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A STUDY OF ORGANIZATIONAL CULTURE IN CAMPUS RECREATION: A COMPETING VALUES APPROACH

BY

SCOTT BUTCH

THESIS

Submitted to the University of New Hampshire
in Partial Fulfillment of
the Requirements for the Degree of

Master of Science
in
Recreation Management and Policy

September, 2008

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6/30/08
Date

DEDICATION

This thesis is dedicated to my parents for their constant patience and support; and to Kate for ensuring many fond memories of all the time spent in between.

ACKNOWLEDGEMENTS

I would like to thank the many efforts of Dr. Bob Barcelona for his guidance and consistent help in all aspects of this thesis research, the end result of which would not be possible without his assistance. I would also like to thank Dr. Josh Carroll and Mr. Denny Byrne for their time and advice throughout this process. And finally I would like to thank the campus recreation departments at the University of New Hampshire and the University of Maryland for giving me the freedom and opportunity to succeed in the field of campus recreation.

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ABSTRACT

A STUDY OF ORGANIZATIONAL CULTURE IN CAMPUS RECREATION: A COMPETING VALUES APPROACH

by

Scott Butch

University of New Hampshire, September, 2008

The purpose of this study was to assess organizational culture in campus recreation departments and its links with organizational effectiveness. The competing values theory and subsequent framework was used to determine if there were significant differences in the organizational cultures of campus recreation departments based upon specified dependent variables including their administrative unit (academics, athletics, business operations or student affairs), their institutional size (small, medium, medium-big, or large), and their institutional control (public or private). A quantitative survey instrument based upon the competing values framework was used to sample campus recreation directors and professional staff members in institutions of higher education. Cluster mapping, descriptive statistics and discriminant analysis were used as the primary methods of statistical analysis. The results indicated there were no significant patterns or classifications in the organizational culture maps based on the dependent variables, and the study was unable to provide any pattern of significant links between the organizational culture of campus recreation departments and their relative organizational effectiveness. There was one

significant difference found in the discriminant analysis in public universities administered under athletics versus student affairs and a follow up study examining this relationship is advised. An exploratory analysis was conducted on the perceptions of organizational culture between campus recreation directors and professional staff members, and a significant difference was found between these two groups in group culture and hierarchical culture. The significant finding in the discriminant analysis, the inferential analysis of the cluster maps, and the exploratory findings in the perceptions of organizational culture between campus recreation leaders and professional staff members are identified as areas for further research.

CHAPTER I

INTRODUCTION

Overview of Study

Organizational theory is a discipline concerned with the structure and design of organizations. Understanding how organizations operate, identifying patterns and regularities, and determining the problems they face and whether they are effective is the primary goal of research in the field (Slack, 1997). Organizational effectiveness is central to organizational theory (Quinn & Rohrbaugh, 1981), yet no singular theory of effectiveness has been proven to be definitive. Effectiveness in an organization refers to the extent to which an organization achieves its goals (Slack, 1997), and is a product of individual organization's values and preferences (Cameron, 1986). There are numerous approaches to measuring effectiveness that are both quantitative and qualitative in nature including the goal attainment approach, the systems resource approach, the strategic constituencies approach, the internal process approach, and the competing values approach. This study will use the competing values method to measure organizational culture and its links with organizational effectiveness and will be discussed at length in Chapter II.

Understanding the relationship between organizational culture and organizational performance is the basis of this study. Past research in

organizational culture has been used as an indicator of organizational effectiveness. Particular studies have researched the predictors of organizational effectiveness in higher education and related those predictors with certain types of organizational cultures and their respective strength and congruence (Cameron & Freeman, 1991). However, using organizational effectiveness as an outcome in this study is difficult because the nine predictors of organizational effectiveness are specific to research in higher education (Cameron, 1986). Therefore the outcomes in this study will be the type of organizational culture itself and its link with effectiveness using institutional variables including institutional size, institutional type, and administrative unit. Previous research has shown that institutions differ significantly along certain dimensions including institutional type and institutional size (Zammuto & Krakower, 1991). The administrative unit which oversees the campus recreation department will also be assessed and the justification of its inclusion will be discussed further in Chapter I.

Overview of CVF

The competing values framework has been widely accepted as a way to assess culture and effectiveness in the field of higher education among others (Kalliath, Bluedown & Gillespie, 1999). The CVF is a three dimensional framework set up on an x and y axis and is based on three competing values of organizations: flexibility/control, internal focus/external focus, and means/ends (Quinn & Rohrbaugh, 1981). The four dimensions in the CVF, "represent [the]

underlying values that guide an organizations environmental management and internal integration." Organizations are complex structures and they are not expected to adhere to one particular competing value; rather they should express part of each dimension to some degree (Kalliath et al., 1999).

The CVF has since been transformed by organizational culture researchers who have used the CVF to explore the basic functions of organizational culture as it relates to, "motives, leadership, decision making, effectiveness, values, and organizational forms" (Quinn & Kimberly, 1984). The CVF is distinctive in that it has been able to integrate what used to be four separate models of organizational effectiveness into one framework (Smart, 2003). An organization that is internally focused and flexible is a group or clan culture. An organization that is externally focused and is flexible is an adhocracy or developmental culture. An organization that is externally focused and stable is a market or rational culture. An organization that is internally focused and stable is a hierarchical culture (Denison & Spreitzer, 1991). These four cultural archetypes will be discussed in Chapter II.

Organizations are expected to reflect each of the four quadrants of the CVF to some degree (Helfrich, Li, Mohr, Meterko & Sales, 2007). Smart (2003) states the fundamental premise [of the CVF] is that the likelihood of an organization achieving higher levels of performance is dependent on the cognitive and behavioral complexity exhibited in its overall organizational culture, and to accomplish this "...organizations must develop an overall organizational culture that comprises a healthy balance of the four culture types" (Smart, 2003).

In his study of organizational effectiveness in institutions of higher education, Smart (2003) found that the effectiveness of both 2-year and 4-year institutions is contingent upon the nature of their campus cultures. Past studies have only looked at effectiveness in higher education as it is related to their dominant culture type, and there is little evidence that considers the overall campus culture as a whole (Smart, 2003). Resource allocation in higher education is dependent upon the justification of their effectiveness as an institution (Smart, 2003), and the field of campus recreation is used to having to justify their programs and services to University administrations. Campus recreation departments and campus recreation professionals in particular have had to adapt to the changes in higher education funding systems (Cameron, 1986), and provide greater justification and purpose for their programs and services.

Assessing the organizational cultures of campus recreation departments using the Competing Values Framework will provide a basis for inferential analysis of culture and effectiveness in campus recreation programs. This study will seek to use all four culture quadrants instead of choosing the one dominant culture type in an organization for assessment. This method of analysis is essential when using the CVF; however it can provide a difficult base for conventional analysis methods which will be discussed in Chapter III.

Overview of Organizational Culture

Organizational culture is defined as the "fundamental values, assumptions, and beliefs held in common by members of an organization" (Helfrich et al., 2007). An organizational culture is generally socially constructed, stable, and subconscious, and is critical in leveraging new knowledge (Helfrich et al., 2007) and implementing value systems.

Past research has shown that an organization's culture type was found to be a good predictor of effectiveness (Denison & Spreitzer, 1991). A study by Cameron and Freeman found close links between the type of culture in an organization and certain facets of effectiveness. A group culture is linked with student development, faculty [staff] satisfaction, and the openness of the system; a developmental culture is linked with external adaptation; and a rational culture is linked with resource acquisition (Cameron & Freeman, 1991). Additional research in higher education has shown that small and private universities tend to be group cultures while large and public institutions tend to be hierarchical or rational cultures (Zammuto & Krakower, 1991). There is no research on the organizational culture types of campus recreation departments, and it is possible that the culture types of higher education institutions will be similar to that of an organizational subunit like a campus recreation department.

It is also important to understand for the analysis in this study that a balanced organizational culture may represent the culture map of an effective organization, and cluster profile maps that are skewed away from a balanced model may be less effective than departments with a more balanced map. A

cluster map is a two-dimensional representation on an x and y axis which shows a spatial model of the culture of an organization. The Competing Values Framework does not say that one dominant culture type is inefficient, but it recognizes the fact that a balanced model has the capacity to respond and adapt to a wide set of environmental conditions (Denison & Spreitzer, 1991). Since organizations are complex structures, they should be expected to hold values of all four culture types as described in the CVF (Helfrich et al., 2007), and embracing the multiple value systems have been found to be the rule and not the exception (Zammuto & Krakower, 1991). A balance in the CVF is predictably related to its effectiveness, and Helfrich et al. note that [research in organizational culture] supports a central contention that an organization may simultaneously exhibit qualities of fundamentally competing value systems, and that the "best" organizational culture may be one of equilibrium (Helfrich et al., 2007).

Additional research in other sectors using the CVF has shown that top ranked hospitals use a high degree of flexibility and a high degree of rigidity (Bradley et al., 2006), and a positive correlation was found between hierarchical and entrepreneurial cultures in the health care industry (Kalliath et al., 1999). An organization with leaders who can integrate their organization to a complex culture is tied to organizational effectiveness, and developing the leadership skills of all four aspects of the CVF culture types is the most enduring way to improve organizational effectiveness (Smart, 2003). An organization that is too congruent in one particular type of culture and too skewed away from a balance in the CVF

culture map may become chaotic and unable to adapt to changes in the field. Finally, real world examples showing balance as being a predictor of organizational effectiveness have been reported prior to the introduction of the CVF, including a study which found that organizations which are best able to balance integration and differentiation are considered to be the most effective systems (Lawrence & Lorsch, 1969). A combination of centralization and decentralization is the most effective function of an organization as described by Alfred Sloan, an executive with General Motors (Zammuto & Krakower, 1991). This real world example describes the inherent competing values of the CVF because when task accomplishment is standardized and mechanized to remove individuality, there is a natural conflict with human nature. There needs to be a balance of individuality and bureaucracy, even though individuality conflicts with efficiency (Quinn & Rohrbaugh, 1981). This balance will be assessed using the competing values framework.

Purpose of Study

The purpose of this study is to assess organizational culture and its links with organizational effectiveness using campus recreation departments in institutions of higher education across the United States. This study will attempt to find a significant difference in the types of organizational culture that exist in campus recreation departments depending on the administrative unit that houses the department in an institution of higher education. As institutions continue to determine the most effective setting for campus recreation departments to

administer their programs, understanding and exploring the differences in organizational cultures that exist in campus recreation departments could provide benefits to the field of campus recreation. This study will add to current research in organizational theory using the competing values framework approach to organizational culture and effectiveness.

Research Questions

This study will focus primarily on the following research questions:

1. Are there significant differences in the types of organizational culture that exist in campus recreation departments housed under athletics, academics, student affairs and business operations?

2. Do certain combinations of institutional size, type, and administrative unit create an organizational culture map that is significantly out of balance or skewed towards a particular dominant culture type?

3. Which administrative unit is expected to provide the most balanced organizational culture as determined by the competing values framework?

Justification

In 1994, the National Intramural-Recreational Sports Association (NIRSA) published a paper discussing the rationale for the independent administration of campus recreation programs which was intended to serve as a guide for institutions of higher education to use when they are deciding where in their administrative structure they should house their campus recreation department.

The paper outlined the differences among administrative units and the reasons institutions should steer clear of housing campus recreation in athletic departments or academic departments, and it provided the benefits and justification of housing campus recreation under student affairs (Bryant, Anderson & Dunn, 1994). Since the publication of this paper, there has not been a research study backing up or refuting the rationale of NIRSA, and this study will attempt to provide empirical evidence to add to the campus recreation literature. By compiling data of institutional organizational cultures, this study will aim to create cluster maps of each type of campus recreation department in order to better understand the differences in organizational cultures in administrative units.

Assumptions

The following underlying assumptions are disclosed as a means of understanding any inherent bias in the study:

1. Participants will respond truthfully and based upon their own experiences and beliefs;

2. The participants will understand the concepts and definitions defined in the survey questions;

3. Participants will not discuss the survey with one another before responding;

4. The competing values framework is a validated operational measure of organizational culture;

5. The organizational culture survey instrument is a validated quantitative measurement tool.

Delimitations

This study will delimit the sample to four year Colleges and Universities taken from the NIRSA directory as they fit the profile of a typical College or University experience for undergraduate students. These particular institutions all have a defined campus recreation departmental structure whereas two year colleges or community colleges are less likely to have a typical campus recreation program as defined in this study. The survey sample will be discussed further in Chapter III.

Limitations

The organizational culture cluster maps and discriminant analysis alone can only provide a limited amount of inferential analysis, and ultimately the research will be primarily exploratory and descriptive in nature and will serve as a jumping off point to lead to further research. This limitation is directly related to the difficulty in determining the criteria of organizational effectiveness as it relates to the field of campus recreation. The concept of measuring organizational effectiveness is difficult without defined effectiveness outcomes, and this study will attempt to link the concept of organizational culture with organizational effectiveness using the competing values framework.

Past research has shown that studying organizational culture and its links with organizational effectiveness can be successful when using a multi-method analysis with both quantitative and qualitative procedures (Zammuto & Krakower, 1991). However due to the limitations of time and breadth this study will focus solely on analyzing the cultural makeup of institutions using a quantitative method of cluster mapping using the institutional variables.

Participants may also be confronted with the possibility of confusion regarding how to answer survey questions with an ipsative scale. Any survey responses in which the total organizational culture score does not equal 100 points on each of the four dimensions will be disregarded and have to be thrown away.

Definition of Terms

Campus Recreation – a program and service provider that exists in institutions of higher education as an outlet for student recreation, health and fitness

Competing Values Framework (CVF) – The competing values framework is a theory of organizational culture and effectiveness which has been operationalized and is a widely accepted method of assessment (Kalliath et al., 1999)

Cluster Mapping – A statistical method of spatial mapping on a two-dimensional scale

Organizational Culture – a pattern of shared assumptions, values and norms that are understood and passed down within an organization

Organizational Effectiveness – the ability of an organization to achieve a determined level of input acquisition or outcome attainment (Pennings & Goodman, 1977)

Outline of Paper

The following chapters will provide an in-depth review of the essential literature related to the study, the methodology involved in the creation and distribution of the survey instrument, a compilation and presentation of the data, and a review and discussion of the findings.

Chapter II will discuss research literature in campus recreation and organizational theory, and will provide a complete synopsis of the competing values framework. Chapter III will outline the selection of the sample, the construction of the survey, and the methods of analysis. Chapter IV will outline the statistical analysis from the survey sample. Chapter V will provide a complete discussion of the findings and future research topics.

CHAPTER II

REVIEW OF LITERATURE

The Evolution of Campus Recreation

During the past two decades, "campus recreation has been a rapidly evolving system within the collegiate environment" (Zhang, DeMichele, & Connaughton, 2004). The field of campus recreation dates back in the University lexicon with the first intramural sporting event at Princeton University in 1857 (Mueller & Reznik, 1971). The process of formalizing campus recreation began with the establishment of a recreation specific sports facility for male students which was opened in 1928 at the University of Michigan and proved to be a landmark in the history of campus recreation (Taylor, Canning, Brailsford & Rokosz, 2003). The construction of recreational sports facilities continued throughout the next three decades on campuses across the country, with the primary funding sources coming from general university or athletic department funds (Taylor et al., 2003). The justification for the construction of facilities across the country was that recreation programs were an offshoot of physical education academic departments, and their existence helped serve the university as an academic component with the ability to offer free extracurricular programs for students as well.

In the 1960s and 1970s new campus recreation facilities began to adapt to demand and were built closer to on-campus housing and were designed with multi-purpose functions for programming and academics (Taylor et al., 2003). These facilities had an academic purpose with classrooms, research labs and offices throughout the building. For the first time programs and services were offered to faculty, staff and alumni for a small fee, and soon other fee based services such as towels, lockers, and guest passes were introduced creating the first minor stream of outside revenue. At this point in the development of campus recreation programs, most of these new facilities were being constructed at major universities with student populations in excess of twenty-five thousand undergraduates and were financed through very modest student fees (Taylor et al., 2003).

From the 1980s until the present state of the campus recreation industry, there has been an exponential transformation of the organizational dynamics, facility construction, and justification process which has opened up an entirely new view of the purpose of campus recreation programs within the University system (Zhang et al., 2004). The increased involvement of women in sports due to the impact of Title IX and the nation's general increase in health and fitness helped aid the boom of recreation as a campus entity (Taylor et al., 2003). Brand new multi-million dollar mega facilities were being built and modeled as campus façade showcases. Students began using them as a gathering place for social activity and University administrations were using them as a tool for recruitment (Bryant, Banta & Bradley, 1995). These wide-open, user friendly spaces for

recreation were in complete contrast to the dark, closed off, intimidating look and feel of the recreation buildings built in the 1960s and 1970s. The new recreation facilities were seen as a necessity as a response to the increased demand for exceptional "student quality of life" features at Universities of all types and sizes (Taylor et al., 2003).

As a result of the changed landscape of campus recreation, departments are growing in size, number of programs offered, and the number of participants engaging in campus recreation. From 2005-2006, more than 63% of colleges and universities reported that they had an increase in campus recreation usage (Colleges & Universities: Campus Recreation, 2007). Campus recreation departments have become campus entities with multi-million dollar operating budgets, multiple million dollar field and facility spaces, and managers of professional and student staffs that range into the hundreds of employees (Taylor et al., 2003). Many proactive institutions have developed master plans and have set aside specific funds for the construction of new facilities and the development of a competent professional staff (Zhang et al., 2004).

Campus recreation departments still continue to rely heavily on student fees and user fees to fund the operating budgets and new construction costs for recreation facilities. The increased demand in programs coupled with the battle for scarce university financial resources has forced departments to focus more and more on providing justification for the increased financial support of their programs (Chase, 1992) and to create a sustainable structure for long term financial sustainability. Campus recreation departments are seen as making

increased contributions to the well-being of the campus community and they are (out of necessity) becoming entrepreneurial quasi-businesses within the University system. This financial and organizational transformation has caused a philosophical debate about the mission, function, and culture of campus recreation departments.

The duality of ensuring an exceptional student quality of life and acting as a self-serving business has posed new challenges about the role of campus recreation departments in the university setting. Professional staff members need to be grounded in financial management, marketing, information technology, student development, and customer service in addition to their duties as recreational programmers in order to stay qualified in the changing professional landscape (Taylor et al., 2003). A study by Barcelona (2004) determined sport managers in campus recreation agencies found research and evaluation, philosophy/sport science, and legality/risk management to be more important than basic program and service delivery competencies (Barcelona, 2004). This evidence of change in the organizational dynamics of campus recreation departments and its impact on the culture and effectiveness of campus recreation departments is a new development in the field.

Campus Recreation Departments

Campus recreation programs exist for reasons that align with the overall mission of the University – namely education, enhancing student quality of life, and preparing students for the future (Weese, 1997). The recreation programs

designed by departments are conducted with the intention that students will continue to recreate as they grow older and they will accrue the benefits of sports involvement beyond their college years (Weese, 1997). Campus recreation programs have also been opined to show contributions in student retention (Smith, 1991); enhancing student quality of life (Laas, 1986); and promoting school spirit and creating a feeling of affiliation with other students (Matthews, 1984). One such study found that 30% of university students considered recreation facilities to be an important factor in retention, and the researchers continued to state that, "recreation may constitute the single most common experience of college students" (Bryant et al., 1995). Thus universities have an inherent vested interest in campus recreation departments and programs for a number of reasons: they invest a great deal of money in showcase facilities, they look to campus recreation as a positive factor in student quality of life, they use campus recreation as a tool for recruitment and retention, and they allow campus recreation departments to use mandatory student fees to fund their operating budgets. Campus recreation departments have become a major enterprise of the University system, and just like all campus entities they are tied within the mission, perspective, values and goals of the University in which they are employed. Campus recreation departments alike have a mission statement which they strive to abide by when making important short term and long term decisions within their department.

Campus recreation departments are generally organized under the university system in one of the following administrative units: academics,

athletics, business operations or student affairs. As of 1992, the breakdown of campus recreation departments was 61% in student affairs, 18% athletics, 16% academics, 4% other, and 1% Associated Students (Bryant et al., 1994). Depending upon the type of administrative unit that houses a campus recreation program, the department's mission, values, and goals should coincide with the mission, values, and goals of that particular type of administration. Some programs may be offered at a loss or break-even basis to encourage maximum participation, some programs may be priced and run to provide significant excess income to run other programs, and some programs may be run on one universal fee for all users (Taylor et al., 2003). In addition, campus recreation departments should to some extent act as a microcosm of the university type of which they are a member, always keeping in mind the university's mission and values when making planning and programming decisions. Aligning mission with the strategic planning process and producing tangible goals and benefits provides an accessible justification process between campus recreation and the university administration.

Research in Campus Recreation

The history of research on the management of campus recreation before 1968 focused primarily on basic statistics such as participant levels, types of equipment, legal liability, officiating and publicity (Van Hoff, 1970). In the 1980s, the research angle began to focus on not just the quantity of programming but on the quality of recreation programming. The effects of programming on

participants and on administrators became the dominate theme in campus recreation research, with a spotlight on the psychological, sociological, and physical welfare of students being a main concern (Matthews, 1987). Additional research which has been limited in its scope on administrative topics includes job satisfaction, motivating personnel, worker burnout and job rotation (Zhang et al., 2004). Research related to participants in campus recreation has included topics such as intramural participant behaviors (specifically ethics, morality and violence), leisure motivation, and attitudes towards intramural sports (Matthews, 1987).

In the 1990s the campus recreation research community took a cue from management research trends and began to look at the empirical potential of organizational effectiveness and organizational culture and its impact on the development of campus recreation. Although the body of research is limited, the most prominent work done to assess the organizational effectiveness of campus recreation programs was the development of a diagnostic survey tool for campus recreation programs (Weese, 1997). The presence of a program says nothing about the quality or progress of a program, and higher education institutions offer a wide variety of programming options which are marketed to the same audience creating an inherent environment of competition among programs (Weese, 1997). The TPSI (Target Population Satisfaction Index) was an instrument created specifically to measure the organizational effectiveness of campus recreation programs. The TPSI is based on the "multiple constituencies" approach to organizational effectiveness (Chelladurai, 1987) as well as the

"prime beneficiary" approach (Blau & Scott, 1960). Together, these modes of effectiveness identify constituent groups to determine if their needs are being met, and it says that ultimately the most powerful constituent's opinion should matter the most [ie that of the students] (Weese, 1997). The TPSI is a satisfaction survey administered to a stratified sample of students with the goal being how constituent satisfaction with campus recreation programming relates to the organizational effectiveness of a campus recreation department.

Although the TPSI was found to be a valid instrument to measure student satisfaction, it is very limiting in its scope as an effectiveness tool because it fails to address the organizational dynamics of a campus recreation department. The TPSI ignores many aspects of a campus recreation department's effectiveness, particularly by failing to address the attitudes, goals, and leadership behavior of campus recreation administrators and service providers. The prime-beneficiary approach and the TPSI have applications in addressing user satisfaction, but in order to address organizational effectiveness as a whole a more comprehensive framework should be utilized.

A similar empirical study was conducted on the relationship between transformational leadership and organizational culture in Mid-American Conference campus recreation administrations, continuing the field's concentration on the management of campus recreation (Weese, 1995). Using a mix of three quantitative measurement tools (Leadership Behavior Questionnaire, Culture Strength Assessment, Culture Building Activities), Weese found that high transformational leaders direct programs with stronger organizational cultures

compared to programs with low transformational leaders. Beyond these two empirical studies in the mid-1990s the range of research in the field of campus recreation about organizational dynamics is short, and the need to understand the effects of changes to the campus recreation profession and campus recreation organizations could prove beneficial.

Research in Organizational Theory

The approaches to operationalize the measurement of organizational effectiveness all contain inherent strengths and weaknesses. The goal attainment method is based on the ends of an organization and not the means. This approach works for organizations whose goals are clearly identifiable, measurable, and attainable (Slack, 1997). The goal attainment method is the most accessible approach to measuring effectiveness because it can be measured in terms of performance and outcomes such as winning and losing, participation levels, and rankings (Slack, 1997). Weese attempted to measure the effectiveness of campus recreation programs based on the goal attainment approach, and succeeded in creating an operational survey instrument (Weese, 1997). However the survey instrument is unable to assess the complexities of organizational effectiveness because the criteria used is focused on the satisfaction levels of participants and ignores the dynamics inherent in complex organizations. This is a limiting factor of the goal attainment approach because it fails to understand the complexity of organizations and the people, culture, means, and competing goals that an organization possesses.

The systems resource method focuses on the inputs to an organization, and is defined by an organization's ability to acquire scarce resources from its environment. Organizations that receive greater resource inputs (resources) are considered to be more effective organizations (Slack, 1997). Although a literal opposite of the goal attainment approach, the systems resource approach is similar because an organization receives increased inputs when their outputs are considered acceptable to the outside environment (Chelladurai, 1987). The systems resource approach is able to assess organizations with multiple goals unlike the goal attainment approach, however it is limiting in that resource acquisition may not be the desired criteria of effectiveness in an organization. In addition, some organizations where financial support is guaranteed on a year to year basis (such as a campus recreation department) would not be applicable to a systems resource approach.

The internal process approach moves away from the inputs and outputs defined in the first two methods of measuring effectiveness, and instead focuses on the ability of organizations to have a workforce whose members are highly integrated into the system and are a part of a smooth running, internal functioning organization (Cameron, 1986). The internal process model can be described as the throughput where the inputs of the systems resource approach are turned into the outputs of the goal attainment model (Slack, 1997). Internal processes are linked with human resource practices. This approach measures how economic efficiency is related to the intra-workings of an organization with strong internal focus and communication. However the internal process

approach is limiting because it cannot account for the effects of the outside environment on the organization and human resource practices are a difficult concept to measure. Also, an organization with poor internal processes may ultimately be efficient by overcoming their deficiencies in their means by achieving their desired ends (Slack, 1997).

The strategic constituencies approach moves beyond the systems resource approach and integrates the prime constituents whom have an interest in the development and effectiveness of an organization (Slack, 1997). This method takes into account that managers of organizations must appease several groups of constituents simultaneously and work towards achieving multiple sets of goals which may be mutually exclusive from one another. Ultimately this approach believes organizations are political and must work to respond to the vested interests of the multiple constituents (Slack, 1997). The strategic constituencies approach is able to take a much broader view of organizational dynamics than the previous models of effectiveness, and it is only moderately limiting in that it is difficult to operationalize.

In the end however, each of these models of measuring effectiveness does not take into account the competing values that are inherent in all organizations as effective as the competing values framework. The competing values model for measuring organizational effectiveness is the most accessible framework and it is the first "metatheory" that is able to take into account all of the aspects of an organization and operationalize them at a single level of analysis.

Competing Values Framework

The competing values approach to organizational effectiveness was constructed as a response to the lack of an operational framework to assess organizational effectiveness (Quinn & Rohrbaugh, 1981). Prior to the development of the CVF (Competing Values Framework), the large quantity and variety of effectiveness criteria and theories proved to be ineffective in their ability to measure organizational effectiveness (Cameron, 1978). The development of the CVF was to produce an operational framework that would create a more common language, greater consistency in the construction of dependent variables, an increased capacity to compare results, and provide a more simplified and systematic assessment vehicle for organizational effectiveness (Quinn & Rohrbaugh, 1981). The procedure for creating the framework was based on a list of thirty indices of organizational effectiveness created by organizational theorist John Campbell (Cameron, 1978). A two stage, multivariate approach was used with a panel of seven experts in the field of organizational theory. The panelists were asked to reduce and organize the list of thirty criteria, and then to evaluate the similarity between every pairing of the remaining criteria which was then subjected to multidimensional scaling. The panel emerged with a three dimensional space and three sets of competing values within the framework as shown in Figure 1 (Quinn & Rohrbaugh, 1981).

The first set of values is related to organizational focus and is located on the x-axis. The left side of the framework shows an organization with a focus on the development of internal components in the organization, and the right side of

the framework focuses on the development of the organization itself. The second set of values is on the y-axis, and is related to organizational structure.

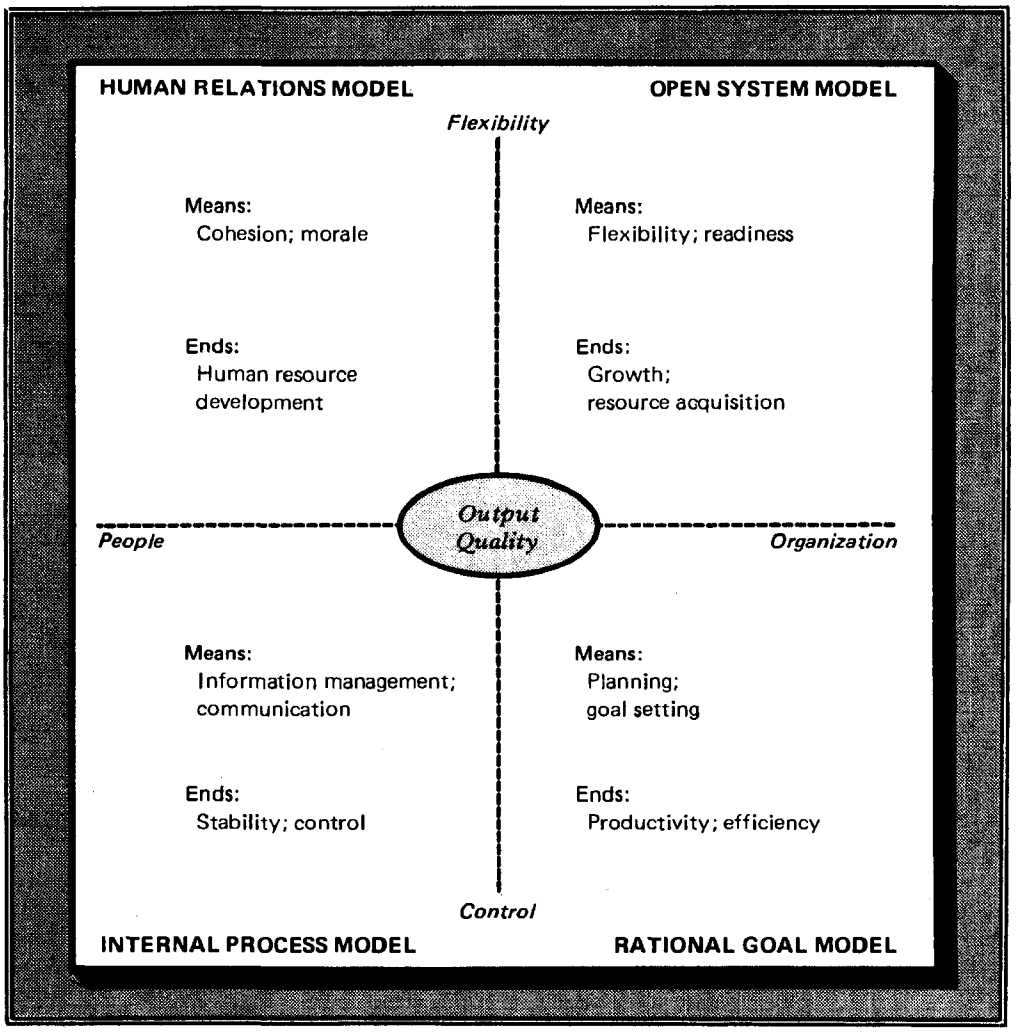

Figure 1: The Competing Values Framework (Quinn & Rohrbaugh, 1981)

The top of the framework has an emphasis on flexibility while the bottom has an emphasis on structure and control. The third set of values is related to means and ends, from an emphasis on important processes such as planning

and goal setting, to an emphasis on final outcomes such as resource acquisition (Quinn & Rohrbaugh, 1981).

The three sets of competing values are common dilemmas in organizational theory literature. The debate of flexibility versus control is a basic quandary of organizational life; one side values authority, structure and coordination as the keys to organizational success while the other side stresses diversity, individual initiative, and organizational adaptability. The second competing value of people versus organization is also a common theme in organizational literature. Organizations are designed to achieve goals and produce efficient products whereas the organization itself is made up of people who have distinct characteristics, feelings, and individualistic traits. When complete attention is paid to the efficiency of the organization, the focus on individual and group development is severely diminished. The third set of competing values of means versus ends is similarly a common theme but on a smaller scale in organizational literature. Organizations can focus on the actions used to achieve a certain goal or outcome which would be considered a means or they may be focused on long term goals such as profit, efficiency, and strategic planning as an ends. This is often described on a horizontal timeframe, with means as a short term focal point and ends as a long term focal point (Quinn & Rohrbaugh, 1981).

The combination of the four quadrant framework and the effectiveness criteria produces four distinct yet interweaving models for organizational effectiveness as shown in Figure 1. The human relations model places an

emphasis on people and flexibility and is shown in the upper left hand side of Figure 1. Cohesion and morale are the means used for the development of human resources which is the ends (Quinn & Rohrbaugh, 1981). The second model shown in the upper right side of Figure 1 is the open systems model. This places an emphasis on the organization and flexibility, and would use readiness and adaptability as a means to an ends of growth, resource acquisition, and external support. The rational goal model in the bottom right hand corner of Figure 1 is emphasized by organization and control. Goal setting and planning are the means and productivity and efficiency in the organization are the ends (Quinn & Rohrbaugh, 1981). The final model in the bottom left hand side of Figure 1 is the internal process model which emphasizes people and control. Information management and communication is used as a means and stability and order within the organization is the ends (Quinn & Rohrbaugh, 1981).

Each model in the CVF has an antithesis model with completely contrasting emphases. The human relations model which focuses on people and flexibility is in opposition to the internal focus and control of the rational goal model (Quinn & Rohrbaugh, 1981). The open systems model is comprised of an organization with an internal focus with the ability to innovate, whereas the internal process model is a stable organization that seeks to use its people to continue the routine operations of the organization. In a similar vein, each model shares an axis with another model either on the x-axis or the y-axis, and therefore the competing values are inherent because all organizations are

expected to use all six aspects of the CVF to some extent (Quinn & Rohrbaugh, 1981).

The CVF does not accept any particular type of organizational culture as bad; they simply show a representation of different types of culture maps. It is expected that the organizational culture of a large school under athletics, a small school under student affairs, and a private school under an auxiliary department will have different organizational culture maps. This study will explore if there is a significant difference among culture types in campus recreation departments, and whether a particular group of institutions are linked with a balanced organizational culture.

The CVF was successful in its ability to operationalize organizational research at a single level of analysis, and has been impactful as a tool for research in organizational theory. The CVF has evolved in the two plus decades of its existence and has since moved away from addressing organizational effectiveness and instead has been embraced as a framework for research in the field of organizational culture. Organizational theory researchers have moved in this direction because of the difficulty in determining what the exact definition of organizational effectiveness is, and the difficulty involved in researching a concept that is not easily defined (Quinn & Spreitzer, 1991). The CVF is a "metatheory" that allows for the conceptualization of both paradoxical and linear phenomena (Denison & Spreitzer, 1991), and it has been expanded to explore the structure of organizational culture and the basic assumptions about motives, leadership, decision making, effectiveness, values, and organizational form

(Quinn & Kimberly, 1984). The CVF connects the, "strategic, political, interpersonal, and institutional aspects of organizational life by organizing the different patterns of shared values, assumptions, and interpretations that define an organization's culture" (Denison & Spreitzer, 1991).

The organizational culture view of the CVF yields four types of cultural orientations as shown in Figure 2: a group culture, a developmental culture, a rational culture, and a hierarchical culture. In the upper left hand quadrant under the human relations model of the CVF is group culture. This "clan" culture has a primary focus on human relations and is emphasized by flexibility and an internal organizational focus. The group culture holds traits in their organization such as belongingness, trust, affiliation, participation and member decision making (Zammuto & Krakower, 1991), and the motivational factors include attachment, cohesiveness and membership. The leaders of the group culture are participative, considerate, and supportive and encourage interaction through teamwork, and the effectiveness criteria is defined by human potential and member commitment (Denison & Spreitzer, 1991).

The upper right quadrant is the developmental culture which emphasizes flexibility with a focus on the external environment (Denison & Spreitzer, 1991), and is associated with change (Zammuto & Krakower, 1991). This culture emphasizes growth, resource acquisition, creativity and adaptation to the external environment, and its motivating factors are growth, stimulation, creativity and variety. The leaders in a developmental culture, also known as the adhocracy, concentrate on visibility, legitimacy, and external support, and the

effectiveness criteria is defined by new markets, resource acquisition, and organizational growth (Denison & Spreitzer, 1991).

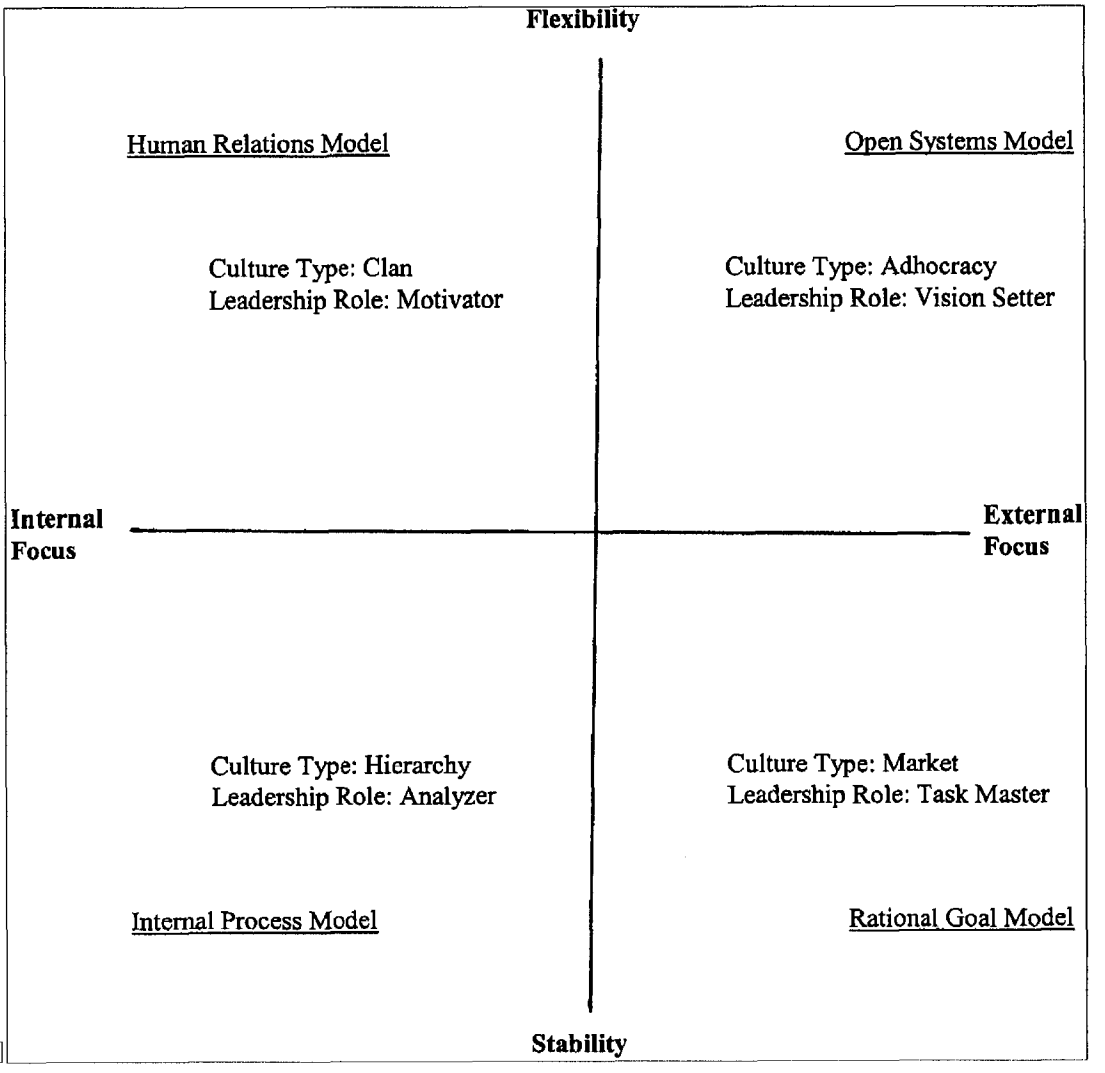

Figure 2: Organizational Culture Types in the CVF (Adapted From Smart, 2003)

The rational goal model of the CVF in the lower right quadrant is defined as the rational culture which emphasizes productivity, performance, goal fulfillment, and achievement. Rational cultures seek to satisfy well defined objectives with the motivating factors including competition and the achievement

of predetermined ends. The leaders of rational cultures are goal oriented, instrumental and functional, and the effectiveness criteria are defined by constant structure, productivity and efficiency (Denison & Spreitzer, 1991).

The final organizational culture is the hierarchical culture which is in the lower left hand quadrant of the CVF under the internal process model, and emphasizes internal efficiency, uniformity, coordination and evaluation. Hierarchical cultures focus on the execution of standards, with motivating factors being security, order, rules and regulations. Leaders of hierarchical cultures are conservative and cautious, and effectiveness criteria include stability, control and efficiency (Denison & Spreitzer, 1991). A bureaucratic organizational culture is the most typical type of a hierarchical culture (Zammuto & Krakower, 1991).

The CVF culture model is very similar to the CVF effectiveness model designed by Quinn and Rohrbaugh in 1981, and the four quadrants are considered ideal models of culture defined within the CVF. The CVF is inherently paradoxical, and organizations are unlikely to be characterized by just one culture model; instead they should be representative of all four culture models. Organizations should be striving to achieve a balance among all four culture models, and an overemphasis on one particular culture type may result in a dysfunctional organization (Denison & Spreitzer, 1991). Organizations that embrace a balance among the four models and use multiple value systems have been shown to be the rule rather than the exception (Zammuto & Krakower, 1991), and organizations with balance within the CVF culture model have been shown to produce higher levels of organizational effectiveness compared to

organizations that are more singularly focused and congruent with one culture type (Smart, 2003). An organization's performance is contingent on its capacity to develop a balanced organizational culture as modeled in the CVF (Smart, 2003).

In addition to needing a balance, a study assessing organizational culture in higher education using predictors of effectiveness in institutions of higher education found the type of culture in the institution was found to be a good predictor of organizational effectiveness, whereas cultural congruence and cultural strength did not show any correlations with organizational effectiveness. This finding went against some of the past literature on organizational effectiveness where the conventional wisdom said that a strong culture was one of the driving forces behind success in American business. In terms of effectiveness criteria, a group culture type was found to be closely linked with student development, faculty satisfaction, and the overall openness of the system; developmental cultures are better at external adaptations; and rational cultures are better at acquiring resources (Cameron & Freeman, 1991).

In order to move away from the anthropologic, qualitative measures of organizational culture that have dominated the past literature in organizational behavior, a quantitative survey instrument had to be created within the CVF. A quantitative measurement tool is able to give greater accuracy, and it is able to provide answers that are not easily teased out of a qualitative study (Zammuto & Krakower, 1991). The resulting survey instrument will be discussed in the

proceeding chapter, along with the overview of the sample used in this study and the methods of analysis.

The CVF has been transformed from a theory to measure effectiveness, to a theory measuring culture in higher education, to a theory which has seen a growth of use in the health care sector (Helfrich et al., 2007). Its ability to adapt to different sectors for research purposes has been shown to work, and this study is the first attempt to use the CVF framework to study the organizational dynamics of campus recreation departments. Chapter III will outline the methods that were taken to collect and analyze the data for the study.

CHAPTER III

METHODS

Sample Overview

The sample in this study will be initially comprised of 773 Campus Recreation Directors of four year Colleges and Universities as selected from the National Intramural-Recreation Sports Administration (NIRSA) directory. NIRSA is the leading trade association affiliated with campus recreation departments in institutions of higher education, and acts as the professional association over the field of campus recreation. This sample represents every four year College and University in the NIRSA directory, some of whom are members of NIRSA and some of whom are not members (The University of New Hampshire is removed due to its relationship with the researcher and committee). A brief pilot study was conducted prior to the dissemination of the survey using professional staff members and graduate assistants in campus recreation departments from three universities. Minor word and syntax changes were made to the study based on the informal response from the pilot study participants.

Campus recreation directors are generally well educated and are expected to have a greater understanding and appreciation of the theoretical, foundational, and research-oriented aspects of recreational sport organizations (Barcelona, 2004). Directors were chosen for the initial mail based portion of the

survey because they are the leader of the department, and they should have the strongest understanding of their organizational culture. Taking part in the survey will provide campus recreation directors and their staff an opportunity to reflect upon the organizational culture that exists within their organization, and could provide topics for discussion and introspection based on their survey answers. Campus recreation directors will also be the link to the snowball portion of the sample where they will be asked to provide the names and emails of up to three members of their professional staff.

Distribution Procedures

A modified six-week, three step non-response distribution was used to maximize the response rate. It is believed that due to the nature of the position of a campus recreation director as a member of an institution of higher education, their advanced educational background, and the short time requirement involved with the survey, the anticipated response rate for this portion of the study was a 40% rate of return. All 773 potential participants were sent a consent letter outlining the objectives of the research and the method of confidentiality of the data collection and a written link to the web-based survey. The researcher compiled the available emails for each campus recreation director using the NIRSA directory (573 of the 773 potential participants), and each director was emailed with a web-link which took them directly to the survey page (Zoomerang survey software was used for this study). The researcher compiled a complete

response tracking list in order to adequately provide a non-response procedure and removed the respondents who already replied from the proceeding emails.

In order to achieve an unbiased organizational culture profile for each institution, a snowballed web-based distribution sample was utilized from the initial campus recreation director survey. At the end of the survey directors are asked to provide the names and emails of the (up to) three longest tenured professional staff members in their department. This methodology is introduced to try and reduce bias in each institutional sample and to analyze whether the campus recreation director and their staff agree to a significant degree on the type of organizational culture that exists in their campus recreation department. Research in organizational culture has shown that using only a horizontal sample instead of a multi-tiered sample may yield data that is unreliable (Helfrich et al., 2007). Helfrich et al. note that there are documented gaps in the perceptions of managers versus service providers in [certain] areas of organizational research. This gap makes it conceivable that individuals in supervisory roles may adopt different cognitive maps of organizational values and assumptions than those adopted by rank and file employees (Helfrich et al., 2007).

The web-based survey for the snowballed sample was administered using the Zoomerang on-line survey software, and a modified four-week, two step non-response procedure will be used to ensure maximum participation. When a director's survey is returned and the names and emails of the three longest tenured members of the professional staff have been given, those three staff members were sent an email with a consent letter, the research topic, how their

email was chosen, and a web-link to the Zoomerang on-line survey. This study will use the three longest tenured staff members because they will have the most experience within the organization and should have a greater understanding of the organizational culture that exists in their department. Some campus recreation departments which have fewer than three professional staff members will still be used in the snowball sample and all institutions which return viable responses will be used in the analysis for the study.

This method of tracking responses closely, using a personal email address, obtaining emails from directors and not an email list-serve, and using a short web-based survey will be used to ensure maximum participation. Although response rates for web-based surveys have been found to be lower than response rates for mail surveys (Redline & Dillman, 1999), follow up e-mail reminders have been found to improve response rates for web-based surveys (Solomon, 2001). After fourteen (14) days from the initial email the second email was sent to the non-responders to the survey, and after twenty-one (21) days from the initial email a second non-response email was sent as a last chance opportunity to respond to the survey. Sending the emails from the researcher's personal account ensured that the mail did not get sorted into a junk-mail folder.

The web-based survey was laid out over three pages online with the following user-friendly aspects: the survey is designed with very short, clear instructions to ensure proper navigation and flow (Redline & Dillman, 1999); the questions are short and concise; there are multiple questions per page which are spaced evenly and ensure there is no question crowding on each page (Couper,

2000); there are no open-ended questions (Frary, 1996); and there are no fancy tables or graphs in the survey design (Dillman, Tortora, & Bowker, 1998). The researcher included in bold print in the email that the survey should take no more than 5 minutes as a way to entice respondents to go to the survey link.

This method of non-response was used because of the importance of the data from the professional staff members, and the ease and inexpensiveness of sending emails with a survey link to encourage response (Zanutto, 2001). The most important part of keeping track of the three step non-response procedure wias staying organized on which institutions have returned surveys, which campus recreation directors and institutions have responded to the online surveys, and when each initial email was sent to the professional staff members of each institution. Although unorthodox, it is believed that this method produced the most effective snowball response sample.

Survey Instrument Psychometrics

This study used a quantitative survey instrument designed specifically for the research of organizational culture in institutions of higher education developed by Zammuto & Krakower, with minor word modifications to align the survey in terms of campus recreation departments (APPENDIX A, APPENDIX B). The use of this survey instrument can be transformed for use in campus recreation research as organizational subunits exist in all organizations, and this survey tool is versatile enough to assess diagnostic and change functions in

subcultures [such as a campus recreation department] in an institution of higher education (Cameron & Freeman, 1991).

The competing values instrument for organizational culture was initially developed at the National Center for Higher Education Management Systems (Krakower & Niwa, 1985) as a way to operationalize the CVF (Zammuto & Krakower, 1991). The respondents were asked to indicate the extent to which their institution matches the characteristics described with each of the four culture types from the CVF by dividing 100 points along four dimensions using an ipsative scale of measurement: institutional [department] character, institutional [department] leader, institutional [department] cohesion, and institutional [department] emphases. A competing values profile is devised for each individual person's ratings for each type of culture within the four culture dimensions by summing up their ratings on questions 1A, 2A, 3A, and 4A, (and likewise for culture dimensions B, C, and D) and dividing by four. This procedure produces a culture rating score for each type of culture: group, developmental, rational and hierarchical (Zammuto & Krakower, 1991). A departmental profile score will then be obtained by taking the organizational culture responses from the snowballed sample of each department and averaging all four scores to achieve a departmental culture map containing four scores which coincide with each of the four quadrants in the CVF.

The survey instrument designed by Zammuto and Krakower can be conducted using either an ipsative scale or a Likert scale. An ipsative scale will be used in lieu of the Likert option in this particular study because of its ability to

provide a clear map of an organization's culture. It is a stronger option for this study because it is inappropriate to separate the four quadrants interdependence because the CVF is inherently paradoxical and tied together as a framework for assessment (Quinn & Spreitzer, 1991). Ipsative scales are naturally dependent on one another, and if respondents rate one particular culture type high then they are in essence rating another particular culture type low, creating an accentuated and exaggerated view of an organization's culture strengths and weaknesses (Quinn & Spreitzer, 1991). This study's use of culture mapping necessitates an exaggerated view of an organization's culture, and it will allow for a better analysis after the data is collected.

Ipsative scales however can be limiting for this very reason. Since they are not independent they are spurious, and therefore they are not suitable for factor analysis, regression and LISREL, (Quinn & Spreitzer, 1991) and they can often times inflate reliability statistics (Helfrich et al., 2007). A Likert scale however does not force respondents to choose a definitive culture type that resembles their organization, and there may not be enough of a separation within the data among organizational culture types. In a self-reporting survey using a Likert scale respondents may be more likely to say they represent all four cultures to a very similar extent which could affect the reliability of the sample. Ipsative scales force a "fixed choice" (Quinn & Spreitzer, 1991), and although factor analysis is not suitable, clustering of profiles (Zammuto & Krakower, 1991) and discriminant analysis can be just as effective in analyzing organizational culture.

A psychometric analysis of the ipsative survey tool was conducted to analyze the internal reliability and the discriminant validity of the instrument. The Cronbach reliability coefficients for the scales are .74 for the group culture, .79 for the developmental culture, .73 for the hierarchical culture, and .71 for the rational culture. The high levels of the cronbach alphas show a high reliability in the ipsative scale. In addition, factor analysis shows that the structure of each measure is an independent indicator, meaning each scale loads high on one factor and low on all the other factors (Quinn & Spreitzer, 1991).

A multi-method qualitative confirmation was conducted following the findings in the confirmatory factor analysis regarding the organizational cultures of religious Universities and large, public research Universities (Zammuto & Krakower, 1991). Focus groups were used to gauge the actual means and ends of each University type and their organizational culture, and the researchers determined the culture that was found using the quantitative mapping was confirmed by the culture that was found using the qualitative content analysis. This multi-method analysis was the final confirmation of the ipsative model of the CVF instrument by the researchers. The psychometrics of the reliability statistics, the discriminant validity, and the multi-method quantitative study confirms that the ipsative scale may be used where the objective is to emphasize the differences among the four culture types (Quinn & Spreitzer, 1991) and when the clustering of profiles is used to understand and emphasize the differences in an organization's culture.

The modified survey instrument asked respondents basic background information as a tool to classify departments by dependent variables including institutional type (public or private), institutional size (initially small, medium, large, however this ordinal scale was changed after the responses came in), and administrative unit (athletics, academics, student affairs, business operations, other). The survey instrument is non-invasive and short and should have taken no more than five minutes to complete. In order to separate the non-responders for the second and third mailings, the name of the institution will be used by the researcher as the identifier. During data reporting and analysis the institution name was removed and all data reporting will exclude any links to individual institution names

Methods of Analysis

Descriptive statistics was used to describe the overall sample, and the culture scores were initially analyzed to determine which areas if any in the sample to expect significant results. Discriminant analysis was used to determine which group of institutions and which combination of dependent variables showed a significant difference among culture types. Cluster analysis was used to create a visual model of the culture maps and the clusters were analyzed based on the institutional characteristics in each type of cluster. Organizational behavior research in higher education has shown that institutional type and size significantly differ on these dimensions (Zammuto & Krakower,

1991), and this study will also attempt to assess the impact of the administrative unit which houses campus recreation and organizational culture.

In order to analyze the types of organizational cultures present in the institutions and assess whether the campus recreation departments are balanced and aligned with the typical organizational culture as found in the sample, cluster mapping was used as the basis of analysis. The clustering of profiles is a form of cluster analysis used to map the organizational cultures of the sample campus recreation departments. The number of clusters (k) will be chosen using a priori hypothesis described in Chapter IV. The cluster maps, discriminant analysis and descriptive statistics were used as the primary mode of analysis of the organizational cultures of campus recreation programs. The maps created from this ipsative data are a useful tool for descriptive analysis and they will be used as an exploratory step in this study to determine future research questions once a basic understanding of organizational culture in campus recreation is determined. Since the CVF does not provide one distinct cultural type as being dominant or "correct," looking at the data using conventional analysis techniques to find an answer is difficult, and alternate methods of analysis must be used in addition to standard methods.

Chapter IV will report the statistical findings from the study as described in the methods above and will provide the visual cluster maps from the cluster analysis.

CHAPTER IV

QUANTITATIVE ANALYSIS

The following chapter will report the statistical findings from the data collected using the quantitative survey instruments (APPENDIX A, APPENDIX B). The first portion of the results will include the descriptive statistics and the second portion will include the cluster analysis and all significant findings using discriminant analysis.

Descriptive Statistics

Sample Statistics

The data was collected in two parts: the first round of data was collected from campus recreation directors and the second round of data was collected from up to three staff members from the departments of those campus recreation directors. Of the 773 Universities which were contacted by letter, 573 of those Universities were successfully emailed with a link taking them directly to the survey site. Two hundred institutions did not receive an email with a direct link to the survey most likely for one of two reasons: the email of the campus recreation director was not included or evident in the NIRSA directory, or the email which was included was an incorrect address. A total of 305 campus recreation directors completed the survey, a rate of 55%. Of the 305 responses,

45 Universities had to be removed from the sample due to incomplete or incorrect responses (points did not add up to 400). The final sample size for the recreation directors was an n = 260 for a response rate of 45% of the sample.

The second round of data consisted of 552 potential professional staff members, 425 of which successfully received an email with a direct link to the survey. The professional staff member emails were provided by the directors at the end of their survey. Some universities gave three names, while smaller departments who had fewer than three staff members gave up to three emails; other institutions chose to pass on giving the email addresses of their staff for the snowball portion of the survey. The snowball sample had a response rate of 49% (n = 211). Of the 211 respondents, 25 had to be thrown out due to incomplete or incorrect responses for n = 186, a final response rate of 44% of the snowball sample.

The data collected from the two separate surveys were then averaged for each separate institution and combined to form one complete data set which provided one institutional score. The average culture scores were computed by first averaging each individual score of each individual respondent for culture groups A, B, C and D. Next, the individual respondents were grouped with their fellow institutional responses, and the averages were found for culture groups A, B, C and D for a final institutional culture score. This group of institutions and their combined organizational culture score is the actual number which is used throughout the statistical analysis. The final was n = 274 for a response rate out of the total NIRSA sample (573) of 48%. The institutions whose directors

responded with invalid culture score data (their scores did not add up to 400 points) but whose snowballed professional staff members did complete the survey successfully were included in the final sample. The fourteen institutions whose staff scores were included without their department director's scores were used because it has been shown that the subordinates of a department have a reliable understanding of their department's organizational culture (Helfrich et al., 2007).

The survey asked respondents for information including institution type (public or private), institution size (small, medium, medium-big, and large), and administrative unit (academics, athletics, business operations, student affairs and other). Actual institution size (nominal) was included and was added using the NIRSA directory post-hoc by the researcher. The survey sample consisted of 181 public schools (66%) and 93 private schools (34%), representing an overweight number of public schools in the sample. The original survey consisted of a question asking Universities their institutional size based on an ordinal scale of small (under 6,999 students), medium (7,000 – 13,999 students) and large (14,000 students of more). However this scale proved to be inadequate and produced an unbalanced ordinal scale, so the study compiled the actual institution sizes from the NIRSA directory and placed them into quartiles. The quartiles produced values for small (3,999 students or less), medium (4,000 – 9,999 students), medium-big (10,000 – 18,999) and large (19,000 students or more). The sample for small schools had an n = 68 (25%), medium of n = 68 (25%), medium-big of n = 65 (24%) and large of n = 72 (26%). The institutional

sample mean for the respondents was 13,305 students and a median of 10,000 students. The total NIRSA population mean taken from the NIRSA directory is 9,317 students with a median of 5,973 students which shows a slight skew in the respondents toward larger institutions than the entire NIRSA population.

The survey sample consisted of 8 schools administratively housed under academics (3%), 47 schools under athletics (17%), 6 schools under business operations (2%), 194 schools under student affairs (70%) and 19 schools administered by various departments not included in the survey (other = 7%). These results are consistent with the data collected by NIRSA in 1994 (Bryant et al., 1994) and thus the sample represents a normal distribution of campus recreation departments. Due to the disparity in administrative types and in order to adequately analyze the sample, the department types were collapsed into three different entities: student affairs, athletics and other. After collapsing the data, the sample broke down as follows: the student affairs sample stays at n = 194, athletics stays at n = 47 and all other becomes n = 33, or 12%.

Culture Scores

The average culture score results of each of the 274 institutions were compiled by culture types: group, developmental, rational and hierarchical. The total sample of 274 institutions had an average group score of 36.03, average developmental score of 22.79, average rational score of 24.23, and average hierarchical score of 17.03. The average culture scores were then computed based on each of the dependent variables. These culture scores are presented in Table 1.

Table 1. Average Culture Scores (One Variable)

(n in parentheses)

Variable	Group	Developmental	Rational	Hierarchical
Public (181)	36.17	23.97	23.57	16.43
Private (93)	35.75	20.49	25.56	18.20
Small (68)	34.67	20.42	26.99	17.92
Medium (68)	37.10	22.71	22.83	17.36
Medium-Big (65)	36.01	24.36	22.31	17.42
Large (72)	36.47	23.74	24.37	15.65
S. Affairs (194)	37.36	22.47	23.82	16.47
Athletics (47)	32.55	22.42	26.51	18.52
Other (33)	33.16	25.21	23.41	18.23

The average culture scores were then determined for the various types of institutions mixing each of the dependent variables together. The resulting culture scores for each of the dependant variable pairings are shown in Table 2. Past research has shown that there are significant differences in the culture types of institutions when combining dependent variables employing institutional control with institutional size (Zammuto and Krakower, 1991). This study included administrative unit and paired it with institutional size and institutional control as shown in Table 2.

Table 2. Average Culture Score Classified by Multiple Variables
(n in parentheses)

Variables	Group	Developmental	Rational	Hierarchical
Public				
Small (18)	30.09	21.96	26.27	21.68
Medium (43)	37.87	23.04	23.05	16.04
Med-Big (51)	37.53	24.87	22.17	15.55
Large (68)	35.86	24.48	23.84	16.07
Private				
Small (50)	36.33	19.86	27.25	16.56
Medium (25)	35.77	22.13	22.46	19.64
Med-Big (14)	30.47	22.47	22.81	24.25
Large (4)	46.98	11.15	33.33	8.54
Public				
Athletics (15)	33.22	23.12	30.39	12.36
S. Affairs (139)	37.33	23.51	22.86	16.48
Other (27)	31.87	26.84	23.35	17.94
Private				
Athletics (32)	32.24	22.09	24.69	20.98
S. Affairs (55)	37.45	19.84	26.26	16.45
Other (6)	38.96	17.85	23.68	19.51
Small				
Athletics (16)	33.87	20.86	27.31	17.97
S. Affairs (48)	34.81	20.10	27.31	17.78
Other (4)	36.25	22.50	21.88	19.38
Medium				
Athletics (12)	34.20	25.01	21.26	19.53
S. Affairs (46)	38.07	22.13	22.99	16.82
Other (10)	36.08	22.63	24.00	17.29
Medium-Big				
Athletics (11)	28.58	26.02	21.82	23.58
S. Affairs (46)	38.42	23.01	22.82	15.88
Other (8)	32.32	29.79	20.05	17.84
Large				
Athletics (8)	32.92	16.72	39.25	11.12
S. Affairs (53)	38.35	24.49	21.81	15.66
Other (11)	29.99	25.20	25.88	18.94

Discriminant Analysis

A series of discriminant analyses were used to determine the significance between the institutional groups' culture scores. Significant differences in culture scores were found in three of the thirty-two discriminant tests which were run. Significant differences were found in large institutions between student affairs and athletics ($p = 0.01$), large institutions and institutional type (public vs. private) ($p = 0.05$), and public institutions between student affairs and athletics ($p = 0.03$).

A structure matrix was then used to determine which culture type was most responsible for the significant differences between the institutional groupings. The structure matrix measures which culture types are most responsible for the significant difference between the two groups. For large institutions measuring the significance between student affairs and athletic departments, the structure matrix had the highest function coefficient in the rational culture at 0.864. For large institutions measuring the significance between public and private institutions in the sample, the structure matrix was again biggest in the rational culture at 0.594. For the third significant finding, public institutions comparing student affairs and athletics had a structure matrix of 0.743 for the rational culture again making it the strongest source of discrepancy between the two institutional subsets. The significant discriminant analysis results are shown below in Table 3.

Table 3. Significant Findings using Discriminant Analysis

Variables	n	p	Wilks-Lambda
(Large) S. Affairs Athletics	61	0.01	0.71
(Large) Public Private	72	0.05	0.87
(Public) S. Affairs Athletics	154	0.03	0.93

Cluster Analysis

Cluster analysis was used to map the cultural profiles within the sample using the methods described in Chapter III and Zammuto & Krakower. In order to determine the appropriate number of clusters, a priori hypothesis was used to specify k (k = number of clusters) entities from the data set (Lorr, 1983). For this sample k was set at 8. Eight clusters were chosen as it represents a reasonable threshold based on the maximum number of clusters which can be formed naturally using the dependent variables in the statistical analysis for this study; (two from institution type; two from department type; and four from institution size). Taking the maximum levels from the dependent variables we get a k entity of (4 Institution Sizes * 2 Department Types or 2 Institution Types) = 8. The cluster maps of each of the eight clusters are shown in Figures 3-10.

Figure 3: Cluster Map #1

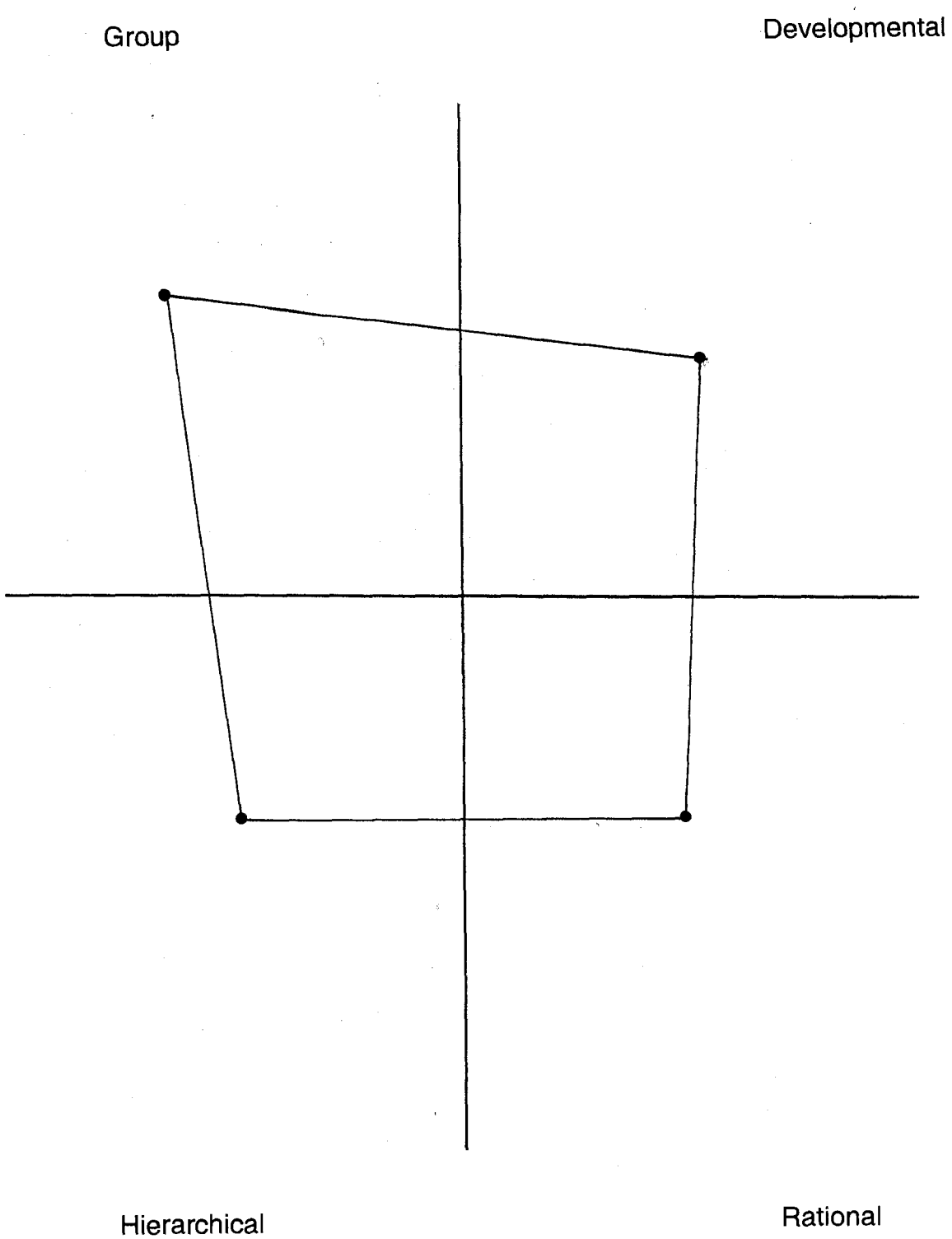

Table 4. Cluster Group 1 Descriptive Statistics

Variable	n	% of Sample
Small	14	26%
Medium	14	26%
Medium-Big	14	26%
Large	14	22%
Public	39	72%
Private	15	28%
Academics	4	7%
Athletics	5	8%
Business Ops	1	2%
Student Affairs	38	70%
Other	6	11%

Culture Type	Culture Score
Group	30.47
Developmental	24.31
Rational	22.47
Hierarchical	22.76
School Size	12,749

Figure 4: Cluster Map #2

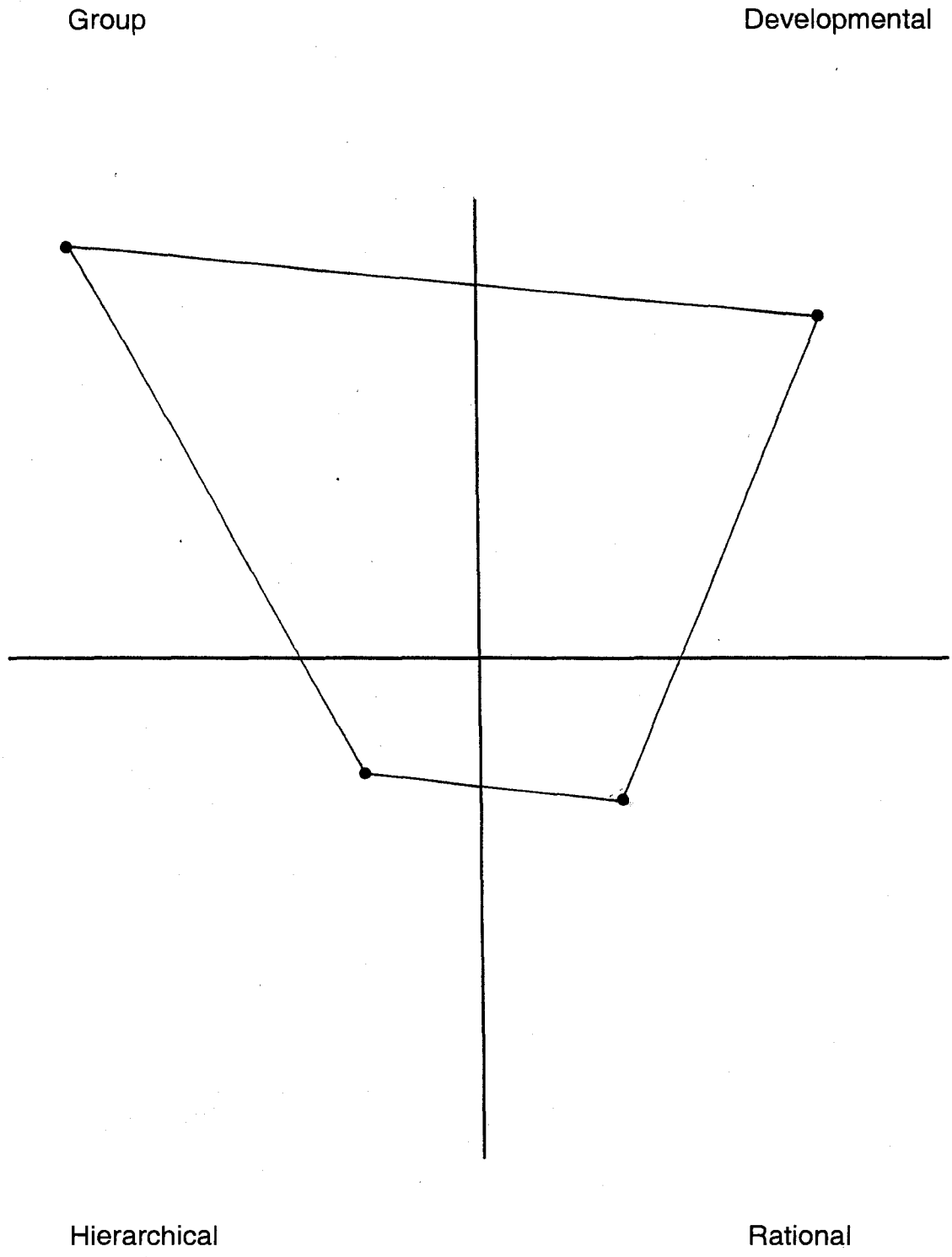

Table 5. Cluster Group 2 Descriptive Statistics

Variable	n	% of Sample
Small	6	40%
Medium	5	33%
Medium-Big	3	20%
Large	1	7%
Public	6	40%
Private	9	60%
Academics	0	0%
Athletics	4	27%
Business Ops	0	0%
Student Affairs	10	67%
Other	1	7%

Culture Type	Culture Score
Group	13.46
Developmental	13.85
Rational	30.35
Hierarchical	42.35
School Size	9,587

Figure 5: Cluster Map #3

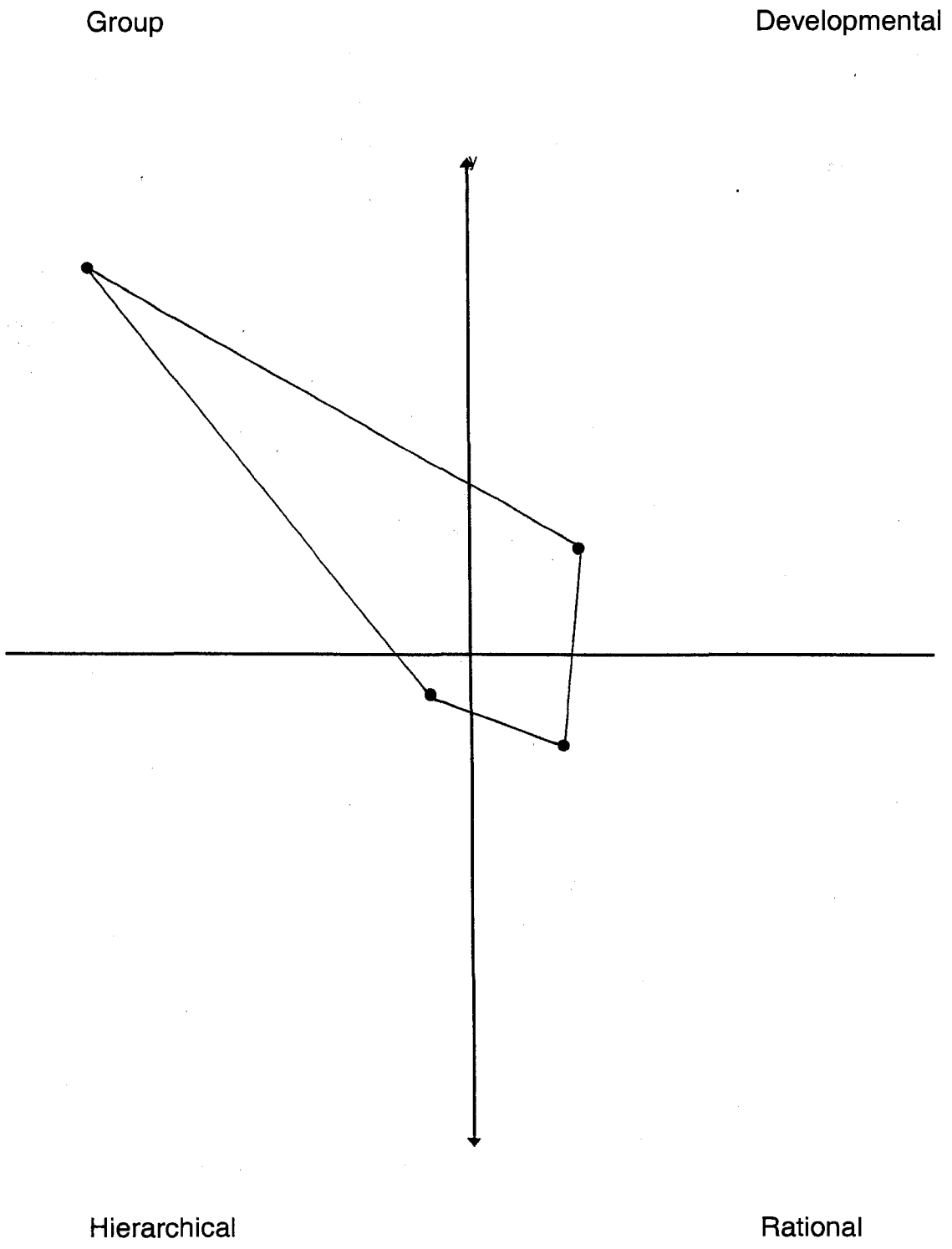

Table 6. Cluster Group 3 Descriptive Statistics

Variable	n	% of Sample
Small	5	19%
Medium	8	30%
Medium-Big	8	30%
Large	6	22%
Public	18	67%
Private	9	33%
Academics	0	0%
Athletics	8	30%
Business Ops	2	7%
Student Affairs	15	56%
Other	2	7%
Culture Type	**Culture Score**	
Group	20.29	
Developmental	41.37	
Rational	19.94	
Hierarchical	18.40	
School Size	13,022	

Figure 6: Cluster Map #4

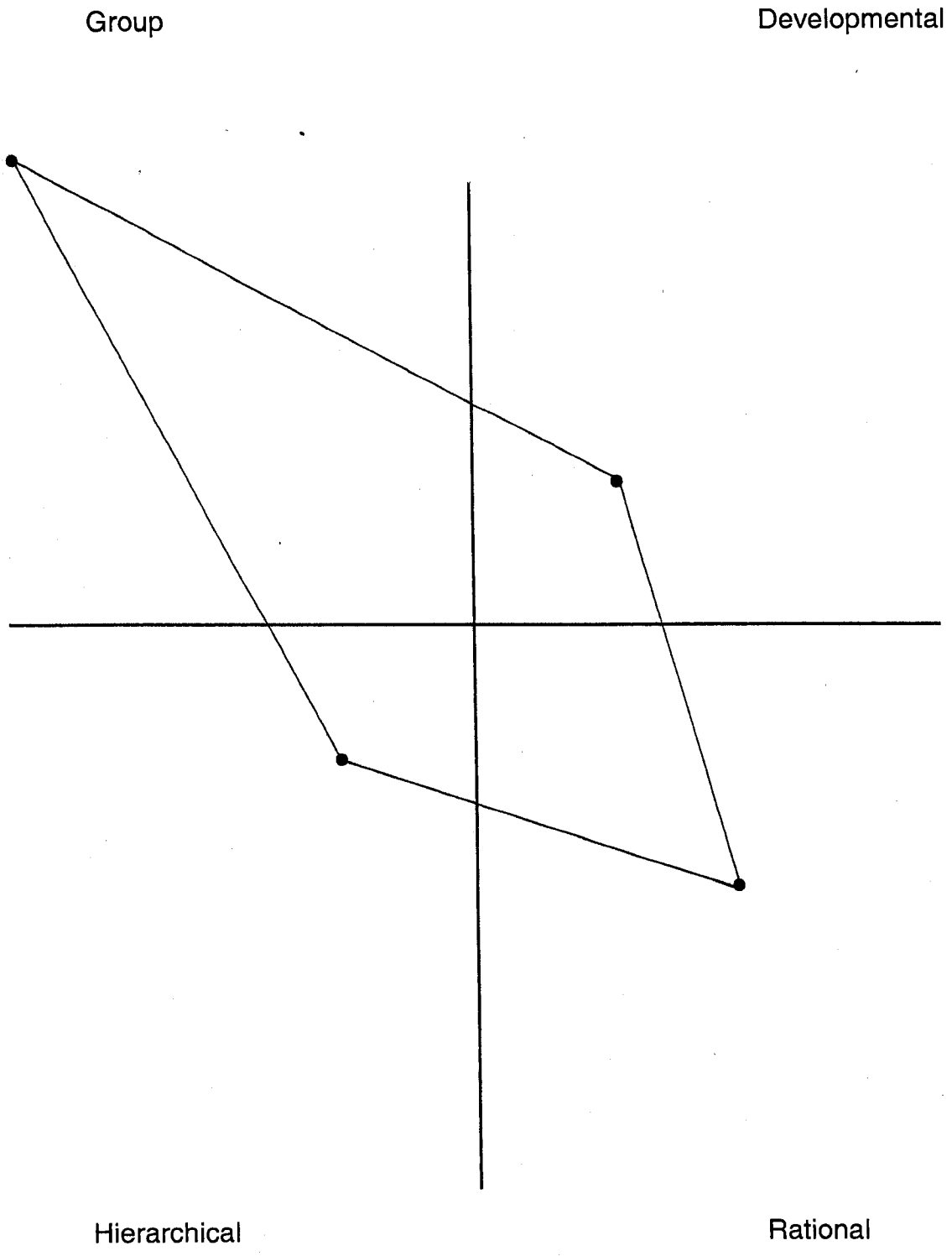

Table 7. Cluster Group 4 Descriptive Statistics

Variable	n	% of Sample
Small	5	50%
Medium	2	20%
Medium-Big	1	10%
Large	2	20%
Public	5	50%
Private	5	50%
Academics	0	0%
Athletics	4	40%
Business Ops	0	0%
Student Affairs	6	60%
Other	0	0%

Culture Type	Culture Score
Group	19.27
Developmental	6.81
Rational	59.27
Hierarchical	14.65
School Size	11,210

Figure 7: Cluster Map #5

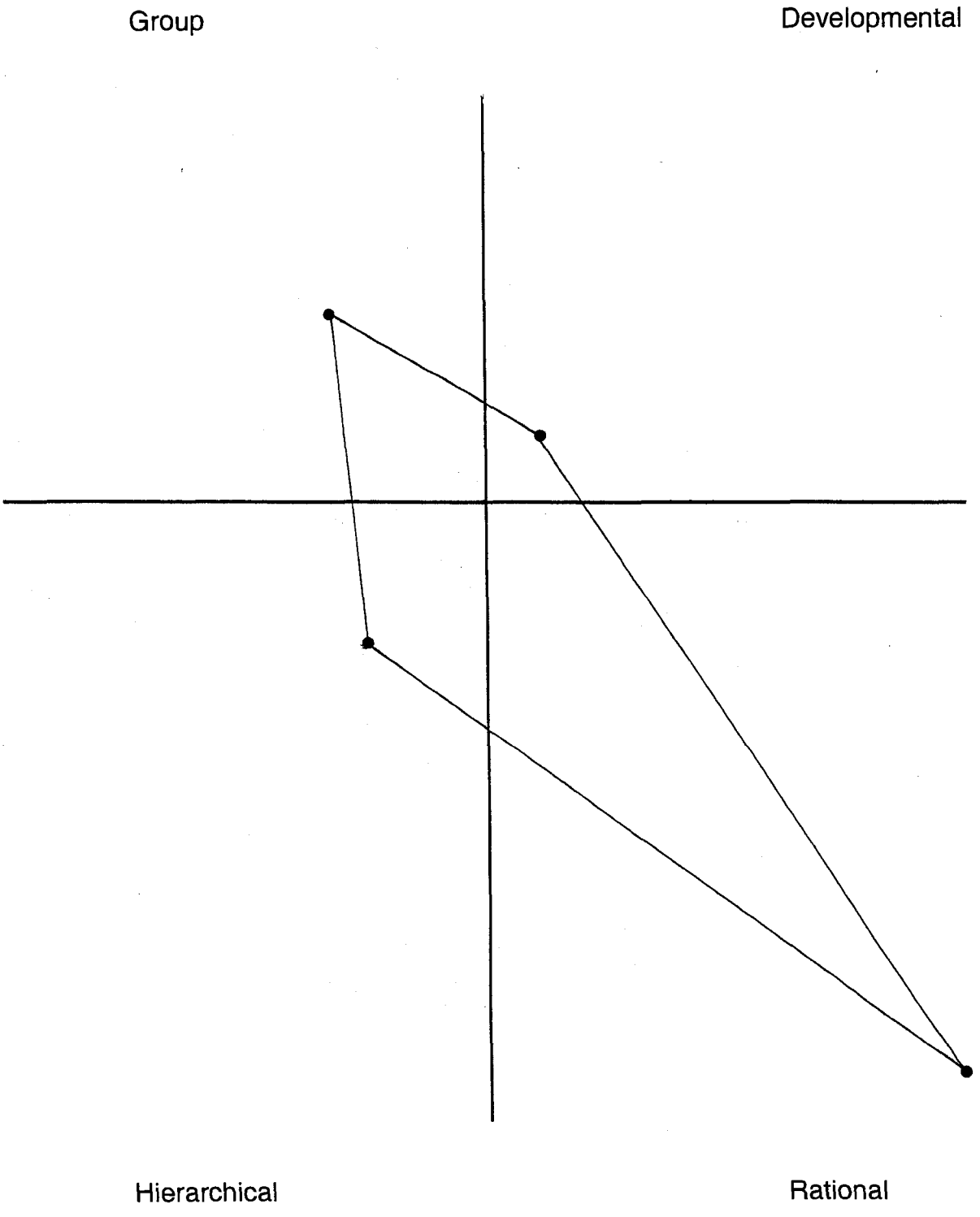

Table 8. Cluster Group 5 Descriptive Statistics

Variable	n	% of Sample
Small	6	14%
Medium	12	28%
Medium-Big	8	19%
Large	17	40%
Public	34	80%
Private	9	20%
Academics	1	2%
Athletics	5	12%
Business Ops	1	2%
Student Affairs	33	77%
Other	3	7%

Culture Type	Culture Score
Group	40.83
Developmental	33.96
Rational	14.12
Hierarchical	11.48
School Size	15,431

Figure 8: Cluster Map #6

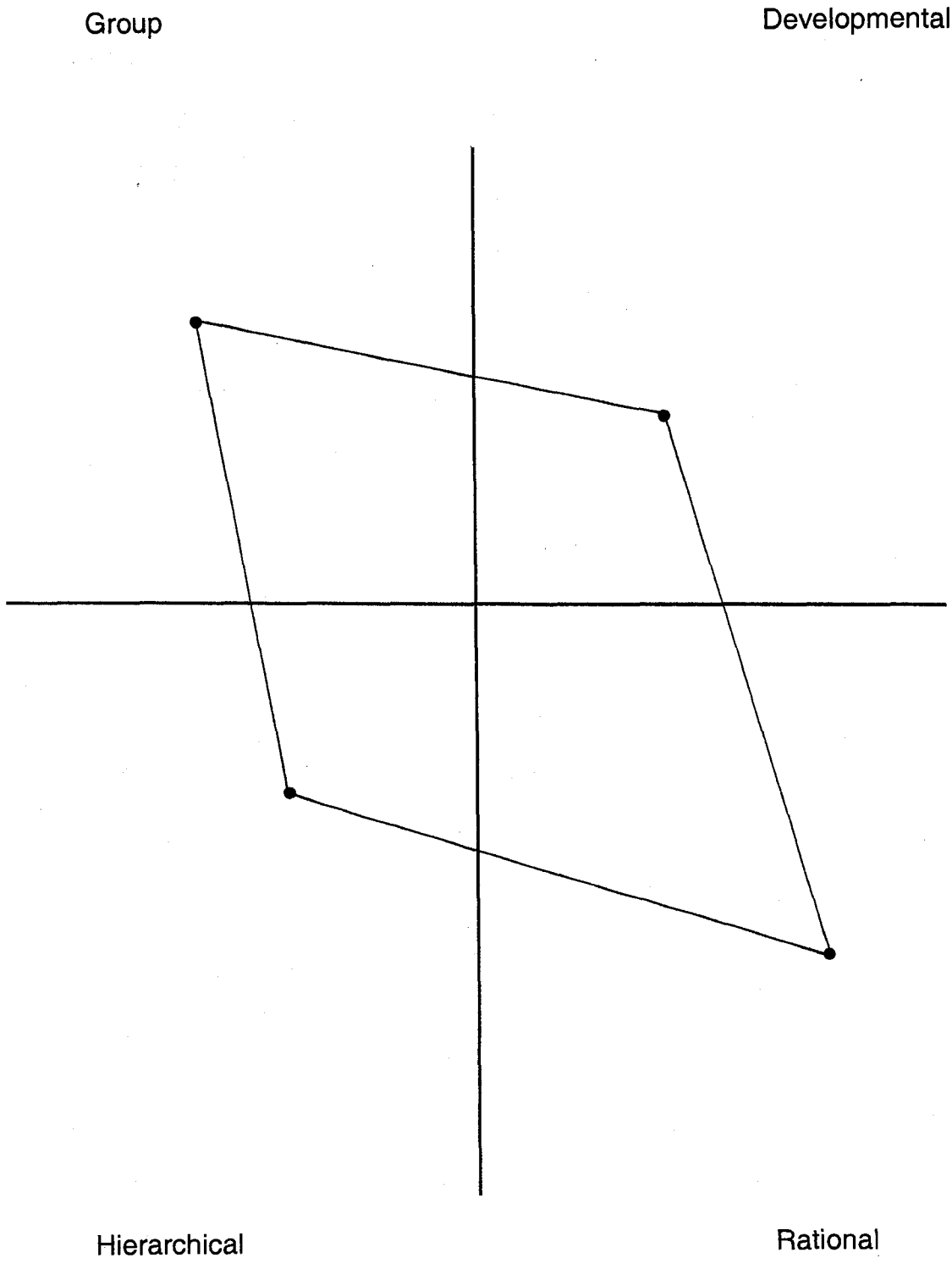

Table 9. Cluster Group 6 Descriptive Statistics

Variable	n	% of Sample
Small	8	23%
Medium	10	29%
Medium-Big	11	31%
Large	6	17%
Public	22	63%
Private	13	27%
Academics	0	0%
Athletics	8	23%
Business Ops	1	3%
Student Affairs	25	71%
Other	1	3%

Culture Type	Culture Score
Group	61.79
Developmental	17.20
Rational	14.58
Hierarchical	6.42
School Size	11.255

Figure 9: Cluster Map #7

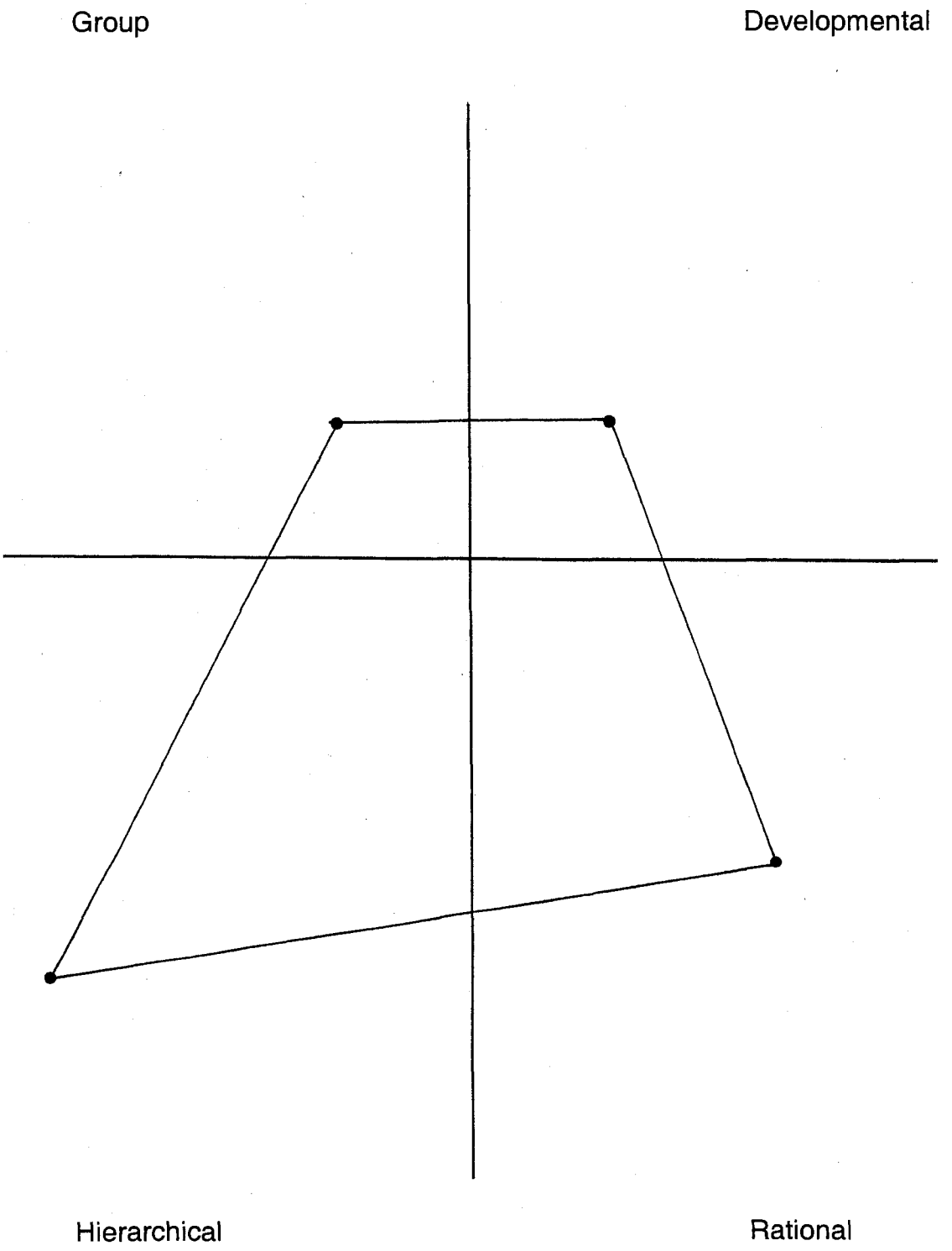

Table 10. Cluster Group 7 Descriptive Statistics

Variable	n	% of Sample
Small	13	31%
Medium	3	7%
Medium-Big	11	26%
Large	15	36%
Public	28	65%
Private	15	35%
Academics	1	2%
Athletics	9	21%
Business Ops	1	2%
Student Affairs	30	70%
Other	2	5%

Culture Type	Culture Score
Group	27.77
Developmental	18.70
Rational	34.76
Hierarchical	18.76
School Size	16,150

Figure 10: Cluster Map #8

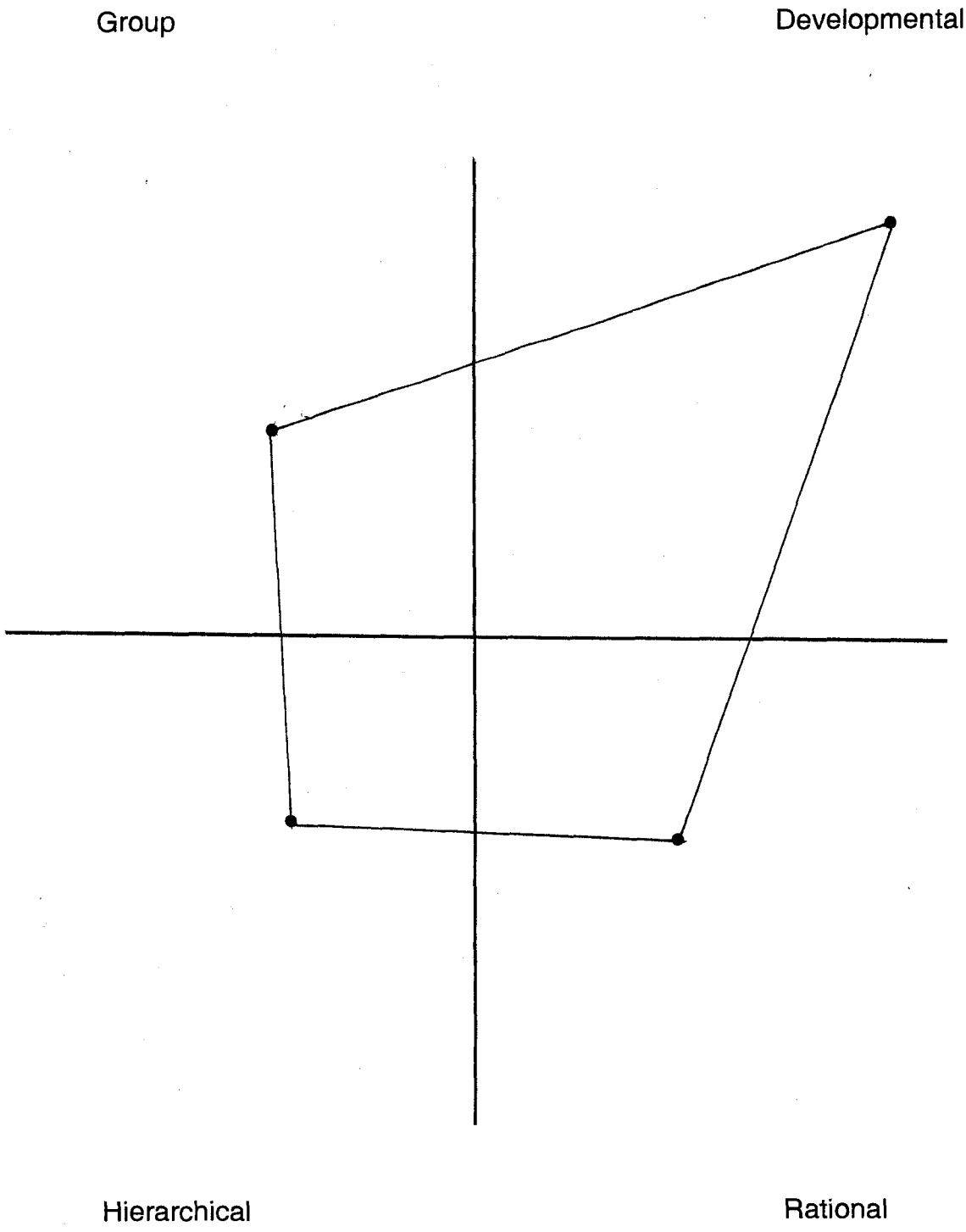

Table 11. Cluster Group 8 Descriptive Statistics

Variable	n	% of Sample
Small	11	23%
Medium	14	30%
Medium-Big	9	19%
Large	13	28%
Public	29	61%
Private	18	39%
Academics	2	4%
Athletics	4	9%
Business Ops	0	0%
Student Affairs	37	79%
Other	4	9%

Culture Type	Culture Score
Group	46.21
Developmental	14.31
Rational	26.13
Hierarchical	13.49
School Size	12,779

These maps represent the relative emphases of the clusters on the different competing values quadrants (Zammuto & Krakower, 1991). Cluster 1 is the largest cluster (20% of the sample) and represents the most balanced cluster (30.47 - 24.31 - 22.47 - 22.76) and the cluster which is most reflective of the overall sample. It has a slight emphasis on group values and a balance among the remaining three culture archetypes. As can be seen in the cluster maps, three other clusters (Clusters 2, 3, and 4) also had high group culture scores with varying degrees of emphases on the remaining culture types. The four group-emphasized cultures are four of the five largest clusters and make up 66% of the sample.

Cluster 1 is made up of a normal distribution of institutions with no discernable characteristic traits that are reflective of the sample distribution. The cluster is balanced between all four institutional size quartiles and is dominated by public institutions under student affairs which is in line with the overall sample characteristics. A complete breakdown of each cluster can be found in Tables 4 - 11. Clusters 2 (16% of the sample), (40.83 - 33.96 - 14.12 - 11.48) Cluster 3 (13% of the sample), (61.79 - 17.20 - 14.58 - 6.42) and Cluster 4 (17% of the sample), (46.21 - 14.31 - 26.13 - 13.49) similarly reflect the sample distribution in their cluster along institution size, institution type and administrative unit with some very mild variation, most notably cluster 2 representing slightly more large and medium sized institutions than the sample distribution. Clusters 1 and 4 are also notable because they represent the largest number of institutions under academics or "other" administrative departments.

Cluster 5 (4% of the sample), (19.27 - 6.81 - 59.27 - 14.65) and Cluster 6 (16% of the sample), (27.77 - 18.70 - 34.76 - 18.76) are characterized by a high rational culture score, followed to differing degrees in order by the group, hierarchical and then developmental cultures. Clusters 5 and 6 are represented by slightly more private institutions and institutions with campus recreation departments run under athletics than the sample distribution. Clusters 5 and 6 are also represented by more small and large institutions than medium and medium-big institutions.

Cluster 7 (5% of the sample), (13.46 - 13.85 - 30.35 - 42.35) has a similar institutional character makeup as clusters 5 and 6 but is dominated most by the hierarchical emphases with the rational culture as the second strongest cultural type. Cluster 7 is by far the cluster with the smallest mean institution size (9,587 students) and is represented by more private universities and athletic departments than the overall sample (60% private, 27% athletics).

The final cluster, Cluster 8 (10% of the sample), (20.29 - 41.37 - 19.94 - 18.40) is the lone cluster with a developmental culture emphasis. Cluster 8 is reflective of the sample distribution based on institutional type and institutional size, but it contains the smallest percentage of institutions under student affairs and the largest number of institutions under athletics.

The cluster analysis, very similar to the discriminant and descriptive analyses, provides almost no discernable classification in culture types among institutions holding for variables including institutional type, institutional size, and administrative unit. The results of the cluster analysis show that using the

competing values framework of organizational culture in campus recreation departments does not provide any conclusive empirical evidence that one particular administrative unit is more effective than any other administrative unit. The same conclusion can be reached when comparing institutional size and institutional control and any combinations of the three dependent variables used in this study. There were a few areas in the descriptive statistics of the cluster analysis which are of interest for future exploration, however overall there was a general lack of classification in the cluster analysis as a whole.

Chapter V will present a discussion on why the cluster analysis was unable to provide any significant findings and will explore a few conclusions including: a) using organizational culture as a method to link organizational effectiveness without the use of effectiveness outcomes is a difficult method of analysis; b) a similar core set of values and beliefs exists within all campus recreation professional staff members and departments no matter what type of institution they work in; c) the similar core values between campus recreation departments is responsible for little between group variation in the culture types in the dependent variables and is responsible for more within group variation within the dependent variable groupings; and d) the lack of significant empirical conclusions and the potential areas of future exploration shows a need for a qualitative analysis using focus groups and interviews of campus recreation staff members in order to better understand the differences and similarities in their organizational cultures. These conclusions and suggestions will be discussed further in Chapter V.

Perceptions of Organizational Culture

The relationship between leadership in campus recreation and organizational culture has been researched in past campus recreation studies (Weese, 1996) and studies using the competing values framework (Helfrich et al., 2007). This study used the data collected from the sample to do an exploratory analysis of the perceptions of organizational culture between campus recreation directors and professional staff members. The combined data set was separated into the campus recreation directors and the professional staff members from the snowball sample in order analyze the mean perceptions of their organizational culture. The directors (n = 260, 58% of the sample) had a mean culture score of 36.75 - 24.03 - 23.18 - 16.05. The professional staff members (n = 186, 42% of the sample) had a mean culture score of 33.21 - 22.75 - 25.11 - 18.93. Four one way ANOVAs were conducted and a significant difference ($p = 0.05$) was found between the directors and the professional staff on group culture scores ($p = 0.03$) and hierarchical culture scores ($p = 0.01$). This preliminary evidence shows that there may be a disconnection in the perceptions of organizational culture between campus recreation directors and their staff. Specifically there may be a detachment in campus recreation director's actual and perceived group culture qualities in their department. Similarly, the data shows that professional staff member's perceived view of their department's hierarchical culture type is stronger to a significant degree than the perceptions of the directors, and their perceptions of group culture are weaker to a significant degree than the directors.

Chapter V will discuss this finding and all the quantitative findings, and it will provide a rationale for the lack of significance and classification in the statistical analysis of the organizational culture of campus recreation departments. Also, the possible implications for the field of campus recreation and future research topics dealing with organizational culture and effectiveness in campus recreation will be explored.

CHAPTER V

DISCUSSION

Descriptive Statistics

The quantitative analysis discussed in Chapter IV found most campus recreation departments are very similar in their organizational cultures in relation to other institutions. The competing values framework of organizational culture and the "balanced" model of organizational effectiveness did not show any consistent patterns or relationships in the sample, and was unable to show a link between organizational culture and organizational effectiveness. However the analysis did provide an exploratory groundwork for questions and future research in organizational culture in campus recreation and higher education.

This study was able to produce a very strong response rate from the population due in large part to the success of the email distribution and the short length of the survey itself. The 55% response rate from the directors and the 49% response rate from the professional staff was a good rate of response for this study. However it was disappointing that 15% of director's responses had to be removed due to an incorrect number of points in their survey response. The ipsative scale could have been a reason for the inaccuracy of the 46 institutions whose director's surveys were removed from the sample. In almost every instance of incorrect point usage, the respondents were off by five to ten points in

their response. In the future, having a summation box ensuring the answers to each part of the survey equal 100 points in the survey for the respondents to see could help reduce the number of unsatisfactory responses. Despite these minor deficiencies the overall response rate and sample size were satisfactory for analysis and provided a distribution that was expected based on the past campus recreation literature.

The descriptive statistics provided a great deal of inferential analysis and provided insight into what to expect prior to the discriminant and cluster analysis. The general lack of variation in the culture scores among all the different types of institutions is noticeable in Table 2 in Chapter IV. With some minor exceptions, most of the institutions put the highest value on group culture, followed by the developmental and rational cultures close together, and the hierarchical culture coming in with the weakest average score. These descriptive statistics provide two insights into the sample: a "balanced" organizational culture in campus recreation is characterized by a slightly stronger skew towards group culture, an even balance between the developmental and rational cultures, and a slightly weaker skew in the hierarchical culture quadrant. Second, there appear to be no major differences in culture types among certain groups of institutions. Ultimately there were a few instances of significant differences in culture types among different types of institutions; however their presence was few and far between and on a smaller scale than what was expected in this study based on past literature (Zammuto & Krakower 1991, Bryant et al., 1994). The rationale and impact of this finding will be discussed later on in Chapter V.

Discriminant Analysis

Discriminant analyses were run on the thirty-two combinations of dependent variables and three significant findings were found as seen in Table 3 of Chapter IV. These findings show that large institutions are significantly different in their rational culture scores for public versus private institutions, and campus recreation departments under student affairs versus athletics departments. However these findings are limiting in their scope because the sample size for large schools under athletics (n = 8) and large private institutions (n = 4) are both too small to make any definitive assertions. Also, because there was only significance at the large institutional level for these variables and nowhere else in the discriminant analysis, it shows that there are no patterns of significant differences along any culture type and that most of the culture types in each institutional subset are similar.

The third significant finding (public institutions comparing student affairs with athletics) also differed along the rational culture with the group culture close behind. This finding does have some merit as the sample size for athletics (n = 15, 32% of the athletics sample) and student affairs (n = 139, 72% of the student affairs sample) are relatively strong enough to merit a significant finding. Most of the schools which responded were public institutions (n = 181, 66% of the total sample), and because NIRSA's rationale centered around the argument of placing campus recreation departments under student affairs in lieu of athletics departments, this statistically significant finding could present an opportunity as a basis for further research. A qualitative analysis or a mixed-method study could

provide some insight into the two different types of administrative units and their relationship to campus recreation. Interviews or focus groups of the campus recreation directors and professional staff members (specifically in public institutions under student affairs and athletics) could provide themes, a rationale, or provide a confirmation for the differences found in this quantitative analysis.

Cluster Analysis

The cluster analysis was successful in its ability to classify groups of institutions into clusters and provide visual maps and a descriptive analysis for the types of institutions in each individual cluster. Cluster 1 (Figure 3) was the largest cluster and the cluster with the best balance among all four quadrant types as described in Chapter II of the CVF. However the descriptive characteristics of cluster 1 were reflective of a sample distribution and did not have any notable dissimilarity. Cluster 1 has the largest group of institutions in its cluster and it is represented as the most balanced cluster of the analysis, but cluster 1 shows that no single institutional type, administrative unit, or institution size is most likely to posses the most balanced culture map.

Clusters 2 (Figure 4), 6 (Figure 8), 7 (Figure 9) and 8 (Figure 10) are the next group of clusters which most closely resemble a balanced culture map but are skewed slightly towards a certain culture type. Cluster 7 is skewed towards the hierarchical culture, cluster 8 is skewed towards the developmental culture, cluster 2 is skewed towards the group culture, and cluster 6 is skewed towards the rational culture. Each of these clusters has some noticeable classification

characteristics in their descriptive statistics. Cluster 7 has more small and private universities in its cluster than a normal distribution. The relationship between small and private universities and their slight skew towards a hierarchical culture map is a minor discovery in the findings. Cluster 8 is notable because it represents a larger number of campus recreation departments working under athletic departments than a normal distribution. The relationships between institutions under athletics and a skew towards a developmental culture is also a minor discovery in the study. Clusters 2 and 6 also fit into this grouping however their descriptive statistics are very representative of a normal distribution of institutions and show no notable patterns of classification.

Clusters 3 (Figure 5) and 4 (Figure 6) are both skewed heavily towards the group culture quadrant in their cluster maps. Much like clusters 2 and 6, clusters 3 and 4 do not show any evidence of patterns or classifications in their descriptive statistics. The final cluster, cluster 5 (Figure 7), is the only other cluster which is heavily skewed towards one particular quadrant: the rational quadrant. Cluster 5 does not have any viable patterns of classification and the sample size of the cluster (n = 10, 4% of the sample) is the smallest of all the clusters.

The cluster analysis and subsequent cluster maps are able to visually interpret the organizational cultures of the campus recreation departments and provide a descriptive analysis of the institutions that make up each cluster type. The cluster maps show one cluster with a balance among all four culture quadrants, four clusters with a good balance but with a slight skew towards each

of the four culture quadrants, and three clusters with a heavy skew and a completely unbalanced culture map. However the cluster maps did not provide any major classifications along any of the dependent variables and ultimately found that most of the clusters were made up of institutions in a ratio very similar to the sample distribution with two minor exceptions, specifically in cluster 7 where small and private institutions are skewed towards a hierarchical culture map where there is an emphasis on control and stability, and in cluster 8 where departments run under athletics are skewed towards a developmental culture with a typical emphasis on growth and resource acquisition. Using a qualitative research method to talk to campus recreation staff members in small and private institutions where there was a skew towards the hierarchical culture, and campus recreation departments under athletic administrations where there was a skew towards the developmental culture to confirm the quantitative findings is a future area of research in organizational culture.

These findings are in line with the descriptive analysis and the discriminant analysis. This study was successful in its research of the organizational cultures of campus recreation departments, but it was unable to show any significant links with increased organizational effectiveness in campus recreation departments under student affairs administrations versus athletic or academic administrations. A rationale for the insignificant findings and a discussion of its relations to the future of campus recreation will now be discussed.

Discussion

The analysis has led the researcher to come to a few possible conclusions to understand the lack of significant data in the majority of the study. The first conclusion is that most campus recreation professionals, whether they are directors or professional staff members, ultimately hold the same value and belief systems about campus recreation regardless of what institution type, size, or administrative unit they work for. Second, the organizational culture survey and the "balanced" cluster map model in the CVF, as it relates to the campus recreation sector, may not be able to determine, to any extent, the relative effectiveness of an organization based on the type of organizational culture that exists in a campus recreation department.

Chapter II discussed the expansion of the "field" of campus recreation and the professional competencies that have accompanied that expansion (Barcelona, 2004). Campus recreation departments no longer act just as service providers, and the professional members of the field are now coming up through campus recreation departments as undergraduates and graduate students. In turn, they are learning and growing up with similar value and belief systems (thus similar organizational cultures) as their peers and may be more apt to agree about how campus recreation should fit into in the world of higher education and student life. The data in this study has shown that on average, most campus recreation departments are similar to a significant degree in their beliefs that a group culture is the strongest and most evident type of culture present in a campus recreation department. The insignificant data in this study shows the

organizational culture that exists in each campus recreation department is not dependent on the type of administrative unit in an institution

The insignificant data in the majority of the statistical analyses was also able to show that trying to use the CVF and a "balanced" organizational culture map as described in Chapters II and III and its links with the organizational effectiveness of an organization was unable to work due to the similarities in the average organizational culture scores and the cluster profiles. No patterns or classifications of institutions along dependent variables emanated from any of the different types of analyses including both the discriminant analysis and the cluster analysis. The lack of separation among most of the 274 institutions in the sample made it very difficult to use the cluster maps for inferential analysis, thus they were unable to determine what institutional subset may make up the most effective organization based on their relative balance in the CVF. The cluster maps ended up providing only a few examples of future research questions based on the data which were briefly described earlier in the chapter.

The final part of the analysis that did see a pattern of significance was the difference in perceptions of organizational culture between directors and professional staff members as reported in Chapter IV. A significant difference in the perceptions of organizational culture was found in the group culture quadrant and the hierarchical quadrant. Director's perceptions of the group culture in their departments tended to be greater than the perceptions of group culture by professional staff members in their departments. Also, director's perceptions of the hierarchical culture in their departments tended to be less than the

perceptions of hierarchical culture by professional staff members in their departments. This data shows in a very preliminary sense that director's may believe they run a department with a greater sense of group culture than their subordinates do, and professional staff members think their directors run a department with a greater sense of hierarchical culture than their director's believe. This is another area where a mixed-method study should be deployed to get a greater understanding of the disconnection between directors and professional staff members, if there is a disconnection at all. Interviews with the director of an institution followed by interviews with the professional staff members could tease out the differences in the perceptions of organizational culture between the two levels of the campus recreation hierarchy.

Limitations

The reach of an organizational culture study in campus recreation could be significantly enhanced by using outcome criteria which links organizational culture type and organizational effectiveness. This study tried to link organizational culture with organizational effectiveness directly without effectiveness criteria because no such criteria existed with the competing values framework and campus recreation. The development of effectiveness criteria using interviews or a panel of campus recreation experts and then using the criteria in a quantitative survey such as the one in this study could be much more successful and should be a focal point of all future research in organizational culture and effectiveness in campus recreation. When organizational

effectiveness criteria are introduced a study correlating organizational culture and organizational effectiveness would become much more attainable.

A second limitation may have been that there are differences in the organizational cultures of campus recreation departments; however this study did not use the correct variables when trying to determine the differences. Instead of using administrative unit, institution size and institution control, departments may have different organizational cultures based on budget, staff size, staff retention, leadership tenure, or a host of other variables. These variables could be used in a future research study of organizational culture and effectiveness in campus recreation.

Implications For Professional Practice

The findings from this study which can be most readily applied to the profession of campus recreation is the acknowledgment that the group culture is the most evident culture type found in campus recreation departments. Past research in higher education has shown the group culture to be linked with student and staff development and high worker morale (Cameron & Freeman, 1991). This coincides with NIRSA in its rationale for the independent administration of campus recreation which says student affairs departments generally contain a similar mission statement to these values of student development. Also, the majority of the institutional culture scores which were collected are very similar and very balanced among the four culture types.

Based on the balanced culture model of the competing values framework, this data shows that most campus recreation department are effective organizations.

Conclusion

This study of organizational culture in campus recreation was able to utilize a strong response rate and conduct a number of statistical analyses which ended up providing a majority of insignificant data with little or no pattern or classification in the data. The study provided a few areas of future exploration based on some preliminary data, most notably finding a significant difference in public institutions with campus recreation departments under student affairs versus athletics administrations. The study was looking for a much more noticeable pattern of institutional classification. Understanding why these types of institutions differ in their organizational cultures (the largest degree was in the rational culture) to a significant degree could be a future research question for the field.

Likewise, the cluster analysis provided a visual sample of the data but the clusters themselves were unable to provide any natural clusters along any of the dependent variables. Cluster 7 was able to show a small degree of exploration for future research showing small and private universities having a slight skew towards a hierarchical culture, and cluster 8 was able to show institutions under athletics had a slight skew towards developmental culture. Each of these cluster findings is preliminary at best, and these clusters did not represent the strongest culture quadrant skew in the total cluster analysis. However exploring these

relationships between organizational culture and institutional variables does represent a possible future research topic.

The lack of the formation of natural clusters by any of the dependent variables in the cluster mapping made the attempts to link a balanced organizational culture with organizational effectiveness moot. The great majority of campus recreation departments had significantly similar organizational culture scores, and the lack of variance made it impossible to come to a conclusion on which subset of institutions has the most effective campus recreation departments.

The researcher found that an opportunity for future research is in the perceptions of organizational culture between leaders and subordinates. There is some literature in the field of campus recreation on the topic of leadership and effectiveness already, and a research topic centered on the differences in the perceptions of organizational culture between directors and professional staff members could be beneficial to the field of campus recreation.

In conclusion, the study was successful in its study of the organizational culture of campus recreation departments but unable in its attempts to find a significant relationship between organizational culture, organizational effectiveness, and institutional variables. There is room for future research in the field of campus recreation in organizational culture and effectiveness, particularly using the quantitative findings in this study as a basis for a qualitative research method. Continuing to expand the research of organizational culture and effectiveness is a promising opportunity in this evolving profession and field.

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APPENDICIES

APPENDIX A

Campus Recreation Director Survey

The purpose of this study is to assess the organizational characteristics of campus recreation departments across the country, and to provide some basic benchmark statistics of departments as well. Using these benchmarks, the goal of this study is to help future campus recreation departments understand the effects of organizational characteristics on effectiveness. The quality of this study depends on your willingness to participate, and I appreciate you taking the time to answer the following questions.

Part I: Background Information

- What is the name of your institution:

  _____

- Is your University or College classified as a:
  - ☐ Public Institution
  - ☐ Private Institution

- Approximately how many undergraduate students attend your institution:
  - ☐ 2,499 or fewer
  - ☐ 2,500 – 9,999
  - ☐ 10,000 or more

- What organizational unit does your campus recreation department report to:
  - ☐ Academics
  - ☐ Athletics
  - ☐ Business Operations
  - ☐ Student Affairs
  - ☐ Other

    _____

Part II: Organizational Characteristics

These questions relate to the type of organization that your campus recreation department is most like. Each of these items contains four descriptions of campus recreation departments. Please distribute 100 points among the four descriptions depending on how *similar* the description is to your department. None of the descriptions is any better than the others; they are just different. *For each question, please use all 100 points.*

FOR EXAMPLE:
In question 1, if department A seems very similar to mine, B seems somewhat similar, and C and D do not seem similar at all, I might give 70 points to A and the remaining points to B.

Facility Character (Please distribute 100 points)

Example Point Distribution:

1. 70
2. 30
3. 0
4. 0

Each should total 100 points.

1. Department Characteristics (Please distribute 100 points)

_____ Department A is a very **personal** place. It is like an extended family. People see to share a lot of themselves.

_____ Department B is a very **dynamic** and entrepreneurial place. People are willing to stick their necks out and take risks

_____ Department C is a very **formalized and structured** place. Bureaucratic procedures generally govern what people do.

_____ Department D is a very **production oriented**. A major concern is with getting the job done. People aren't very personality involved.

2. Department Leader (Please distribute 100 points)

_____The head of department A is generally considered to be a **mentor**, a **sage**, or a **father** or **mother** figure.

_____ The head of department B is generally considered to be an **entrepreneur**, an **innovator**, or a **risk taker**.

_____The head of department C is generally considered to be a **coordinator**, an **organizer**, or an **administrator**.

_____ The head of department D is generally considered to be a **producer**, a **technician**, or a **hard driver**.

3. **Department "Glue" (Please distribute 100 points)**

_____ The glue that holds department A together **is loyalty and tradition**. Commitment to this department runs high.

_____ The glue that holds department B together is a **commitment to innovation and development**. There is an emphasis on being first.

_____ The glue that holds department C together is **formal rules and policies**. Maintaining a smooth-running department is important here.

_____ The glue that holds department D together is the emphasis on **tasks and goal accomplishment**. A production orientation is commonly shared.

4. **Department Emphases (Please distributed 100 points)**

_____ Department A emphasizes **human resources**. High cohesion and morale in the school are important.

_____ Department B emphasizes **growth** and **acquiring new resources**. Readiness to meet new challenges is important.

_____ Department C emphasizes **permanence and stability**. Efficient, smooth operations are important.

_____ Department D emphasizes **competitive actions and achievement**. Measurable goals are important.

Part III: Organizational Information

In order to better understand organizational dynamics, we would like to survey other members of your immediate organization. If you would please be willing to provide the **names and emails of the three (3) longest tenured members of your professional staff** whom report directly to you, it would be greatly appreciated. We will be sending a similar survey to these staff members in the next six weeks, and their inclusion in this research is extremely important to this study.

Staff Member's Name:

_____

Staff Member's Title:

_____

Staff Member's Email:

_____

Staff Member's Name:

_____

Staff Member's Title:

_____

Staff Member's Email:

_____

Staff Member's Name:

_____

Staff Member's Title:

_____

Staff Member's Email:

_____

Part IV: Comments

If you have any comments that you would like to make regarding this survey, please let us know!

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Thank you for your time and willingness to participate in this survey. Your participation in this research is greatly appreciated.

APPENDIX B

Campus Recreation Professional Staff Survey

The purpose of this study is to assess the organizational characteristics of campus recreation departments across the country, and to provide some basic benchmark statistics of departments as well. Using these benchmarks, the goal of this study is to help future campus recreation departments understand the effects of organizational characteristics on effectiveness. The quality of this study depends on your willingness to participate, and I appreciate you taking the time to answer the following questions.

Part I: Background Information

- What is the name of your institution:

_____

Part II: Organizational Characteristics

These questions relate to the type of organization that your campus recreation department is most like. Each of these items contains four descriptions of campus recreation departments. Please distribute 100 points among the four descriptions depending on how *similar* the description is to your department. None of the descriptions is any better than the others; they are just different. *For each question, please use all 100 points.*

FOR EXAMPLE:
In question 1, if department A seems very similar to mine, B seems somewhat similar, and C and D do not seem similar at all, I might give 70 points to A and the remaining points to B.

Facility Character
(Please distribute 100 points)
Example Point Distribution:

1. 70
2. 30
3. 0
4. 0

Each should total 100 points.

1. **Department Characteristics (Please distribute 100 points)**

_____ Department A is a very **personal** place. It is like an extended family. People see to share a lot of themselves.

_____ Department B is a very **dynamic** and entrepreneurial place. People are willing to stick their necks out and take risks

_____ Department C is a very **formalized and structured** place. Bureaucratic procedures generally govern what people do.

_____ Department D is a very **production oriented**. A major concern is with getting the job done. People aren't very personality involved.

2. **Department Leader (Please distribute 100 points)**

_____The head of department A is generally considered to be a **mentor**, a **sage**, or a **father** or **mother** figure.

_____ The head of department B is generally considered to be an **entrepreneur**, an **innovator**, or a **risk taker**.

_____The head of department C is generally considered to be a **coordinator**, an **organizer**, or an **administrator**.

_____ The head of department D is generally considered to be a **producer**, a **technician**, or a **hard driver**.

3. **Department "Glue" (Please distribute 100 points)**

_____ The glue that holds department A together **is loyalty and tradition**. Commitment to this department runs high.

_____ The glue that holds department B together is a **commitment to innovation and development**. There is an emphasis on being first.

_____ The glue that holds department C together is **formal rules and policies**. Maintaining a smooth-running department is important here.

_____ The glue that holds department D together is the emphasis on **tasks and goal accomplishment**. A production orientation is commonly shared.

4. **Department Emphases (Please distributed 100 points)**

_____ Department A emphasizes **human resources**. High cohesion and morale in the school are important.

_____ Department B emphasizes **growth** and **acquiring new resources**. Readiness to meet new challenges is important.

_____ Department C emphasizes **permanence and stability**. Efficient, smooth operations are important.

_____ Department D emphasizes **competitive actions and achievement**. Measurable goals are important.

Part III: Comments

If you have any comments that you would like to make regarding this survey, please let us know!

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Thank you for your time and willingness to participate in this survey. Your participation in this research is greatly appreciated.

APPENDIX C

Informed Consent

Dear Campus Recreation Director:

I am conducting a research project to assess the organizational dynamics campus recreation departments. I am writing to invite you to participate in this project along with more than 750 Campus Recreation Directors across the country in this study.

If you agree to participate in this study, you will be asked to complete a survey which should take approximately **5 minutes to complete**. While you will not receive any compensation for your participation in this study, the anticipated benefits will be to understand the factors influencing organizational culture and effectiveness of campus recreation departments across the country.

Your participation is strictly voluntary; refusal to participate will involve no prejudice, penalty, or loss of benefits to which you would otherwise be entitled. If you agree to participate and then change your mind, you may stop at anytime and choose not to continue by contacting Scott Butch with the contact info posted below.

I will maintain the confidentiality of all data and records associated with your participation in this research. You should understand, however, there are rare instances when the investigator is required to share personally-identifiable information (e.g., according to policy, contract, and regulation). For example, in response to a complaint about the research, officials at the University of New Hampshire, designees of the sponsor, and/or regulatory and oversight government agencies may access research data. You should also understand that the investigator is required by law to report certain information to the government and/or law enforcement officials. Data will be kept in a locked file cabinet in my office; only I will have access to the data.

The work will be conducted by me and Dr. Bob Barcelona, Professor of Recreation, Management and Policy at the University of New Hampshire. I am Scott Butch, Graduate Student in Recreation, Management and Policy and the Graduate Assistant for Intramurals at the University of New Hampshire.

If you have any questions about this research project or would like more information before, during, or after the study, you may contact me, Scott Butch, by email at □ HYPERLINK "mailto:Scott.Butch@unh.edu" □Scott.Butch@unh.edu□, or by phone at 603-862-1597. If you have questions about your rights as a research subject, you may contact Julie Simpson in the UNH Office of Sponsored Research at 603-862-2003 to discuss them.

You will be receiving an email within the next five (5) days with a link to take you to the survey page. I have also included the URL at the bottom of this letter which you can type in at your own convenience. Thank you for your consideration.

Sincerely,

Scott Butch,
Graduate Student
University of New Hampshire

The Effects of Organizational Culture on Campus Recreation Departments
Informed Consent Information

You have been invited to participate in a research project that will study the effects of organizational culture on campus recreation departments. This project is being conducted by Scott Butch, a Graduate Student in the Department of Recreation Management and Policy at the University of New Hampshire (UNH). The use of human subjects in this project has been approved by the UNH Institutional Review Board (IRB) for the Protection of Human Subjects in Research. Please read the following statements. If you understand them and agree to participate, please click on the link at the bottom to indicate your consent and go to the first screen of the survey.

- You should understand that participation in this project requires you to (1) provide identifiable information, and (2) respond to a few survey questions. The information acquired during this study will be stored and reported anonymously, so any identifiable information you give will only be seen by the researcher and the research committee.
- You should understand that participation in this research project requires you to answer questions about the organizational characteristics of your campus recreation department.
- You should understand that the actual survey take approximately 10 minutes to complete. You should understand that some questions in the survey will ask you about your personal feelings about your campus recreation department's dynamics that may cause you discomfort.
- Your participation is purely voluntary and you are free to withdraw your consent and discontinue participation at any time. You should understand that your responses to the survey will be reported anonymously, and will be kept confidential to the extent possible considering transmission over the Internet.
- You should understand that the results of this research may be published or reported to scientific bodies, and that any such reports or publications will be reported in a group format. Thus, no individual identity will be determinable through demographic variables such as the name of your University, University Department, location, gender or age.
- You should understand that this project is not expected to present any greater risk of your loss of personal privacy than you would encounter in everyday life when sending and/or receiving information over the Internet. You should also understand that while it is not possible to identify all risks in such research, all reasonable efforts have been undertaken to minimize any such potential risks. Further, you should understand that any form of communication over the Internet does carry a minimal risk of loss of confidentiality. You should understand that the responses that you provide will not be encrypted, but that the following steps have been taken to minimize any risk to confidentiality: (1) identifying information, such as your name, collected for compensation purposes will be stored separately from responses to the actual survey which is anonymous, (2) information provided for compensation purposes is removed daily from the server and destroyed after reported to receive compensation, and (3) ALL of the information provided will be stored in a password protected environment and that password is known only to the principal investigator, named above.
- You should understand that you are not expected to receive any direct benefits from your participation, but that the investigator hopes that the information gained here may benefit society indirectly.
- You should understand that if at any time you have questions or concerns about any procedure in this project, you may e-mail the investigator by clicking here, speak with the investigator by calling Scott Butch at 603-862-1597, or ask them at the end of the survey. You should also understand that you will be able to request a summary of the findings If you have questions about your rights as a research subject, you may contact Julie Simpson in UNH Office of Sponsored Research, 603-862-2003 or at julie.simpson@unh.edu

CLICK HERE if you have read these statements, understand them, and consent to participate.

Thank you for completing the survey!! This page will further explain the purpose of the survey research you have just participated in. After you are finished viewing this page and have submitted your answers by clicking on the button at the bottom of the page, it is recommended you exit or quit your Web browser to eliminate the possibility (which varies depending on your computer and browser) that your responses could be viewed by hitting the "back" button.
It is critical that you do not discuss or show the information on this page with any of your friends who might complete the survey or speak with someone else who might. This is to avoid invalidating the results of the study. We would like to remind you that all the data you just provided will be kept in a confidential and anonymous manner and that any identifying information you provided will destroyed immediately following this notification.
Because you have invested time in this study, you may have an interest in what we hope to find from your results. The purpose of this study is to assess the effects of organizational culture on campus recreation departments. If you have questions about this survey or would like a copy of the results available in the Spring of 2008, please click now or call me at the number below. Thank you again for your interest and participation. Now, it's time to submit your answers.

CLICK HERE if you have read this information and want to keep your responses to the survey.
CLICK HERE if you have read this information and want to remove your responses from the data file.

Principal Investigator: Scott Butch
University of New Hampshire
Department of Recreation Management and Policy
115 Hewitt Hall
UNH
Durham, NY 03820
Phone: 603-862-1597
Fax: 603-862-4801
Email: scott.butch@unh.edu

APPENDIX D

IRB Approval Letter

University *of* New Hampshire

Research Conduct and Compliance Services, Office of Sponsored Research
Service Building, 51 College Road, Durham, NH 03824-3585
Fax: 603-862-3564

30-Jan-2008

Butch, Scott
RMP, Hewitt Hall
269 Washington Street
Dover, NH 03820

IRB #: 4103
Study: A Study of Organizational Culture: The Effects on Campus Recreation in the University System
Approval Date: 30-Jan-2008

The Institutional Review Board for the Protection of Human Subjects in Research (IRB) has reviewed and approved the protocol for your study as Exempt as described in Title 45, Code of Federal Regulations (CFR), Part 46, Subsection 101(b). Approval is granted to conduct your study as described in your protocol.

Researchers who conduct studies involving human subjects have responsibilities as outlined in the attached document, *Responsibilities of Directors of Research Studies Involving Human Subjects.* (This document is also available at http://www.unh.edu/osr/compliance/irb.html.) Please read this document carefully before commencing your work involving human subjects.

Upon completion of your study, please complete the enclosed pink Exempt Study Final Report form and return it to this office along with a report of your findings.

If you have questions or concerns about your study or this approval, please feel free to contact me at 603-862-2003 or Julie.simpson@unh.edu. Please refer to the IRB # above in all correspondence related to this study. The IRB wishes you success with your research.

For the IRB,

Julie Simpson

Julie F. Simpson
Manager

cc: File
Barcelona, Robert