between items 66 and 67 was high and statistically significant. Given the high correlation between the items, coupled with the understanding that the two items were designed to provide a summary judgment of department chair performance, an average score was calculated which created one dependent variable for the regression analyses. This variable (the mean of Items 66 and 67), represents retention and confidence of the department chair. The variable was labeled "overall judgment" for the purposes of the analyses.

Due to issues of collinearity, multiple variations of including and excluding the three factors were performed. The solution that was satisfactory included conducting the regression

with *Communication and Coordination* (administrative methods) and *Flexibility/Adaptability* (personal characteristics) as the independent variables. The multiple regression model with *Communication and Coordination* and *Flexibility/Adaptability* as predictors produced $R^2 = .833$, $F(2, 601) = 1504.19$, p> .001, which explained a significant amount of variance (83%).

The findings from these analyses provide useful insight into understanding the extent to which behaviors (*Communication/Coordination*) and/or traits (*Flexibility/Adaptability*) are meaningful predictors in determining retention and confidence of department chairs based on faculty ratings. Eighty-three percent of the variance in the composite of the two summary judgment items is explained by the two factors. In addition, faculty ratings of the chair's performance of responsibilities, personal characteristics, and administrative methods are positively related to faculty members' overall judgment of the chair's effectiveness.

Communication/Coordination was the best predictor from this model. This suggests that faculty have more confidence in the department chair's ability to provide leadership and are less likely to believe that the department chair should be replaced if they perceive him or her as supporting faculty, promoting a positive environment, and focusing on democratic and goal-oriented behaviors in their position.

Flexibility/Adaptability was also a significant. This implied that faculty have confidence in the department chair's overall performance if they perceive that he or she demonstrates the ability to resolve issues, communicate, and demonstrates traits of trustworthiness, openness and patience in implementing change.

Research Question Nine and Hypothesis 2

Are the scales for faculty ratings, based on those derived from the EFA performed on heads'/chairs' importance ratings of administrative responsibilities, related to faculty members' overall judgment of the chair's effectiveness?

Hypothesis 2: Faculty ratings, based on those derived from the EFA performed on heads'/chairs' importance ratings of administrative responsibilities, will be positively related to faculty members' overall judgment of the chair's effectiveness.

To test this hypothesis, Pearson product-moment coefficients were computed and a multiple regression analysis was conducted. The predictor variables for this analysis were based on mean faculty ratings on factors derived from the EFA performed on department chair's importance ratings of administrative responsibilities. The administrative experience department chairs possess makes them uniquely qualified to distinguish the underlying dimensions of the 20 responsibilities in the CIF. Knowing how faculty rated chairs on these dimensions and how those ratings correlate with the overall judgment variable (mean of Items 66 and 67) seemed worthy of investigation.

With this rationale, new variables were created from the faculty ratings on the items derived from the EFA performed on the department chair's importance ratings of administrative responsibilities. Reliabilities for faculty responses on the three responsibility scales established from the department chair data were high.

The multiple regression model with all three predictors entered into the equation indicated a substantial amount of variance in overall judgment scores was explained by the three factor scales. The predictor with the highest standardized beta coefficient was *Faculty Enhancement*. This suggests that faculty had more confidence in the department chair's overall effectiveness if they perceived him or her as developing collegiality, fostering faculty talents, and improving the department's campus reputation.

The predictor with the second highest standardized beta coefficient was *Departmental Operations*; *Research and Assessment* accounted for the least amount of variance in the model. This suggests that faculty have more confidence in the department chair's ability to provide leadership and are less likely to believe that the department chair should be replaced if they perceived him or her as attending to the administrative operations of the department in general.

Finally, *Research and Assessment* (Factor 1) was highly correlated with the criterion, which implied faculty had more confidence in the department chair's overall effectiveness/performance if they perceived that he or she supported the stimulation of research/grants and contracts, and provided guidance for the development of sound procedures for assessing faculty performance.

Based on these results, faculty ratings, based on those derived from the EFA performed on department chairs' importance ratings of administrative responsibilities, are positively related to faculty members' overall judgment of the chair's effectiveness.

Conclusions from Research Questions

Overall, results from these analyses provide a better understanding of the FPDHS instrument and provide evidence that it can provide valuable formative feedback for department chairs. Although personal characteristics are a significant predictor of department chair performance, the administrative methods she/he carries out account for more variance. This suggests that department chairs are not necessarily advantaged or limited by their personal traits; however they can improve faculty's perception of their ability as a leader by improving their administrative skills. In general, this study provides strong evidence that much can be learned from the IDEA *Feedback for Department Chairs* system. However, additional research on the topic of evaluating and developing department chairs is needed.

Recommendations for Additional Research

This study provided insight into understanding more about the roles and responsibilities that department chairs view as most important. Furthermore, this study examined the relationship between department chair behaviors, as perceived by faculty, and how they correlate with the department chair's performance. The results from the study also addressed the strengths of the department chair's personal characteristics and various administrative behaviors that were highly correlated with the department chair's performance. Despite the importance of the role of department chairs, there is very little empirical research focused on evaluating department chairs' performance and effectiveness.

As demonstrated in this study this gap in the literature, specifically related to department chair leadership and how to effectively evaluate performance, is still prevalent. More research is necessary and will potentially complement the existing literature on how to effectively manage departments in any institution of higher education. The following recommendations are suggested for further research:

1. Continue research designed to explore the relationship between the essential administrative responsibilities and operations from the perspective of the department chairs and faculty, and disaggregate by gender, age, race/ethnicity to explore potential

differences.

2. Conduct a longitudinal study on a set of the administrative responsibilities items that have been in place for 30 years from the IDEA Center's *Feedback for Department Chairs* system data base to determine change over time, if relevant.

3. Conduct a qualitative research study on reflective practice of department chairs, asking questions such as, what is important about having performance feedback? How do department chairs' utilize performance data? The aim could be directed to understanding what works, under what circumstances, and why?

4. Conduct exploratory survey research to determine how department chairs are currently evaluated, and examine how the results from the performance evaluations impact change in leadership behavior.

5. Examine the relationship among interpersonal behaviors of effective and ineffective department chairpersons and a variety of personal characteristics (e.g., age, gender, length of employment)

Conclusion

Overall, results from this study have provided a better understanding of factors related to the department chair's effectiveness and evidence that assessment can provide valuable formative feedback for department chairs. This study contributed to new insights in matters of interest to administrators in higher education as well as evaluators in the field. Finally, the information gained from this examination can help define future agendas for research in the areas of evaluation and academic administration in higher education.

Upon reflecting on the implications from this study it is evident that the field of evaluation, leadership, and higher education can complement each other when examining the dimensions that inform the understanding of effectiveness of department chairs. This study also

introduced a broader interpretation of how the essential elements of program evaluation can be applied to personnel evaluation when the purpose is to provide formative and summative feedback. It is clear that there is a lot more to learn about evaluating department chair's effectiveness and faculty's perception of their performance; however, this study provides a foundation from which to draw and expand on in future research. In concurrence with Wergin (2003), it is the creation of a culture of critical reflection and continuous improvement that leads to the path of sustained excellence in higher education.

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Appendix A - Faculty Perceptions of Department Chair (FPDHS)

IDEA Feedback for Department Chairs

Administrator Name: **Sample Chair**
Department of Psychology
_IDEA University

VeriSign Secured VERIFY▸

FACULTY PERCEPTIONS OF DEPARTMENT HEAD/CHAIR

This survey may be conducted for two purposes: (1) to assist the department head/chair to become a more effective administrator and (2) to assist those responsible for evaluating the head/chair's effectiveness to make a valid assessment. Either purpose will be best served if you make an effort to reflect on the head/chair's overall performance and provide a fair and honest representation of the head/chair in your responses. It will be helpful if you can identify both strengths and weaknesses.

This survey will take you approximately 20 minutes to complete. Please allow enough time to provide thoughtful responses.

To encourage objectivity, you are asked <u>not</u> to identify yourself. Results of the survey will be summarized for all respondents. Your responses to open-ended questions will be provided verbatim to the department head/chair. Thus, you will want to avoid comments that would reveal your identity.

Part I.

The list below describes 20 responsibilities, which some department heads/chairs pursue. Rate the performance of your department head/chair over the past 12 months on each of these by selecting the circle which best represents your judgment. If you feel you have an insufficient basis for making a rating on a given responsibility, mark in the X column to indicate omit response.

1 = Poor
2 = Only So-So
3 = In Between
4 = Good
5 = Outstanding
X = Omit Response

	1	2	3	4	5	X	
1.	o	o	o	o	o	o	Guides the development of sound procedures for assessing faculty performance
2.	o	o	o	o	o	o	Takes the lead in recruiting promising faculty
3.	o	o	o	o	o	o	Attends to essential administrative details (e.g., class scheduling, budget preparation, promotion and tenure documentation)
4.	o	o	o	o	o	o	Fosters good teaching in the department (e.g., encourages course updating, use of appropriate technology, attending to student feedback
5.	o	o	o	o	o	o	Facilitates obtaining grants and contracts from external sources
6.	o	o	o	o	o	o	Leads in establishing and monitoring progress on annual or biannual department goals
7.	o	o	o	o	o	o	Communicates the department's needs (personnel, space, monetary) to the dean
8.	o	o	o	o	o	o	Develops collegiality/cooperation among departmental faculty members
9.	o	o	o	o	o	o	Encourages an appropriate balance among academic specializations within the department
10.	o	o	o	o	o	o	Stimulates research and scholarly activity in the department
11.	o	o	o	o	o	o	Guides the development of a sound organizational plan to accomplish departmental programs
12.	o	o	o	o	o	o	Improves the department's image and reputation within the campus community
13.	o	o	o	o	o	o	Fosters the development of each faculty member's special talents or interests

1 = Poor
2 = Only So-So
3 = In Between
4 = Good
5 = Outstanding
X = Omit Response

	1	2	3	4	5	X	
14.	○	○	○	○	○	○	Sees to it that new faculty and staff are acquainted with departmental procedures, priorities, and expectations
15.	○	○	○	○	○	○	Understands and communicates expectations of the campus administration to the faculty
16.	○	○	○	○	○	○	Stimulates or rejuvenates faculty vitality/enthusiasm
17.	○	○	○	○	○	○	Guides curriculum development
18.	○	○	○	○	○	○	Establishes trust between himself/herself and members of the faculty
19.	○	○	○	○	○	○	Improves the department's image and reputation with off-campus constituencies
20.	○	○	○	○	○	○	Recognizes and rewards faculty in accordance with their contributions to the department

Part II.

To what degree do items 21-30, below, represent a "strong point" or a "weak point" of the head/chair? Select the number that best corresponds to your judgment. Omit if you feel unable to make a valid judgment.

1 = Definite Weakness
2 = More a Weakness Than a Strength
3 = In Between
4 = More a Strength Than a Weakness
5 = Definite Strength
X = Omit Response

	1	2	3	4	5	X	
21.	○	○	○	○	○	○	Interpersonal skill
22.	○	○	○	○	○	○	Problem solving ability
23.	○	○	○	○	○	○	Appreciation for department's history
24.	○	○	○	○	○	○	Patience in implementing change
25.	○	○	○	○	○	○	Honesty
26.	○	○	○	○	○	○	Practical judgment
27.	○	○	○	○	○	○	Willingness to listen
28.	○	○	○	○	○	○	Flexibility/adaptability in dealing with individuals/situations
29.	○	○	○	○	○	○	Accessibility to faculty
30.	○	○	○	○	○	○	Fairness

Part III.

Indicate how frequently each of the following statements is descriptive of your department head/chair by selecting the number corresponding to your judgment. Omit items where you feel unable to make a valid judgment.

1 = Hardly Ever (not at all descriptive)
2 = Less Than Half the Time
3 = About Half the Time
4 = More Than Half the Time
5 = Almost Always (very descriptive)
X = Omit Response

	1	2	3	4	5	X	
31.	○	○	○	○	○	○	Allocates faculty responsibilities in an effective and equitable manner
32.	○	○	○	○	○	○	Supports and protects academic freedom
33.	○	○	○	○	○	○	Reduces, resolves, and/or prevents conflict among departmental faculty members
34.	○	○	○	○	○	○	Assists faculty in developing their own goals and priorities
35.	○	○	○	○	○	○	Makes sound suggestions for developing/changing departmental directions/priorities
36.	○	○	○	○	○	○	Is willing to stand up to higher authority when departmental interests are threatened
37.	○	○	○	○	○	○	Maintains steadiness in the face of crisis or unanticipated frustrations
38.	○	○	○	○	○	○	Acts as though high faculty morale is vital to him/her
39.	○	○	○	○	○	○	Is easy to understand
40.	○	○	○	○	○	○	Tries out new ideas with the faculty
41.	○	○	○	○	○	○	Does little things that make it pleasant to be a member of department
42.	○	○	○	○	○	○	Sees to it that faculty members are working up to capacity
43.	○	○	○	○	○	○	Is more a reactor than an initiator
44.	○	○	○	○	○	○	Works without a plan
45.	○	○	○	○	○	○	Looks out for the personal welfare of individual faculty members
46.	○	○	○	○	○	○	Lets faculty members know what is expected of them
47.	○	○	○	○	○	○	Treats all faculty members as her/his equal
48.	○	○	○	○	○	○	Gains input from faculty on important matters
49.	○	○	○	○	○	○	Sees to it that the work of the faculty is coordinated
50.	○	○	○	○	○	○	Explains the basis for his/her decisions
51.	○	○	○	○	○	○	Lets faculty members know when they have done a good job
52.	○	○	○	○	○	○	Makes sure her/his part in the department is understood by all members
53.	○	○	○	○	○	○	Acts as though visible department accomplishment were vital to him/her
54.	○	○	○	○	○	○	Maintains definite standards of performance
55.	○	○	○	○	○	○	Puts faculty suggestions into action
56.	○	○	○	○	○	○	Facilitates positive relationships between faculty and the clerical/technical staff
57.	○	○	○	○	○	○	Encourages teamwork among members of the faculty
58.	○	○	○	○	○	○	Encourages faculty ownership of a vision for the department
59.	○	○	○	○	○	○	Provides feedback to faculty on their major activities
60.	○	○	○	○	○	○	Tries to learn about each faculty member's interest, talents, and aspirations

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Part IV.

This section asks about potential impediments to the head/chair's effectiveness. Use this code to answer:

1 = Definitely False
2 = More False Than True
3 = In Between
4 = More True Than False
5 = Definitely True
X = Omit Response

	1	2	3	4	5	X	
61.	○	○	○	○	○	○	The department's facilities are inadequate.
62.	○	○	○	○	○	○	The head/chair's effectiveness is impaired by bureaucratic rules/regulations.
63.	○	○	○	○	○	○	Financial resources are inadequate to support the department's programs.
64.	○	○	○	○	○	○	The department has been given a relatively low priority by the dean.
65.	○	○	○	○	○	○	There is obstructionism/negativism from one or more senior members of the faculty.

Part V.

Summary Judgment. Use this code to answer:

1 = Definitely False
2 = More False Than True
3 = In Between
4 = More True Than False
5 = Definitely True
X = Omit Response

	1	2	3	4	5	X	
66.	○	○	○	○	○	○	I believe the department would be better off if we replaced the current head/chair.
67.	○	○	○	○	○	○	I have confidence in the head/chair's ability to provide leadership to the department.

Open-ended Comments

68. What are this head/chair's main assets?

_____

69. What reservations do you have about this person as a head/chair?

_____

70. What changes (e.g., in priorities, style, organization, policy) would do most to improve this head/chair's effectiveness?

_____

Submit   If you Submit you will no longer be able to access the survey or modify your responses.

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Appendix B - Department Chair Information Form (CIF)

IDEA ONLINE

Administrator Name: **Sample Chair**
Department of Psychology
_IDEA University

VeriSign Secured VERIFY►

DEPARTMENT HEAD/CHAIR INFORMATION FORM (CIF)

The list below describes responsibilities which some department heads/chairs pursue. Select the number which describes your judgment of how important each of these is in your role as head/chair.

You must assign a value of Not Important, Only So-So, Fairly Important, Quite Important, or Essential for each of the responsibilities.

1 = Not Important
2 = Only So-So
3 = Fairly Important
4 = Quite Important
5 = Essential

	1	2	3	4	5	
1.	☐	☐	☐	☐	☐	Guides the development of sound procedures for assessing faculty performance
2.	☐	☐	☐	☐	☐	Takes the lead in recruiting promising faculty
3.	☐	☐	☐	☐	☐	Attends to essential administrative details (e.g., class scheduling, budget preparation, promotion and tenure documentation)
4.	☐	☐	☐	☐	☐	Fosters good teaching in the department (e.g., encourages course updating, use of appropriate technology, attending to student feedback
5.	☐	☐	☐	☐	☐	Facilitates obtaining grants and contracts from external sources
6.	☐	☐	☐	☐	☐	Leads in establishing and monitoring progress on annual or biannual department goals
7.	☐	☐	☐	☐	☐	Communicates the department's needs (personnel, space, monetary) to the dean
8.	☐	☐	☐	☐	☐	Develops collegiality/cooperation among departmental faculty members
9.	☐	☐	☐	☐	☐	Encourages an appropriate balance among academic specializations within the department
10.	☐	☐	☐	☐	☐	Stimulates research and/or scholarly activity in the department
11.	☐	☐	☐	☐	☐	Guides the development of a sound organizational plan to accomplish departmental programs
12.	☐	☐	☐	☐	☐	Improves the department's image and reputation within the campus community
13.	☐	☐	☐	☐	☐	Fosters development of each faculty member's special talents or interests
14.	☐	☐	☐	☐	☐	Sees to it that new faculty and staff are acquainted with departmental procedures, priorities, and expectations
15.	☐	☐	☐	☐	☐	Understands and communicates expectations of the campus administration to the faculty
16.	☐	☐	☐	☐	☐	Stimulates or rejuvenates faculty vitality/enthusiasm
17.	☐	☐	☐	☐	☐	Guides curriculum development
18.	☐	☐	☐	☐	☐	Establishes trust between members of the faculty and myself
19.	☐	☐	☐	☐	☐	Improves the department's image and reputation with off-campus constituencies
20.	☐	☐	☐	☐	☐	Recognizes and rewards faculty in accordance with their contributions to the department

To what degree does the department emphasize the following programs? Use this code to respond:

1 = Minor or No Emphasis
2 = Fairly Important Emphasis
3 = Very Important Emphasis
4 = Essential Emphasis

	1	2	3	4	
21.	○	○	○	○	Undergraduate degree program
22.	○	○	○	○	Graduate or professional degree program
23.	○	○	○	○	Teaching "basic skills"-communication, quantitative reasoning, computing, etc.
24.	○	○	○	○	Providing "general/liberal education"-strengthening, broadening intellectual background and competence of students in any major
25.	○	○	○	○	Funded research/creative programs and products
26.	○	○	○	○	Providing advice, information, or other service to public or professional constituents

27. Which of the following best describes the nature of your appointment as head/chair?
- ○ I was appointed by the dean with the consultation and approval of the faculty.
- ○ I was appointed by the dean without meaningful faculty consultation/approval.
- ○ I was elected by the faculty to serve a definite term.
- ○ I was elected by the faculty to serve an indefinite term.
- ○ Other

28. Counting the current year, how long have you served as head/chair?
- ○ One year
- ○ Two or three years
- ○ Four or five years
- ○ More than five years

29. During the past five years, have you as the department head/chair been challenged in a grievance procedure or in a lawsuit brought by a faculty member?
- ○ No
- ○ Yes, once
- ○ Yes, more than once

30. What percent of the full-time faculty in the department are tenured?
- ○ Less than 35%
- ○ 35 – 49%
- ○ 50 – 66%
- ○ 67 – 84%
- ○ 85% or more

Submit If you Submit you will no longer be able to access the survey or modify your responses.

Appendix C - IDEA Feedback for Department Chair Report

IDEA Feedback for Department Chair Report
IDEA Center
www.idea.ksu.edu

Chairperson: **SAMPLE, C**
Department: EDUCATION
Institution: IDEA UNIVERSITY

Number Asked to Participate: 29
Number Responding: 20

Term: Fall 2001-2002
% Responding: 69.0

Because the number of faculty responding is high, your ratings are estimated to be very reliable; repeated ratings from the same respondents are unlikely to result in significant differences. The percent responding is high enough to suggest that your results are probably representative of the faculty as a whole.

Sections and Purposes of the Report

Page	Section	Purpose
2	I. Overall Ratings of Effectiveness	Provides estimates of effectiveness in performing five types of administrative responsibilities as well as a summary judgment of the faculty.
3	II. Effectiveness in Performing 20 Specific Administrative Responsibilities	Provides detailed information related to the 20 administrative responsibilities that make up the five types of responsibilities summarized in Section I.
4-5	III. Description of Administrative Methods and Personal Characteristics	Describes perceptions of strengths and weaknesses in your administrative techniques and style or personal characteristics. These results should be consulted if effectiveness ratings in Sections I and II are disappointing.
6	IV. Focusing Improvement Efforts	Suggests specific areas where improvement efforts might be helpfully focused.
7	V. Statistical Detail	Provides detailed statistical information about how faculty responded to each question.
8	VI. Cautionary Note & Processing Errors	Summarizes some limitations of this report.

Definitions
Raw Score: Results based on the actual numerical ratings derived from a 5-point scale (1=low; 5=high). The report usually provides both the *average* rating and the percent of *extreme* ratings (those in the two highest and/or two lowest categories). Such reports should help you identify areas where improvement efforts might be concentrated.

Adjusted Score: Adjusted average scores take into account the fact that the five departmental characteristics identified below influence effectiveness ratings but are largely beyond the control of the chair. Faculty descriptions of these factors in your department, and their expected influence on effectiveness ratings, are provided below.

Understanding the Report
Average ratings are displayed in each section. In addition, most results are presented on graphs giving the percent of local faculty making positive or negative ratings. When possible, comparisons are made with ratings obtained by chairs/heads in the national IDEA data base, using five categories--High (upper 10%); High Average (next 20%); Average (middle 40%); Low Average (next 20%); and Low (lowest 10%). **Part One** of **Section III** (page 4) shows the degree to which average ratings on selected items departed from the national average. *National comparisons are not yet available for new items (indicated by *).*

Faculty Ratings of Departmental Characteristics
Several departmental characteristics, which are largely beyond the control of the chair, have been shown to influence effectiveness ratings. Your results on these, and the effect of these results on "adjusted" ratings, are shown below.

	Definitely False =1	More False/ True =2	In Between =3	More True/ False =4	Definitely True =5	Avg.	Std. Dev.
61. Facilities are inadequate.	2	8	3	7	0	2.8	1.1
62. Bureaucracy impairs effectiveness.	2	6	2	8	2	3.1	1.3
63. Inadequate financial resources.	2	9	4	4	1	2.7	1.1
64. Low priority from dean.	4	2	4	3	6	3.3	1.6
65. Some senior faculty are negative.	6	8	2	2	2	2.3	1.3

NA=Not Applicable

Section I. Overall Ratings of Effectiveness

Part One is an overall indication of the confidence the faculty have in the chair. While it represents an important summary judgment, it provides no indications of the reasons for this judgment. These may be inferred, in part, from results provided in **Sections II and III**.

Part One: Summary Judgment	Mostly True or True	Mostly False or False
66. I believe the department would be better off if we replaced the current head/chair.	5.3	94.7
67. I have confidence in the head/chair's ability to provide leadership to the department.	95.0	5.0

Percents do not include those who did not respond, or indicated they could not make a judgement

Part Two summarizes faculty views of the chair's effectiveness in performing five major responsibilities, each of which consists of several specific responsibilities (see **Section II**). These have been weighted in accordance with the average degree of importance the chair attached to specific responsibilities. Both *raw* and *adjusted* averages are reported; the latter take into account the effect of some departmental characteristics which are largely beyond the control of the chair (see page 1).

The graph in the center shows the percent of faculty who rated the chair as *ineffective* and *effective*. The chart on the right compares average ratings with those for the IDEA Center's national data base.

Part Two: Effectiveness in Performing Five Types of Administrative Responsibilities

Responsibility	Average Rating		Percent of Faculty Rating Chair as:		Comparison of Rating With National Database
	Effectiveness Raw Adjusted	Chair Rating of Importance	Ineffective (1 or 2)	Effective (4 or 5)	Raw Adjusted
A. Administrative Support	4.3 **4.8**	3.3			High Average **High**
B. Personnel Management	4.1 **4.5**	3.0			High Average **High**
C. Program Leadership/Support	4.1 **4.6**	2.7			High Average **High**
D. Building Image/Reputation	4.3 **5.0**	2.0			High **High**
E. Developing Positive Climate	4.0 **NC**	2.8			Not Available **Not Available**
All Activities (A through E)	4.2 **4.6**	2.8			High Average **High**

80% 60% 40% 20% 0% 20% 40% 60% 80%

Faculty Effectiveness Ratings based on 5-point scale: 1=Poor; 2=Only so-so; 3=In Between; 4=Good; 5=Outstanding

Average Chair Importance Ratings on Administrative Activities that make up each Responsibility area (see **Section II**, page 3) based on 5-point scale:
    0=Not important; 1=Only so-so; 2=Fairly important; 3=Quite important; 4=Essential

NC=Not calculated (based on new items which cannot be adjusted until more data are available)

NA=No data available

Give priority attention to the most important responsibilities. Consider both the average ratings of effectiveness and the percent rating the chair as *effective* or *ineffective*. In general, outstanding performance is indicated when 50% or more of the faculty view performance as *effective* and the average rating is 4.5 or higher. If this average is below 3.3, or more faculty rate the chair as *ineffective* than *effective*, improvement is desirable. A review of **Section IV** (page 6) may provide some guidance in developing improvement strategies.

Section II. Effectiveness in Performing 20 Specific Administrative Responsibilities

In this Section, faculty ratings of effectiveness in performing each of 20 specific administrative responsibilities are summarized and is intended to provide guidance to the chair in determining where to focus improvement efforts. Each of these is an *element* in one of the five *types* of responsibilities reviewed in **Part Two** of **Section I**.

In focusing improvement efforts, priority attention should be given to responsibilities considered by the chair to be *Essential* or *Quite Important*. Those rated as *Fairly Important* or of *So-so* importance should be of secondary concern.

Responsibility	Average Faculty Rating of Effectiveness		Chair Rating of Importance	Percent of Faculty Rating Chair as:		Comparison of Rating With National Database	
	Raw	Adj.		Ineffective (1 or 2)	Effective (4 or 5)	Raw	Adj.
A. Administrative Support							
7. Communicates dept's needs	4.3	4.9	Essential			Average	High
11. Guides organizational plans	4.2	4.6	Quite			High Avg	High
*3. Attends to admin. detail	4.4	NC	Quite			Not yet available	
B. Personnel Management							
1. Guides fac. evaluation process	4.2	4.5	Quite			High Avg	High
2. Leads fac. recruiting	4.3	4.6	Quite			High Avg	High
13. Fosters fac. development	4.4	4.7	Quite			High	High
20. Rewards fac. appropriately	3.8	4.2	Quite			Average	High
C. Program Leadership/Support							
4. Fosters good teaching	4.3	4.6	Quite			High Avg	High
9. Encourages balanced faculty	4.3	4.8	Quite			High Avg	High
10. Stimulates rsch/scholarly work	3.8	4.0	Fairly			Average	High Avg
15. Commun. admin. expctatns.	4.1	4.6	Quite			Average	High
17. Guides curr development	4.4	4.7	Quite			High	High
*6. Leads department planning	4.0	NC	Fairly			Not yet available	
D. Building Image/Reputation							
5. Facilitates external funding	4.1	4.3	Not			High Avg	High
12. Improves on-campus image	4.3	5.0	Quite			High Avg	High
*19. Improves off-campus image	4.4	NC	Quite			Not yet available	
E. Developing Postive Climate							
*8. Fosters collegiality	4.0	NC	Fairly			Not yet available	
*14. Orients new faculty/staff	4.0	NC	Quite			Not yet available	
*16. Stimulates faculty vitality	3.9	NC	Quite			Not yet available	
*18. Establishes trust	4.2	NC	Quite			Not yet available	

80% 60% 40% 20% 0% 20% 40% 60% 80%

Faculty Effectiveness Ratings based on 5-point scale: 1=Poor; 2=Only so-so; 3=In Between; 4=Good; 5=Outstanding

NC=Not calculated (based on new items which cannot be adjusted until more data are available)
NA=No data available

On the basis of average rating and the percent making "extreme" ratings (4, 5 or 1, 2), each of the 13 original responsibilities has been placed in one of the effectiveness categories shown below.

Effectiveness Category	Importance Rating of Administrative Responsibilities	
	Essential or Quite	Fairly or So-So
Outstanding	1,2,4,7,9,11,12,13,15,17	
Strong	20	10
Acceptable		
Needs Improvement		

Improvement efforts might first be concentrated on important responsibilities listed in the *Needs Improvement* category. A review of **Section IV** (page 6) may provide some additional guidance in developing improvement strategies.

Section III. Description of Administrative Methods and Personal Characteristics

The purpose of this section is to describe administrative methods/styles (**Part One**) and personal characteristics (**Part Two**) which are often related to effectiveness. Improvement in administrative functioning may be facilitated if one can make changes in administrative behavior (**Part One**) or in one's image as an administrator (**Part Two**).

Part One groups the 30 administrative methods to form five scales. Research has established that the first two scales are related to effectiveness. Scales C, D, and E have not been adequately studied, but authorities in the field have consistently identified them as desirable methods. Methods which influence effectiveness positively are called "strengths"; those with negative effects are "weaknesses." On methods for which a national database has been established (Scales A and B), "strength" is a rating 0.3 or more *above* the national average and "weakness" is a rating 0.3 or more *below* the national average. For methods reported on Scales C, D, and E, "strength" is inferred when the percentage of positive ratings (4 or 5) is greater than 30; and "weakness" is inferred when the percentage of negative ratings (1 or 2) is greater than 30.

Results in this section identify methods or characteristics which are *general* strengths or weaknesses. In **Section IV** (page 6), the *specific* relevance of some methods to selected administrative responsibilities is identified.

Administrative Method	Average Faculty Rating	Identification of Strengths and Weaknesses
Scale A. Democratic/Humanistic	**4.3**	
38. Stresses faculty morale	4.3	
39. Easy to understand	4.5	
41. Does little things	4.1	
45. Looks out for faculty welfare	4.5	
47. Treats faculty as equals	4.2	
48. Gains faculty input on important matters	4.3	
50. Explains basis for decisions	4.3	
51. Tells faculty when a good job is done	4.1	
55. Puts suggestions into action	4.3	
Scale B. Goal-Oriented/Structured	**4.2**	
40. Tries out new ideas with faculty	4.4	
42. Sees that faculty work to capacity	4.1	
(43.) More a reactor than initiator	3.4	
(44.) Works without a plan	4.4	
46. Communicates faculty expectations	4.5	
49. Sees that work is coordinated	4.3	
52. Ensures own role is clear	4.2	
53. Stresses departmental accomplishments	4.4	
54. Maintains definite performance standards	4.5	

-0.8 -0.6 -0.3 0.0 0.3 0.6 0.8

NA = No data available   Difference from Average in National Database

Administrative Method	Average Faculty Rating	Identification of Strengths and Weaknesses
Scale C. Supports Faculty	**4.0**	
*34. Helps faculty develop goals/priorities	3.9	
*59. Provides faculty feedback	4.2	
*60. Knows/understands faculty	4.1	
Scale D. Promotes Positive Climate	**4.2**	
*32. Supports academic freedom	4.5	
*33. Reduces conflicts	4.0	
*37. Steady in crisis	4.3	
*56. Facilitates good faculty/staff relations	4.3	
*57. Encourages faculty teamwork	4.1	
*58. Encourages faculty ownership of dept. vision	4.0	
Scale E. Promotes Dept Advancement	**4.5**	
*31. Allocates faculty duties wisely	4.4	
*35. Suggests sound priorities	4.4	
*36. Defends department well	4.7	

80% 60% 40% 20% 0% 20% 40% 60% 80%

NA = Data not Available   %Rating 1 or 2 Inferred Weakness   %Rating 4 or 5 Inferred Strength

Averages based on a 5-point scale: 1=Hardly ever; 2=Less than half the time; 3=About half the time; 4=More than half the time; 5=Almost always
Items in () are scored in reverse (1=5; 2=4; etc.)

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Section III. Description of Administrative Methods and Personal Characteristics (continued)

Part Two: This part is similar to **Part One**; it considers Personal Characteristics (rather than Administrative Methods) which are presumably related to effectiveness. Ten such characteristics were rated--two representing each of five "traits" or "capacities." Although not enough research has been done to establish how these characteristics are related to administrative effectiveness, authorities in the field consistently cite them as highly relevant. Until such research has been completed, it is recommended that they be regarded as "probably important."

Each of these ratings constitutes an "image" the faculty have formed of you as a person. In general, if the average rating is 4.5 or higher and the percent describing this as a strength exceeds 50, the image is a highly favorable one which can be expected to contribute to your success as an administrator. If this average is below 3.3, or if more rate the characteristic as a weakness than as a strength, there is reason to believe that this faculty image of you may create an obstacle to effective functioning. In such cases, you may wish to consult with a colleague or supervisor about ways to create a more favorable impression.

Personal Characteristic	Average Faculty Rating	Identification of Strengths and Weaknesses
Trait A. Ability to Resolve Issues	**4.4**	
*22. Problem solving ability	4.4	
*26. Practical judgment	4.4	
Trait B. Communication Skills	**4.1**	
*21. Interpersonal skill	3.7	
*27. Listening	4.4	
Trait C. Steadiness	**4.4**	
*23. Apreciation for department's history	4.6	
*24. Patience in implementing change	4.3	
Trait D. Trustworthiness	**4.5**	
*25. Honesty	4.6	
*30. Fairness	4.4	
Trait E. Openness	**4.4**	
*28. Flexibility/adaptability	4.3	
*29. Accessibility	4.5	

80% 60% 40% 20% 0% 20% 40% 60% 80%

NA = Data Not Available

%Rating 1 or 2
Inferred Weakness

%Rating 4 or 5
Inferred Strength

Averages based on a 5-point scale: 1=Definite weakness; 2=More a weakness than a strength; 2=In between; 4=More a strength than a weakness; 5=Definite strength

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Section IV. Focusing Improvement Efforts

This section is intended to provide focus to improvement efforts. In the chart below, Column 1 lists the responsibilities you rated as *Essential*, *Quite Important*, and *Fairly Important*. Column 2 identifies specific administrative techniques which research has shown are highly related to effectiveness ratings for each of these activities. Column 3 shows which of these "relevant" methods was identified as one of your strengths or weaknesses. (The numbers in Columns 2 and 3 refer to administrative methods numbered 31-60 on the graphical presentation in **Section III, Part One, page 4**.) In seeking to improve your effectiveness, it is just as important that you retain current strengths as it is to correct current weaknesses.

Column 1 Responsibilites Emphasized	Column 2 Most Relevant Methods	Column 3 Most Relevant Strengths/Weakness	
		Strengths	Weaknesses
Essential Activities			
7. Communicates dept's needs	38,39,41,43,45,46,49,50,52,53,54,55	38,39,41,45,46,49,50,52,53, 54,55	
Quite Important Activities			
1. Guides fac. eval. process	38,41,46,49,50,52,54,55	38,41,46,49,50,52,54,55	
2. Leads fac. recruitment	38,39,41,42,43,45,46,48,49,50,52,54,55	38,39,41,42,45,46,48,49,50, 52,54,55	
*3. Attends to admin. detail	Not yet available	-------Not yet available-------	
4. Fosters good teaching	38,41,45,46,48,49,54,55	38,41,45,46,48,49,54,55	
9. Encourages balanced fac.	38,39,41,42,45,46,47,48,49,50,52,53,54,55	38,39,41,42,45,46,48,49,50, 52,53,54,55	
11. Guides organizational plans	43,44,46,49,50,52,54,55	44,46,49,50,52,54,55	
12. Improves campus image	38,39,41,43,45,46,49,50,52,53,54,55	38,39,41,45,46,49,50,52,53, 54,55	
13. Foster fac. development	38,39,41,45,47,48,49,50,53,54,55	38,39,41,45,48,49,50,53,54, 55	
*14. Orients new fac/staff	Not yet available	-------Not yet available-------	
15. Commun. admin. expctatns	38,39,44,45,46,47,48,49,50,52,53,54,55	38,39,44,45,46,48,49,50,52, 53,54,55	
*16. Stimulates fac vitality	Not yet available	-------Not yet available-------	
17. Guides curr development	38,39,42,43,44,45,46,49,52,54,55	38,39,42,44,45,46,49,52,54, 55	
*18. Establishes trust	Not yet available	-------Not yet available-------	
*19. Improves off-campus image	Not yet available	-------Not yet available-------	
20. Rewards fac. appropriately	38,39,41,42,45,46,47,48,49,50,51,53,54,55	38,39,41,42,45,46,48,49,50, 53,54,55	

Potential Areas for Improvement Efforts
Generally, improvement efforts are most successful if they focus on no more than three to five administrative methods at a time. These results suggest that your improvement strategies might best be chosen from the following administrative methods.
No areas for improvement were indicated

Strengths to Retain
These results suggest that the following methods are being used effectively and should be retained:
    49. Sees to it that the work of the faculty is coordinated
    54. Maintains definite standards of performance
    55. Puts faculty suggestions into action
    38. Acts as though high faculty morale is vital to him/her
    46. Lets faculty members know what is expected of them
    Other effective methods include 45, 50, 39, 41, 52, 48, 53, 42, and 44.

When item 44 has been identified as an area for improvement or a strength to retain, the desired behavior is to be one who is planful.

Please Note: The relationship between ratings of new items 31-37, 56-60, and 21-30 (shown on pages 4 and 5) and effectiveness ratings has not yet been empirically established. However, their relevance should be assumed, and results should be reviewed to identify other potential strengths and weaknesses.

Section V. Statistical Detail: Item Frequencies, Averages, and Standard Deviations

Items 1-20: Administrative Responsibilities

Key: 1=Poor   2=Only So-so   3=In Between   4=Good   5=Outstanding

	1	2	3	4	5	Omit	Avg.	s.d.			1	2	3	4	5	Omit	Avg.	s.d.
1.	0	1	0	14	5	0	4.2	0.7		11.	0	1	0	13	6	0	4.2	0.7
2.	0	1	0	11	7	1	4.3	0.7		12.	0	0	3	8	9	0	4.3	0.7
3.	0	0	1	10	9	0	4.4	0.6		13.	0	0	1	11	8	0	4.4	0.6
4.	0	1	0	12	7	0	4.3	0.7		14.	1	1	1	12	5	0	4.0	1.0
5.	0	0	4	10	5	1	4.1	0.7		15.	0	1	2	12	5	0	4.1	0.8
6.	0	1	4	10	5	0	4.0	0.8		16.	1	1	4	8	6	0	3.9	1.1
7.	0	0	0	13	6	1	4.3	0.5		17.	0	0	1	11	8	0	4.4	0.6
8.	1	0	3	10	6	0	4.0	1.0		18.	1	0	3	6	10	0	4.2	1.1
9.	0	0	1	11	7	1	4.3	0.6		19.	0	0	0	12	7	1	4.4	0.5
10.	0	2	4	10	4	0	3.8	0.9		20.	1	2	3	9	5	0	3.8	1.1

Items 21-30: Personal Characteristics

Key: 1=Definite weakness   2=More a weakness than a strength   3=In between   4=More a strength than a weakness   5=Definite strength

	1	2	3	4	5	Omit	Avg.	s.d.			1	2	3	4	5	Omit	Avg.	s.d.
21.	0	3	6	4	6	1	3.7	1.1		26.	0	2	0	6	11	1	4.4	1.0
22.	0	1	1	7	10	1	4.4	0.8		27.	0	1	0	8	10	1	4.4	0.8
23.	0	0	0	8	10	2	4.6	0.5		28.	0	1	1	9	8	1	4.3	0.8
24.	0	0	1	11	6	2	4.3	0.6		29.	0	0	1	8	10	1	4.5	0.6
25.	1	0	0	3	15	1	4.6	1.0		30.	0	1	0	8	10	1	4.4	0.8

Items 31-60: Administrative Methods

Key: 1=Hardly ever   2=Less than half the time   3=About half the time   4=More than half the time   5=Almost always

	1	2	3	4	5	Omit	Avg.	s.d.			1	2	3	4	5	Omit	Avg.	s.d.
31.	0	1	1	8	10	0	4.4	0.8		46.	0	1	1	4	11	3	4.5	0.9
32.	0	0	1	8	10	1	4.5	0.6		47.	0	2	3	5	10	0	4.2	1.0
33.	1	0	3	11	5	0	4.0	0.9		48.	0	0	3	8	9	0	4.3	0.7
34.	1	1	1	13	4	0	3.9	1.0		49.	0	0	1	12	7	0	4.3	0.6
35.	0	1	0	9	10	0	4.4	0.8		50.	0	1	2	7	10	0	4.3	0.9
36.	0	0	0	5	14	1	4.7	0.5		51.	1	1	2	7	9	0	4.1	1.1
37.	0	1	2	8	9	0	4.3	0.9		52.	0	1	2	10	7	0	4.2	0.8
38.	1	0	2	5	11	1	4.3	1.1		53.	1	0	0	8	10	1	4.4	1.0
39.	0	1	0	8	11	0	4.5	0.8		54.	0	1	0	8	11	0	4.5	0.8
40.	0	0	2	8	9	1	4.4	0.7		55.	0	1	2	8	9	0	4.3	0.9
41.	1	0	3	9	7	0	4.1	1.0		56.	0	0	3	7	9	1	4.3	0.7
42.	0	1	2	12	5	0	4.1	0.8		57.	1	1	2	8	8	0	4.1	1.1
(43)	3	7	6	1	2	1	2.6	1.2		58.	1	0	2	11	5	1	4.0	0.9
(44)	12	5	0	2	0	1	1.6	1.0		59.	1	1	0	9	8	1	4.2	1.1
45.	0	1	0	8	11	0	4.5	0.8		60.	1	2	0	8	8	1	4.1	1.2

() Items scored in reverse (5=1, 4=2, etc.) on page 4, but not in the statistical detail above.
Items 61-65: see page 1   Items 66-67: see page 2

Section VI. Cautionary Note & Processing Errors

No rating scale can include all relevant questions; and what is relevant varies from campus to campus. Therefore, the results cannot be considered totally comprehensive. Furthermore, there are some weaknesses in all rating processes which reduce the validity of ratings. Among the most important of these are the *halo effect* (the tendency to allow one's general impression of the administrator to influence systematically responses to all items) and the *error of central tendency* (a reluctance to make extreme ratings, high or low).

Some facets of administrative functioning cannot be observed by faculty members, particularly those involving interactions with the dean or higher administrative officials, those involving other campus administrators, those involving students, and those involving off-campus constituents. For a comprehensive evaluation of effectiveness, it is important to obtain input from additional sources.

Effectiveness ratings can be affected by many factors which are not under the control of the chairperson. Although the "adjusted" scores take into account five such factors identified by the research, there may be many others which have not yet been established.

The current form is a revision of a form which had been in use for over 20 years. Some of the items on the revision have not yet been empirically tested, although all have been cited as relevant by authorities writing in the field. Items which are new to the revision are identified with an asterisk (*); the interpretation of results related to such items should be more tentative than for items which have been thoroughly researched.

Processing Error Messages

Appendix D - Correlation Matrix for the CIF Instrument Items 1-20

Table D- 1 *Correlation Matrix for the CIF Instrument Items 1-20*

Chair Information Form (CIF)	1	2	3	4	5	6	7	8	9	10	11	12
1. Guides the development of sound procedures for assessing faculty performance (CIF)	1.00											
2. Takes the lead in recruiting promising faculty (CIF)	.39**	1.00										
3. Attends to essential administrative details (CIF)	.23**	.19**	1.00									
4. Fosters good teaching in the department (CIF)	.28**	.31**	.31**	1.00								
5. Facilitates obtaining grants and contracts from external sources (CIF)	.41**	.31**	.017	.22**	1.00							
6. Leads in establishing and monitoring progress on annual department goals (CIF)	.38**	.33**	.26**	.38**	.35**	1.00						
7. Communicates the department's needs to the dean (CIF)	.32**	.22**	.35**	.31**	.20**	.34**	1.00					
8. Develops collegiality/cooperation among departmental faculty (CIF)	.29**	.24**	.21**	.41**	.24**	.31**	.39**	1.00				
9. Encourages an appropriate balance among academic specializations (CIF)	.35**	.35**	.22**	.36**	.33**	.36**	.29**	.38**	1.00			
10. Stimulates research and/or scholarly activity in the department (CIF)	.53**	.38**	.16**	.29**	.64**	.41**	.27**	.32**	.42**	1.00		
11. Guides the development of a sound organizational plan to accomplish (CIF)	.43**	.36**	.30**	.40**	.32**	.60**	.30**	.33**	.43**	.39**	1.00	
12. Improves the department's image and reputation with the campus (CIF)	.25**	.26**	.18**	.31**	.32**	.32**	.31**	.41**	.37**	.34**	.37**	1.00
13. Fosters development of each faculty member's special talents or interests	.36**	.30**	.14**	.38**	.33**	.32**	.34**	.53**	.38**	.41**	.36**	.43**

Chair Information Form (CIF)	1	2	3	4	5	6	7	8	9	10	11	12
14. Sees to it that new faculty and staff are acquainted with departmental procedures (CIF)	.26**	.34**	.31**	.44**	.18**	.32**	.29**	.39**	.32**	.25**	.40**	.29**
15. Understands & communicates expectations of the campus administration (CIF)	.34**	.24**	.35**	.38**	.21**	.38**	.43**	.34**	.37**	.29**	.45**	.40**
16. Stimulates or rejuvenates faculty vitality/enthusiasm (CIF)	.38**	.31**	.12**	.42**	.41**	.40**	.29**	.56**	.42**	.46**	.43**	.41**
17. Guides curriculum development (CIF)	.14**	.27**	.30**	.47**	.12**	.32**	.25**	.31**	.33**	.20**	.36**	.28**
18. Establishes trust between members of the faculty and myself (CIF)	.37**	.26**	.30**	.44**	.24**	.36**	.44**	.58**	.32**	.36**	.42**	.36**
19. Improves the department's image and reputation with off campus (CIF)	.30**	.29**	.08*	.34**	.43**	.38**	.22**	.34**	.39**	.48**	.41**	.63**
20. Recognizes and rewards faculty in accordance with their contributions (CIF)	.47**	.34**	.27**	.36**	.37**	.38**	.36**	.40**	.41**	.51**	.42**	.29**

** Correlation is significant at the $p < 0.01$ level (2-tailed)
* Correlation is significant at the $p < 0.05$ level (2-tailed)
a. Listwise N=602

Table D- 2 *Correlation Matrix for the CIF Instrument Items 1-20 continued*

Chair Information Form (CIF) continued	13	14	15	16	17	18	19	20
13. Fosters development of each faculty member's special talents or interests	1.00							
14. Sees to it that new faculty and staff are acquainted with departmental procedures (CIF)	.38**	1.00						
15. Understands and communicates expectations of the campus administration	.34**	.47**	1.00					
16. Stimulates or rejuvenates faculty vitality/enthusiasm (CIF)	.57**	.42**	.44**	1.00				
17. Guides curriculum development (CIF)	.30**	.36**	.33**	.34**	1.00			
18. Establishes trust between members of the faculty and myself (CIF)	.50**	.39**	.42**	.54**	.29**	1.00		
19. Improves the department's image and reputation with off campus (CIF)	.42**	.31**	.34**	.42**	.31**	.29**	1.00	
20. Recognizes and rewards faculty in accordance with their contributions (CIF)	.46**	.31**	.34**	.43**	.20**	.44**	.31**	1.00

** Correlation is significant at the $p < 0.01$ level (2-tailed)
a. Listwise N=602

Appendix E - Total Variance Explained from EFA of CIF Instrument Items 1-20

Table E- 1 *Total Variance Explained from EFA of CIF Instrument Items 1-20*

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.663	38.315	38.315	7.663	38.315	38.315	3.578	17.889	17.889
2	1.620	8.099	46.415	1.620	8.099	46.415	3.555	17.774	35.663
3	1.214	6.071	52.486	1.214	6.071	52.486	3.365	16.823	52.486
4	1.100	5.502	57.988						
5	.899	4.497	62.486						
6	.750	3.749	66.235						
7	.718	3.589	69.824						
8	.655	3.274	73.098						
9	.650	3.252	76.350						
10	.600	3.000	79.350						
11	.534	2.670	82.020						
12	.522	2.609	84.629						
13	.503	2.513	87.142						
14	.455	2.274	89.416						
15	.417	2.083	91.499						
16	.396	1.982	93.481						
17	.366	1.828	95.309						
18	.327	1.635	96.944						
19	.322	1.608	98.552						
20	.290	1.448	100.000						

Extraction Method: Principal Component Analysis.

Appendix F - Scree Plot from EFA of CIF Instrument Items 1-20

Figure F.1 *Scree Plot from EFA of CIF Instrument Items 1-20*
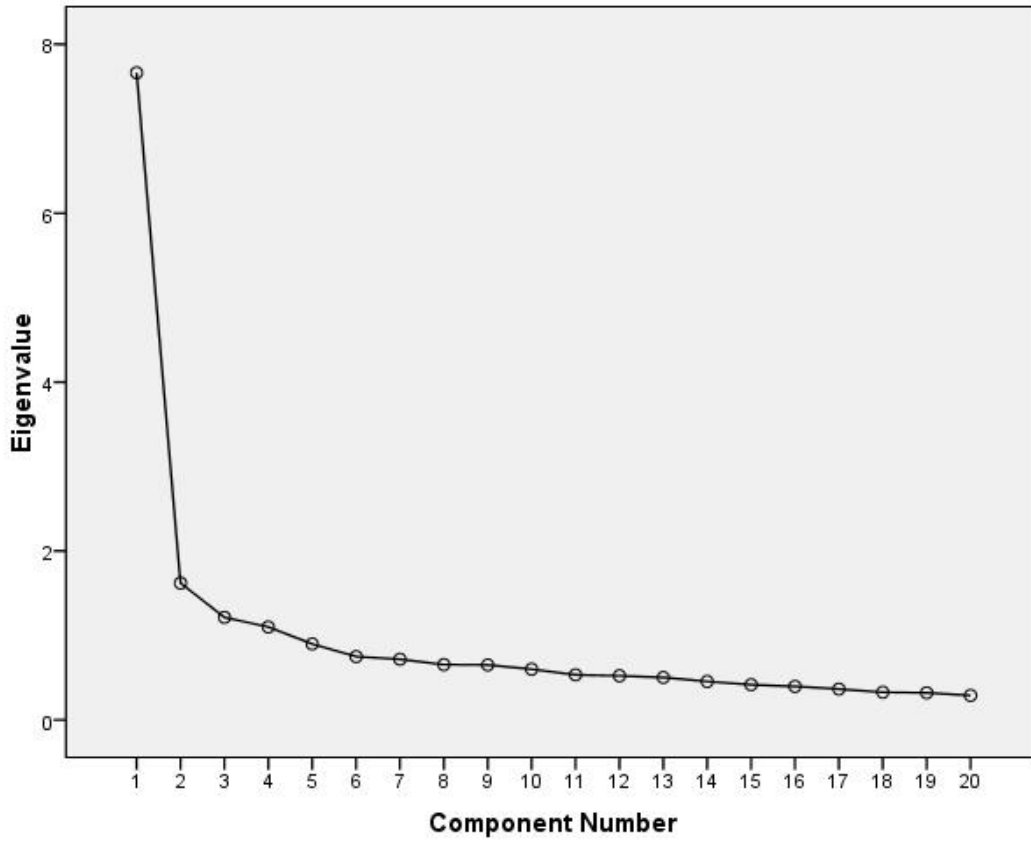
Appendix G - Summary Descriptives, Frequencies, and Percentages for CIF Instrument Items 1-20 (*n* = 604)

CIF			Not important	Only So-So	Fairly Important	Quite Important	Essential	Total
Variable	*M* *SE*	*SD*	frequency percentage	frequency percentage	frequency percentage	frequency percentage	frequency percentage	N %
Item 1	4.07 .04	1.04	23 3.8%	31 5.1%	76 12.6%	224 37.2%	248 41.2 %	604 100%
Item 2	4.28 .04	.93	9 1.5%	25 4.2%	72 12%	180 29.9%	316 52.2%	604 100%
Item 3	4.59 .03	.74	5 .8%	6 1%	43 7.1%	123 20.4%	425 70.6%	604 100%
Item 4	4.32 .03	.78	3 .5%	15 2.5%	55 9.1%	245 40.6%	285 47.3%	604 100%
Item 5	3.29 .05	1.3	79 13.1%	86 14.3%	143 23.7%	173 28.7%	122 20.2%	604 100%
Item 6	4.14 .04	.88	7 1.2%	21 3.5%	93 15.4%	241 40%	241 40%	604 100%
Item 7	4.76 .02	.58	4 .7%	4 .7%	11 1.8%	95 15.8%	489 81.1%	604 100%
Item 8	4.43 .03	.78	5 .8%	8 1.3%	57 9.5%	184 30.5%	349 57.9%	604 100%
Item 9	3.91 .40	.99	14 2.3%	36 6%	131 21.7%	231 38.3%	191 31.7%	604 100%
Item 10	3.93 .04	1.08	22 3.6%	44 7.3%	108 17.9%	208 34.5%	221 36.7%	604 100%

CIF Variable	*M* *SE*	*SD*	Not important frequency percentage	Only So-So frequency percentage	Fairly Important frequency percentage	Quite Important frequency percentage	Essential frequency percentage	Total N %
Item 11	4.21 .04	.86	7 1.2%	20 3.3%	70 11.6%	247 41%	259 43%	604 100%
Item 12	4.29 .03	.85	6 1%	15 2.5%	72 11.9%	216 35.8%	294 48.8	604 100%
Item 13	4.24 .03	.81	5 .8%	10 1.7%	82 13.6%	245 40.6%	261 43.3%	604 100%
Item 14	4.22 .04	.86	8 1.3%	14 2.3%	79 13.1%	237 39.3%	265 43.9%	604 100%
Item 15	4.33 .03	.79	6 1%	6 1%	69 11.4%	227 37.6%	295 48.9%	604 100%
Item 16	4.00 .04	.93	7 1.2%	36 6%	109 18.1%	250 41.5%	201 33.3%	604 100%
Item 17	3.84 .04	.96	10 1.7%	41 6.8%	151 25%	237 39.3%	164 27.2%	604 100%
Item 18	4.62 .03	.66	4 .7%	2 .3%	31 5.1%	144 23.9%	422 70%	604 100%
Item 19	4.07 .04	1.01	13 2.2%	41 6.8%	89 14.8%	206 34.2%	254 42.1%	604 100%
Item 20	4.41 .03	.82	5 .8%	14 2.3%	55 9.1%	182 30.2%	347 57.5%	604 100%

CIF = Department Chair rating of importance based on 5-point scale:
1=Not important; 2=Only so-so; 3=Fairly important; 4=Quite important; 5=Essential

Appendix H - Correlation Matrix for FPDHS Instrument Items 1-20

Table H- 1 *Correlation Matrix for FPDHS Instrument Items 1-20*

FPDHS Instrument	1	2	3	4	5	6	7	8	9	10	11	12
1. Guides the development of sound procedures for assessing faculty performance	1.00											
2. Takes the lead in recruiting promising faculty	.75**	1.00										
3. Attends to essential administrative details	.77**	.66**	1.00									
4. Fosters good teaching in the department	.80**	.70**	.77**	1.00								
5. Facilitates obtaining grants and contracts from external sources	.61**	.61**	.50**	.56**	1.00							
6. Leads in establishing and monitoring progress on annual department goals	.83**	.73**	.74**	.79**	.63**	1.00						
7. Communicates the department's needs to the dean	.74**	.75**	.71**	.71**	.60**	.79**	1.00					
8. Develops collegiality/cooperation among departmental faculty	.76**	.67**	.67**	.76**	.57**	.75**	.70**	1.00				
9. Encourages an appropriate balance among academic specializations	.79**	.71**	.70**	.81**	.54**	.75**	.74**	.83**	1.00			
10. Stimulates research and/or scholarly activity in the department	.74**	.71**	.58**	.68**	.77**	.73**	.71**	.67**	.71**	1.00		
11. Guides the development of a sound organizational plan to accomplish	.86**	.76**	.80**	.81**	.62**	.91**	.82**	.78**	.79**	.72**	1.00	
12. Improves the department's image and reputation with the campus	.78**	.73**	.70**	.76**	.66**	.79**	.79**	.79**	.76**	.73**	.83**	1.00
13. Fosters development of each faculty member's special talents or interests	.83**	.74**	.71**	.81**	.64**	.78**	.77**	.85**	.86**	.77**	.80**	.82**

FPDHS Instrument	1	2	3	4	5	6	7	8	9	10	11	12
14. Sees to it that new faculty and staff are acquainted with departmental procedures	.81**	.70**	.75**	.80**	.55**	.76**	.69**	.75**	.76**	.68**	.79**	.73**
15. Understands & communicates expectations of the campus administration	.83**	.71**	.79**	.78**	.57**	.82**	.80**	.78**	.79**	.70**	.85**	.80**
16. Stimulates or rejuvenates faculty vitality/enthusiasm	.81**	.75**	.67**	.80**	.67**	.80**	.76**	.89**	.84**	.77**	.83**	.84**
17. Guides curriculum development	.79**	.70**	.74**	.84**	.56**	.83**	.74**	.74**	.78**	.66**	.85**	.74**
18. Establishes trust between members of the faculty and myself	.77**	.68**	.72**	.77**	.55**	.74**	.73**	.92**	.83**	.67**	.78**	.80**
19. Improves the department's image and reputation with off campus	.73**	.72**	.63**	.70**	.67**	.76**	.74**	.73**	.71**	.71**	.77**	.89**
20. Recognizes and rewards faculty in accordance with their contributions	.81**	.71**	.69**	.75**	.62**	.75**	.75**	.80**	.79**	.74**	.76**	.79**

** Correlation is significant at the p < 0.01 level (2-tailed)
a. Listwise N=603

Table H- 2 *Correlation Matrix for FPDHS Instrument Items 1-20 continued*

FPDHS Instrument continued	13	14	15	16	17	18	19	20
13. Fosters development of each faculty member's special talents or interests	1.00							
14. Sees to it that new faculty and staff are acquainted with departmental procedures (CIF)	.82**	1.00						
15. Understands and communicates expectations of the campus administration	.82**	.84**	1.00					
16. Stimulates or rejuvenates faculty vitality/enthusiasm (CIF)	.89**	.78**	.80**	1.00				
17. Guides curriculum development (CIF)	.76**	.74**	.77**	.80**	1.00			
18. Establishes trust between members of the faculty and myself (CIF)	.87**	.75**	.80**	.88**	.73**	1.00		
19. Improves the department's image and reputation with off campus (CIF)	.77**	.69**	.74**	.79**	.70**	.73**	1.00	
20. Recognizes and rewards faculty in accordance with their contributions (CIF)	.87**	.76**	.78**	.85**	.73**	.82**	.75**	1.00

** Correlation is significant at the $p < 0.01$ level (2-tailed)
a. Listwise N=603

Appendix I - Total Variance Explained from EFA of FPDHS Instrument Items 1-20

Table I- 1 *Total Variance Explained from EFA of FPDHS Instrument Items 1-20*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.281	76.405	76.405	15.281	76.405	76.405
2	.811	4.056	80.461			
3	.636	3.181	83.642			
4	.426	2.131	85.773			
5	.359	1.797	87.570			
6	.340	1.702	89.272			
7	.279	1.397	90.669			
8	.274	1.369	92.037			
9	.234	1.168	93.205			
10	.219	1.094	94.299			
11	.186	.928	95.227			
12	.154	.769	95.995			
13	.143	.714	96.709			
14	.123	.616	97.325			
15	.120	.599	97.924			
16	.100	.499	98.424			
17	.096	.478	98.902			
18	.082	.410	99.312			
19	.069	.346	99.657			
20	.069	.343	100.000			

Extraction Method: Principal Component Analysis.

Appendix J - Scree Plot from EFA of FPDHS Instrument Items 1-20

Figure J.1 *Scree Plot from EFA of FPDHS Instrument Items 1-20*
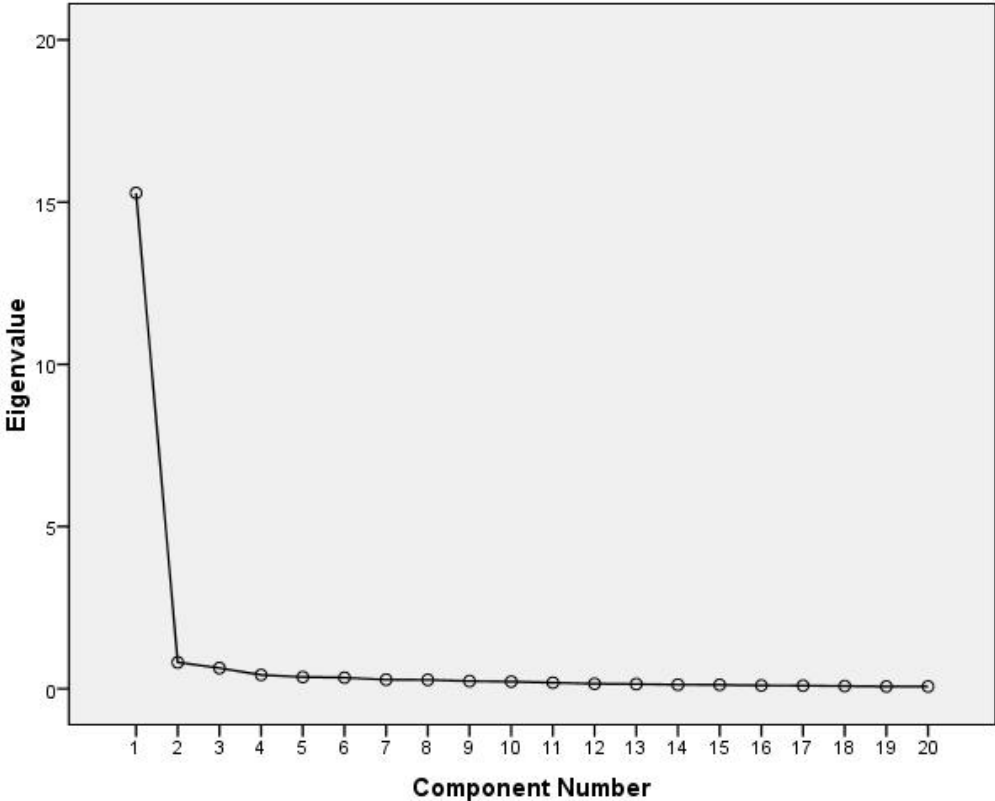
Appendix K - Component Matrix Coefficients and Communalities for FPDHS Instrument Items 1-20

Table K- 1 *Component Matrix Coefficients and Communalities for FPDHS Instrument Items*

	Factor			
Variable	I	Communalities	*M*	*SD*
Item 1 Guides evaluation	.905	.820	3.81	.59
Item 2 Leads recruiting	.829	.687	3.95	.62
Item 3 Attends to admin. detail	.819	.671	4.17	.58
Item 4 Foster good teaching	.880	.774	4.00	.56
Item 5 Facilitates funding	.709	.503	3.64	.75
Item 6 Leads planning	.898	.807	3.91	.63
Item 7 Communicates needs	.861	.742	4.22	.58
Item 8 Fosters collegiality	.883	.781	3.88	.71
Item 9 Balanced faculty	.889	.790	3.94	.58
Item 10 Stimulates res/work	.824	.679	3.81	.64
Item 11 Guides org. plans	.924	.853	3.88	.64
Item 12 On-campus image	.901	.812	4.04	.64
Item 13 Fosters development	.927	.859	3.86	.61
Item 14 Orients new faculty	.865	.749	3.92	.62
Item 15 Shares expectations	.903	.816	4.06	.55
Item 16 Stimulates vitality	.931	.866	3.60	.71
Item 17 Guides curriculum	.871	.758	3.81	.64
Item 18 Establishes trust	.891	.795	3.92	.75
Item 19 Off-campus image	.854	.730	4.05	.62
Item 20 Rewards faculty	.889	.790	3.84	.62

Appendix L - Correlation Matrix for FPDHS Instrument Items 21-30

Table L- 1 *Correlation Matrix for FPDHS Instrument Items 21-30*

FPDHS Instrument Items 21-30	21	22	23	24	25	26	27	28	29	30
21. Interpersonal skill	1.00									
22. Problem solving ability	.71**	1.00								
23. Appreciation for department's history	.62**	.68**	1.00							
24. Patience in implementing change	.78**	.72**	.71**	1.00						
25. Honesty	.74**	.74**	.65**	.76**	1.00					
26. Practical judgment	.77**	.90**	.71**	.81**	.84**	1.00				
27. Willingness to listen	.85**	.73**	.66**	.83**	.82**	.82**	1.00			
28. Flexibility in dealing with situations	.87**	.81**	.70**	.85**	.81**	.85**	.92**	1.00		
29. Accessibility to faculty	.64**	.64**	.60**	.64**	.70**	.67**	.72**	.71**	1.00	
30. Fairness	.80**	.81**	.69**	.79**	.90**	.87**	.87**	.90**	.73**	1.00

**Correlation is significant at the p < 0.01 level (2-tailed)
a. Absolute values of r ranges from .60 to .92

Appendix M - Total Variance Explained from EFA of FPDHS Instrument Items 21-30

Table M- 1 *Total Variance Explained from EFA of FPDHS Instrument Items 21-30*

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.887	78.869	78.869	7.887	78.869	78.869
2	.463	4.629	83.498			
3	.428	4.284	87.783			
4	.384	3.842	91.625			
5	.265	2.650	94.275			
6	.208	2.081	96.356			
7	.142	1.425	97.781			
8	.092	.923	98.704			
9	.069	.689	99.393			
10	.061	.607	100.000			

Extraction Method: Principal Component Analysis.

Appendix N - Correlation Matrix for FPDHS Instrument Items 31-60

Table N- 1*Correlation Matrix for FPDHS Instrument Items 31-60*

FPDH	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Item 31	1.00																		
Item 32	.71	1.00																	
Item 33	.83	.70	1.00																
Item 34	.81	.72	.79	1.00															
Item 35	.81	.70	.79	.85	1.00														
Item 36	.69	.59	.66	.68	.81	1.00													
Item 37	.76	.67	.80	.77	.83	.74	1.00												
Item 38	.81	.72	.86	.83	.82	.70	.80	1.00											
Item 39	.76	.70	.78	.74	.77	.61	.77	.81	1.00										
Item 40	.74	.64	.72	.80	.86	.72	.73	.79	.72	1.00									
Item 41	.76	.69	.78	.79	.76	.62	.74	.86	.79	.75	1.00								
Item 42	.80	.64	.77	.84	.83	.71	.75	.80	.71	.78	.75	1.00							
Item 43	.49	.36	.46	.53	.61	.56	.53	.48	.41	.58	.44	.52	1.00						
Item 44	.57	.44	.48	.56	.65	.53	.57	.52	.49	.56	.45	.58	.71	1.00					
Item 45	.81	.74	.81	.84	.79	.69	.78	.87	.79	.74	.86	.77	.43	.47	1.00				
Item 46	.80	.67	.75	.84	.82	.67	.72	.78	.76	.76	.75	.83	.52	.61	.77	1.00			
Item 47	.75	.72	.78	.75	.70	.53	.73	.82	.78	.65	.79	.64	.35	.42	.82	.68	1.00		
Item 48	.79	.75	.78	.78	.80	.65	.75	.84	.79	.77	.78	.72	.44	.53	.82	.76	.82	1.00	
Item 49	.85	.69	.81	.82	.86	.69	.76	.83	.78	.78	.77	.85	.53	.63	.80	.86	.73	.84	1.00

FPDH	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Item 50	.82	.72	.80	.79	.84	.67	.77	.84	.81	.79	.79	.77	.47	.57	.81	.81	.79	.89	.86
Item 51	.73	.69	.73	.80	.72	.60	.68	.83	.73	.73	.83	.74	.42	.43	.81	.77	.74	.76	.75
Item 52	.83	.70	.80	.84	.85	.68	.79	.85	.80	.78	81	.82	.51	.59	.82	.85	.75	.84	.88
Item 53	.68	.66	.68	.76	.79	.70	.69	.76	.67	.77	.73	.79	.51	.52	.72	.77	.57	.68	.76
Item 54	.81	.66	.76	.81	.87	.73	.77	.79	.74	.78	.72	.86	.59	.65	.75	.86	.64	.75	.87
Item 55	.83	.76	.80	.83	.85	.72	.77	.84	.79	.82	.81	.80	.51	.56	.83	.79	.78	.86	.86
Item 56	.76	.66	.79	.76	.75	.61	.72	.79	.74	.73	.78	.72	.41	.46	.79	.72	.74	.75	.76
Item 57	.81	.68	.85	.82	.82	.70	.79	.87	.77	.79	.81	.82	.51	.53	.83	.78	.77	.80	.85
Item 58	.78	.72	.78	.82	.86	.72	.78	.85	.75	.83	.79	.80	.53	.56	.82	.77	.74	.84	.82
Item 59	.78	.70	.75	.85	.83	.67	.75	.81	.76	.78	.80	.83	.51	.57	.81	.87	.68	.78	.84
Item 60	.75	.68	.76	.86	.79	.65	.73	.83	.75	.78	.84	.77	.48	.47	.84	.78	.75	.78	.76

Correlations were all significant at the p < 0.01 level (2-tailed)

Table N- 2 *Correlation Matrix for FPDHS Instrument Items 31-60 continued*

FPDHS Instrument continued	50	51	52	53	54	55	56	57	58	59	60
Item 50	1.00										
Item 51	.76	1.00									
Item 52	.88	.81	1.00.								
Item 53	.72	.78	.79	1.00.							
Item 54	.80	.72	.84	.81	1.00.						
Item 55	.85	.79	.86	.75	54.	1.00.					
Item 56	.77	.73	.78	.66	.83	.80	1.00.				
Item 57	.82	.79	.84	.77	.72	.84	.82	1.00.			
Item 58	.84	.78	.84	.78	.81	.86	.77	.88	1.00.		
Item 59	.81	.85	.87	.83	.85	.83	.74	.80	.83	1.00.	
Item 60	.78	.85	.81	.77	.75	.80	.77	.82	.82	.85	1.00

Appendix O - Total Variance Explained from EFA of FPDHS Instrument Items 31-60

Table O- 1 *Total Variance Explained from EFA of FPDHS Instrument Items 31-60* (*n* = 604)

Total Variance Explained									
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	22.639	75.462	75.462	22.639	75.462	75.462	16.578	55.261	55.261
2	1.347	4.489	79.951	1.347	4.489	79.951	7.407	24.691	79.951
3	.683	2.277	82.228						
4	.531	1.769	83.997						
5	.510	1.699	85.696						
6	.431	1.436	87.132						
7	.359	1.198	88.330						
8	.313	1.042	89.372						
9	.273	.911	90.283						
10	.256	.855	91.138						
11	.247	.825	91.963						
12	.229	.764	92.727						
13	.201	.670	93.397						
14	.171	.570	93.968						
15	.169	.562	94.530						
16	.157	.523	95.053						
17	.151	.502	95.555						
18	.143	.477	96.032						
19	.134	.447	96.479						
20	.125	.418	96.897						
21	.119	.395	97.292						
22	.115	.383	97.676						
23	.109	.362	98.038						
24	.099	.329	98.367						
25	.094	.314	98.681						
26	.090	.301	98.982						
27	.086	.286	99.268						
28	.081	.271	99.538						
29	.071	.238	99.776						
30	.067	.224	100.000						

Extraction Method: Principal Component Analysis.

Appendix P - Scree Plot from EFA for FPDHS Instrument Items 31-60

**Figure P-1** *Scree Plot from EFA of FPDHS Instrument Items 31-60*
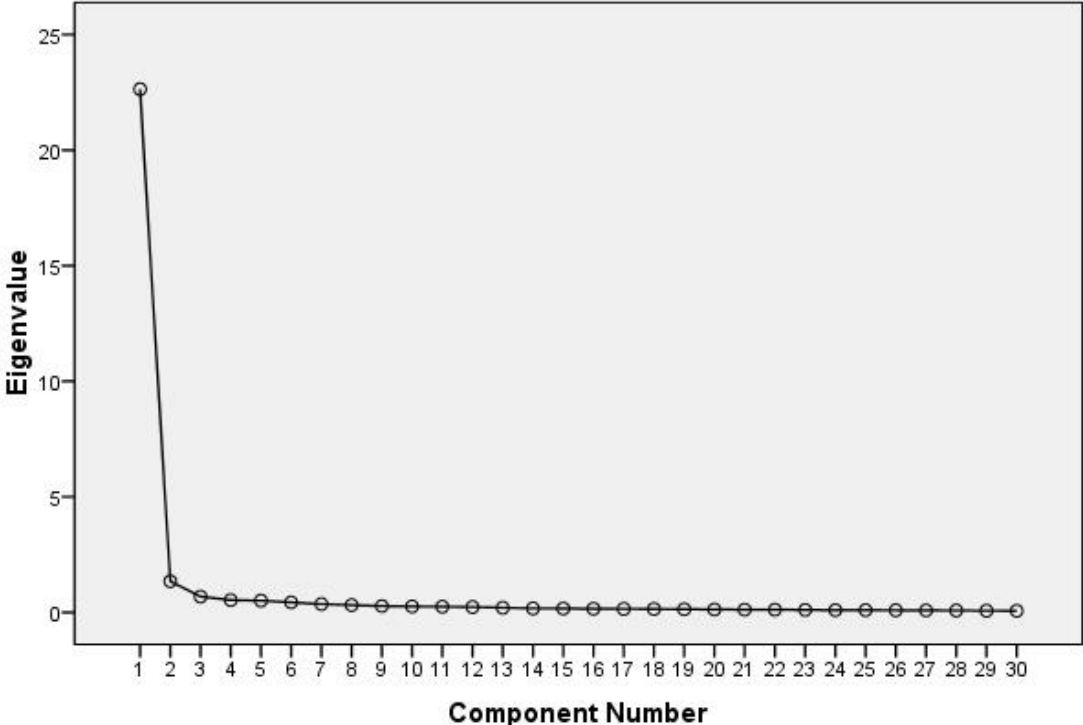
Appendix Q - Total Variance Explained from EFA of FPDHS Instrument 28 Items

Table Q- 1*Total Variance Explained from EFA of FPDHS Instrument Items 31-60 without Items 43 and 44 (n = 604)*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	21.937	78.347	78.347	21.937	78.347	78.347
2	.892	3.187	81.534			
3	.609	2.174	83.708			
4	.478	1.706	85.414			
5	.429	1.531	86.945			
6	.363	1.298	88.243			
7	.313	1.117	89.359			
8	.274	.977	90.336			
9	.258	.922	91.258			
10	.236	.841	92.100			
11	.212	.759	92.859			
12	.175	.625	93.483			
13	.169	.603	94.087			
14	.160	.571	94.658			
15	.151	.539	95.197			
16	.145	.517	95.714			
17	.136	.487	96.201			
18	.127	.455	96.656			
19	.119	.426	97.082			
20	.115	.411	97.493			
21	.109	.389	97.881			
22	.099	.355	98.236			
23	.097	.346	98.582			
24	.090	.323	98.905			
25	.086	.308	99.213			
26	.082	.292	99.505			
27	.071	.255	99.760			
28	.067	.240	100.000			

Extraction Method: Principal Component Analysis.

Appendix R - Component Matrix Coefficients and Communalities for FPDHS Instrument Items 31-60

Table R- 1 *Component Matrix Coefficients and Communalities for FPDHS Instrument Items 31-60 (n = 604)*

	Factor			
Variable	I	Communalities	*M*	*SD*
Item 31	.890	.793	4.03	.55
Item 32	.792	.627	4.42	.46
Item 33	.883	.780	3.87	.70
Item 34	.911	.830	3.90	.59
Item 35	.918	.842	4.00	.64
Item 36	.772	.596	4.06	.72
Item 37	.861	.741	4.19	.57
Item 38	.928	.862	3.95	.68
Item 39	.863	.744	4.25	.54
Item 40	.870	.756	4.00	.57
Item 41	.886	.786	3.85	.70
Item 42	.885	.783	3.81	.58
Item 45	.910	.827	3.98	.61
Item 46	.889	.790	4.11	.52
Item 47	.832	.692	4.11	.63
Item 48	.895	.801	4.14	.60
Item 49	.918	.843	3.89	.62
Item 50	.913	.833	4.06	.61

Factor				
Variable	I	Communalities	*M*	*SD*
Item 51	.868	.753	4.09	.58
Item 52	.930	.864	3.99	.58
Item 53	.841	.707	4.17	.53
Item 54	.893	.797	4.07	.58
Item 55	.927	.859	3.93	.57
Item 56	.851	.725	4.12	.63
Item 57	.918	.842	4.00	.63
Item 58	.916	.839	3.92	.66
Item 59	.909	.827	4.01	.59
Item 60	.892	.796	3.88	.64