

# Organizational Culture At The University Level: A Study Using The OCAI Instrument

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## ABSTRACT

*Organizational culture is a primary component of functional decision making in universities. In order for administrators, faculty, and staff to effectively coordinate an efficient academic environment for health education, continuing cultural assessment and change are necessary. The purpose of this study was to explore the concept of culture at the university level. Specifically, 50 students from two health education courses at Rowan University were studied with regard to three main levels of culture with respect to the Health and Exercise Science Department: Artifacts, Espoused Values, and Basic Underlying Assumptions. The Organizational Culture Assessment Instrument (OCAI) was utilized to determine how departmental culture affects the perceptions, thoughts, and feelings of students. In this paper, results of the OCAI were examined in terms of how students rated the current departmental culture, and what they would prefer it to be in five years. It was hypothesized that student perceptions of departmental culture would positively coincide with the overall mission, goals, and objectives of the department and university.*

## LITERATURE REVIEW

In the last decade or so, organizational researchers and managers have examined the concept of culture in a variety of settings in order to develop more consistency and productivity in the workplace (Schein, 1992). Although culture can be defined in many different ways, in the context of the academic setting, culture can be referred to as the certain values that leaders try to incorporate in their organizations. According to Schein (1992), a deeper understanding of cultural issues in groups and organizations is necessary to decipher what goes on in them and also to identify what may be the priority issues for leaders and leadership. Organizational cultures are created in part by leaders, and one of the most decisive functions of leadership is the creation, management, and sometimes even destruction of culture (Schein).

Further, the Organizational Culture Assessment Instrument (OCAI) is a survey used by many leaders to produce an overall organizational culture profile (Cameron & Quinn, 1999). This instrument assesses six dimensions of organizational culture, which are based on a theoretical framework of how organizations work and the kinds of values upon which their cultures are founded (Cameron & Quinn, 1999). The OCAI identifies both the current organizational culture and the preferred, future organizational culture. This framework serves as a way to diagnose and initiate change in the organizational culture that organizations develop as they progress through their life cycles and cope with external environmental pressures (Cameron & Quinn, 1999). Each organizational culture profile reflects underlying attributes such as the management style, strategic plans, climate, reward system, leadership, and basic values of the organization (Cameron & Quinn, 1999). Culture change, therefore, requires that these various elements be identified and modified. The identification and modification processes are key challenges faced by individuals interested in initiating culture change. By administering the OCAI to university students in a Health & Exercise Science department, organizational leaders in this area can determine and consider the thoughts, feelings, and perceptions of the student population with regard to the current and preferred, future departmental/university culture. This, in turn, can serve as a basis for positive organizational change and further development and productivity.

## **Defining University Culture**

At the university level, culture can be defined as the values and beliefs of university stakeholders (i.e., administrators, faculty, students, board members and support staff), based on tradition and communicated verbally and nonverbally (Deal and Kennedy, 1982; Bartell, 2003). Values and beliefs are thought to greatly influence decision-making processes at universities (Tierney, 1988; Bartell, 2003) and shape individual and organizational behaviors. Behaviors based on underlying assumptions and beliefs are conveyed through stories, special language and institutional norms (Bartell, 2003; Bartell, 1984; Cameron & Freeman, 1991; Sporn, 1996).

University culture can also be thought of as the personality of an organization. Through observation of building architecture, campus facility maintenance, and student interactions and attire, one can tell a great deal about the university culture. University leaders are increasingly becoming more aware of the concept of culture and its significant role in university change and development.

Further, universities possess distinctive characteristics, which correlate strongly with their respective cultures (Bartell, 2003; Sporn, 1996). Unlike most business organizations, universities often possess goals that are unclear and difficult to measure (Bartell, 2003; Baldrige et al. 1978; Birnbaum 1988; Kosko, 1993). Further, the internal and external stakeholders are diverse and play extraordinary roles. Internal stakeholders range from domestic and foreign undergraduates to graduate, professional, and continuing education students. External stakeholders include those in the surrounding community, the political jurisdiction, granting and accrediting agencies, unions and the press (Bartell, 2003). In this context, the university can be thought of as an intricate web, where the role of managers is to link components of the web together (Bartell, 2003). As a web, the university can be considered interwoven and continuous, allowing communication among individuals who share responsibility and decision making power (Bartell, 2003; Mintzberg & Van der Hayden, 1999).

## **Components Of A Successful Organizational Culture**

According to the 2003 Higher Education Report, culture can lead to successful governance through trust between managers and employees. An effective university culture teaches and exhibits appropriate behavior, motivates individuals, and governs information processing; these components of culture can shape internal relations and values (ASHE, 2003). In turn, strong values can give rise to beliefs about preferred modes of conduct and desirable objectives (ASHE, 2003).

Further, as previously stated, culture can be seen as an influential framework for decision makers. The literature suggests that to be effective, leaders must possess a complete understanding of the customs and traditions, historical and philosophical evolution, formal and informal political structures, language, and myths that mold a particular organization (ASHE, 2003). This requires a vast knowledge of the assumptions, values, norms, and tangible signs (artifacts) among faculty members, staff, and administrators.

The university culture is a great tapestry, where the beliefs and practices of trustees, senior administrators, faculty members, campus community members, competitors, and society combine to fundamentally shape the effectiveness of that university. A strong and deep understanding of tradition and history is necessary for an academic social system to thrive; once accomplished, university hierarchies can comprise a shared mental model that allows all faculty and staff to give meaning to external and internal occurrences. Normally, this mental model is communicated to faculty, staff, and students either verbally or in the form of written bylaws and handbooks (ASHE, 2003). Cameron & Freeman (1991) investigated the relationship among three dimensions of organizational culture (congruence, strength, and type) and organizational effectiveness. The researchers found that the type of culture (i.e., clan, adhocracy, hierarchy, or market) was a greater determinant of organizational effectiveness than were either congruence or strength.

Further, the 2003 Higher Education Report states that an effective strategy and culture must be intact before a functional organizational mission can be defined. It further notes that the most successful campus cultures appear to be those that support both group cooperation and individual achievement (ASHE, 2003). Alternatively, those

university cultures that encourage competition rather than internal cooperation tend to exhibit dysfunctional behavior (ASHE, 2003). This type of behavior often leads to conflict between the university culture and the actions of the hierarchies, resulting in alienation, disorganization, and confusion (Schein, 1992; ASHE, 2003).

### **The Changing Role Of The Academic Middle Manager**

The university environment is a rapidly changing and demanding operation both externally and internally. Some major external or environmental components facing today's universities include mass education, state funding reduction, distance learning and capital equipment cost (Bartell, 2003). These components influence the effectiveness of academic programs, delivery systems and internal relationships. Because of the vast complexity of external factors, many university stakeholders (administrators, professors, etc.) are ineffective organizational operators. Rapid external demands often require frequent adaptation and institutional change in order to implement strategies for increased productivity (Bartell, 2003; Dill, 1982; Masland, 1985).

Further, university academia consists of many internal boundaries. A hierarchy exists between trustees and faculty and also between administrators, faculty, students, alumni, and sometimes the external community (ASHE, 2003). Specifically, these boundaries can be seen within independent universities, impeding progress toward effective governance. For example, appointment of trustees by state governors rather than by existing university boards can create a major boundary; usually, state appointed individuals are not as familiar with the university culture and tend to transcend themselves above the boundaries as compared to those appointed by university boards (ASHE, 2003). Effective boards share governance and seek to create a culture based on trust, competence, coordination, and communication (ASHE, 2003).

However, because conflict sometimes exists between faculty, administrators, and staff with regard to interpretation of underlying organizational values and belief systems, efficient resolution of problems is often hindered. Professors consider autonomy and academic freedom of high importance, while administrators place more value on systematic and procedural processes. As a result, change and innovation are often repressed or slowed (ASHE, 2003). In order to remedy this, both administrators and faculty need to find a balance between their conflicting roles and agree on shared values (ASHE).

Therefore, many challenges exist for university stakeholders needing to increase cross-boundary communication to improve organizational culture. First, trustees need to allow faculty to oversee academic policies and programs, while faculty need to acknowledge and support the board's oversight of faculty prerogatives (ASHE, 2003). Second, university presidents need to oversee both the board and faculty in order to bridge communication gaps and moderate strategic interests (ASHE). While the literature notes the importance of effective communication in establishing culture, a majority of faculty leaders and vice presidents see organizational culture as both a positive and negative in terms of shared governance (ASHE). While effective organizational culture implies that shared meaning is held by members, in order for a consensus or shared meaning to form, individuals within the university setting must clearly know their role and feel an inherent sense of obligation to that role (ASHE). Effective communication and group involvement in decision-making processes are thought to be key elements in a successful organization (ASHE).

In a 2001 study by Hellowell and Hancock, fourteen academic middle managers (at the level of Dean, Associate Dean, and Head of Department) were interviewed about their perceived roles and the concept of organizational culture and collegiality. Collegiality consists of a shared decision-making process and a set of values agreed upon by university hierarchies (California, 1996; Hellowell & Hancock, 2001). Collegial governance allows the academic community to work together to find the best answers to issues facing the university (California, 1996; Hellowell & Hancock, 2001). Overall, most participants agreed that in order for a university to flourish and positively adapt to change, collegiality is imperative. However, at the lower levels of the organization (Head of Departments), the majority of the respondents felt that collegiality was still viewed as the norm in interpersonal relations even where there were obstacles to it. As they viewed the various levels up the hierarchy, however, the interviewees felt that collegiality decreased (Hellowell & Hancock). One of the problems leading to this effect was logistics; in a large university, it is difficult for faculty academic staff to communicate and work together to design

and deliver courses when they are either scattered across a large building or in different buildings altogether (Hellawell & Hancock). Therefore, it is suggested that modifications be made to house faculty and staff of similar departments together in order to form a more cohesive and shared group consensus when dealing with change (Hellawell & Hancock). Also faculty boards, and higher hierarchical university members (Deans, Associate Deans, Boards of Trustees, etc.) should meet in a regular fashion in order to operate collegially (Hellawell & Hancock).

Because most interviewees agreed that the job of the middle manager is rapidly changing to become more complex and difficult, it is necessary that appropriate communication and stability of process are intact. As one interviewee in the study stated, “The job of the middle manager (Head of Department) has changed from what it was only five or six years ago. It bears no relationship whatsoever hardly to where I was in 1992 and if it continues at that speed you’ve got to have pretty good reflexes to stay with it. And I think that the pace and range of things that I now have to deal with are just way beyond what they were in the past. It’s a continual change and a continual attempt really to come to terms with that. And I don’t think that’s going to alter in the next few years. In fact, it’s bound to get more and more complex” (Hellawell & Hancock, 2001).

In order to deal with this complexity, Valentino (2004) suggests that both middle and senior managers incorporate Schein’s eight essential steps and Bennis’s four competencies to accomplish effective cultural change and improve communication in hierarchies. In general, the fewer hierarchical layers in an organization, the less chance for misinterpretation of the organization’s basic underlying assumptions, beliefs, and values (Valentino, 2004; Deal & Kennedy, 1999; Lando, 2000; Mintzberg, 1989; Schein, 1992).

Bennis (1989) and Schein (1999) agree and explicitly state that a compelling vision must be created. This vision must be held and articulated widely by senior managers (Schein 1999) and communicated unequivocally and in a consistent manner to all organizational members (Bennis 1989). Bennis’s Four Competencies include: Management of Attention, Management of Meaning, Management of Trust, and Management of Self (Valentino, 2004).

Management of Attention consists of managers gaining staff attention through vision creation and alignment of individuals with tasks to meet the vision. Management of Meaning describes the leader’s ability to communicate his or her vision to the organization, which entails more than speaking and writing; it is the ability of managers to consistently demonstrate the organization’s vision through their actions and behaviors (Bennis, 1989; Hennessey, 1998). Further, Management of Trust deals with the reliability and consistency demonstrated by leaders and managers (Bennis, 1989; Hennessey, 1998); leaders who demonstrate the greatest amount of trust keep their word and always let staff know where they stand (Hennessey, 1998; Valentino, 2004). Finally, Management of Self refers to knowing one’s skills and using them effectively; this is characterized by the ability of leaders to apply their strengths to compensate for organizational inconsistencies and personal weaknesses (Hennessey, 1998; Valentino, 2004). It is with Management of Self that Schein’s eight steps are integrated into the organizational framework. These steps are: create a compelling positive vision, coach and provide feedback, be a positive role model, provide opportunities for formal training, create in employees a sense that the organization’s leaders will allow them to manage and be in control of their own personal learning process, create interdepartmental groups and cross-departmental liaisons, provide support groups, and align the organizations reward and discipline systems with the new way of thinking and working (Valentino, 2004; Schein, 1999).

### **Improvement Strategies For University Culture**

During the last two decades universities, worldwide have come under increasing pressures to adapt to rapidly changing social, technological, economic and political forces (Bartell, 2003). The unprecedented growth, complexity and competitiveness of the global economy with its attendant socio-political and technological forces have been creating relentless and cumulative pressures on higher education institutions to respond to the changing environment requiring far-reaching institutional adaptations involving “significant transformation in the organization of research, training, and administration in higher education” (Bartell, 2003; Cohen, 1997).

Organizational change must include not only structures and processes but also prior cultural change. According to Bennis, Spreitzer, and Cummings (2001), one has to adhere simultaneously to the symbols of tradition and stability and revision and change to be an effective change agent. Efforts at organizational change fail on many occasions. Such failure can often be attributed to insufficient understanding of the critical role of culture within organizations, including real and perceived rewards and disincentives, formal as well as informal role distributions, and the philosophy and style of senior managers. This is one of the reasons why many strategic planners now place as much emphasis on identifying core institutional values as they do on mission and vision. A complex set of forces come together to reinforce the culture and values of an organization. They may include stories told and retold, which take on a mythological character, as well as famous or notorious personalities and dominant individuals who may have had more than their share of influence in shaping the organization's sense of self and its character (Deal & Kennedy, 1982).

A rapidly changing environment for higher education and recent developments in harnessing the potential of information and communications technology have brought the role of knowledge and information more sharply into the arena of strategic decision-making (Dhillon, 2001). Information is the lifeblood of higher education institutions. It is a resource and needs managing as such. The challenges of developing a strategy for a modular multi-campus higher education institution are considerable and require a high level of commitment from senior managers and staff at all levels of the organization (Dhillon, 2001).

Dhillon (2001) conducted a study with university staff and students to address the two fundamental questions: 1. What information do we provide for students? and 2. What information should we provide for students? Using face-to-face in-depth interviews with staff and students, postal survey to a random sample of first-year students, web responses from staff and students collected via the university home page, and focus group discussions with students, answers to these two questions were obtained. Dhillon found that although there were examples of good practice in different parts of the university, there was also a feeling of powerlessness and the existence of a 'blame' culture within the organization; different categories of staff commented on the difficulties they had in obtaining current, accurate information to carry out regular aspects of their work. There was a strong undercurrent of blaming other departments for failing to provide information. Due to the staff's lack of communication and reluctance to share knowledge, Dhillon concluded that a need exists for cultural change (Dhillon, 2001).

Further, the importance of verbal communication was emphasized by a majority of student respondents as well. In the study of student information, Dhillon (2001) found three main areas of focus necessary for effective information generation and dissemination: quality of academic information, responsibility for information, and communication of information. Analysis of the data revealed specific recommendations generated from the data: the quality of the information itself, identifying responsibility for information and establishing ownership, and communicating knowledge and information through appropriate means, including verbal, print, and electronic media (Dhillon, 2001).

As a result of the findings, staff consultation and involvement with research and development was implemented. Dhillon (2001) noted that much change occurred with the implementation, as staff began to recognize and understand their roles and responsibilities. Regarding student information, more care and commitment to students rather than assigning blame for poor information flow resulted.

Overall, Dhillon (2001) concluded that organizations need to enable their staff to capitalize on both individual and shared knowledge and information by ensuring that channels for communication are effectively in practice; this is a major challenge for achieving cultural change in the organization. The process of cultural change is crucial to developing positive attitudes toward information generation and communication and must focus on the people in the organization.

**The Rowan University Mission**

The Rowan University mission combines liberal education with professional preparation from the undergraduate to graduate levels. Rowan provides a collaborative, learning-centered environment in which highly qualified and diverse faculty, staff, and students integrate teaching, research, scholarship, creative activity, and community service (Rowan University, 2004). Through intellectual, social, and cultural contributions, the University enriches the lives of those in the campus community and surrounding region (Rowan University, 2004).

**Rowan University Strategic Objectives**

The achievement of goals and objectives at the university level is complicated due to the diversity of faculty, staff, and students. As a result, stakeholders must develop and implement many standards that encompass the variety of outcomes, consequences and outputs produced (Bartell, 2003).

As of May 20, 2004, Rowan University is operating under updated strategic objectives. Over the next five years, Rowan University plans to reaffirm its focus on learning and teaching by combining liberal education with professional preparation. The philosophy of this organization is that through challenging academic pursuits in a learning-centered environment, the ideal educational experience obtained at Rowan will develop students as whole persons intellectually, physically, emotionally, socially, and culturally (Rowan University, 2004).

Therefore, the strategic objectives of the university are to strengthen existing programs; develop plans for the addition of new academic programs that meet the needs of the region when state support and the university's budget permit; promote systematic assessment of student learning outcomes in all programs; review degree requirements both in general education and in the major to assure their effectiveness in meeting the goals of liberal education while promoting efficiency of degree completion; enhance the quality of graduate programs through a systematic review process; develop and expand professional experience opportunities for students and graduates in each discipline; and enhance and refine the academic advising process in each discipline to support student learning outcomes (Rowan University, 2004).

Regarding the Health and Exercise Science Department as well as the entire College of Education at Rowan University, educational initiatives for 2004-2005 are to strengthen existing programs; plan for the addition of new academic programs; promote systematic assessment of student learning outcomes in all programs; review degree requirements in general education and the major(s); enhance quality of graduate programs; develop and expand professional experience opportunities for students and graduates in each discipline; enhance and refine academic advising processes; and receive continued accreditation (Rowan University, 2004). Through an exploration of the current culture of the Health & Exercise Science Department at this university, one can determine whether or not the department/ university objectives are being met. This information would help administrators, faculty, and staff to effectively coordinate an efficient academic environment for health education.

**METHODOLOGY**

The study used a pretest-only survey design to assess the current and preferred organizational culture of the Health and Exercise Department at Rowan University. The Organizational Culture Assessment Inventory (OCAI) was issued to students enrolled in two health and exercise science courses at the university. The target population consisted of undergraduate students in the Health and Exercise Science Department. Inclusion criteria for participants involved students being: 1. undergraduates in the Health and Exercise Science Department at Rowan University, and 2. enrolled in one of the two courses taught by the researcher. The Seton Hall University Institutional Review Board approved the research proposal for this study. Fifty subjects were included in the study sample.

**Subjects**

Subjects included 50 undergraduate students in the Health & Exercise Science Department at Rowan University. All students in the target population at the selected university who met the inclusion criteria were invited to participate in the study. Students were identified from the class lists of two health education classes taught by the researcher. Initially, permission to conduct the study was obtained from the Department Chair and the Rowan University IRB before students were invited to participate in the study. Once permission was granted, a research assistant administered to participating students a letter of invitation that explained the study. Consent from the student to participate was demonstrated by the student voluntarily completing the survey and putting it into the locked survey collection box. Confidentiality and other rights of students consenting to participate were protected in accordance with IRB requirements.

**Study Site**

Rowan University, NJ was the site of this study. The researcher personally spoke with the Chair of the Department of Health & Exercise Science to discuss the study rationale and preliminary study procedures. An official departmental letter of invitation detailing the study and a copy of the OCAI survey instrument were also given to the Department Chair. The participating students were from two health and exercise science courses (General Health & Wellness; Consumer Health) taught by the researcher in Esbjornson Gymnasium.

**Instrumentation**

The Organizational Culture Assessment Instrument (OCAI) was the survey used in this study. The OCAI has been used in more than a thousand organizations and has been found to predict organizational performance (Cameron & Quinn, 1999). Its intent is to first help identify the organization's current culture and then identify the culture organization members think should be developed to match the future demands of the environment and challenges to be faced (Cameron & Quinn, 1999).

The OCAI consists of six questions (i.e., Dominant Characteristics, Organizational Leadership, Management of Employees, Organizational Glue, Strategic Emphases, Criteria of Success). Each question has four alternatives (A=Clan, B=Adhocracy, C=Market, D=Hierarchy). Individuals completing the OCAI are asked to divide 100 points among the four alternatives, depending on the extent to which each alternative is similar to the organization being assessed. A higher number of points are to be given to the alternative that is most similar to the organization in question. Results of the OCAI survey are obtained by computing the average of the response scores for each alternative. Once scores are determined for all alternatives in both the Now and Preferred columns, they can be plotted to draw a picture of the Health and Exercise Science Departmental Culture. The plot serves as an organizational culture profile and is an important step in initiating a culture change strategy (Cameron & Quinn, 1999).

**Four Major Culture Types (Alternatives) Of The OCAI***The Hierarchy Culture*

The Hierarchy Culture emphasizes an environment that is relatively stable, where tasks and functions can be integrated and coordinated, uniformity in products and services can be maintained, and workers and jobs are under control (Cameron & Quinn, 1999). In this culture, success is defined by incorporation of decision-makers of clear authority, standardized rules and procedures, and control and accountability mechanisms (Cameron & Quinn, 1999).

The organizational culture associated with the hierarchy culture and assessed in the OCAI consists of a formal and structured workplace (Cameron & Quinn, 1999). Individuals follow procedures, and leaders effectively coordinate and organize activity to maintain a smooth-running organization (Cameron & Quinn, 1999). Stability, predictability, and efficiency characterize the long-term concerns of this organization (Cameron & Quinn, 1999).

### *The Market Culture*

In the context of the OCAI, *market* refers to a type of organization functioning as a market itself (Cameron & Quinn, 1999). This organization is primarily concerned with external environment, as it focuses on transactions with such externalities as suppliers, customers, contractors, licensees, unions, regulators, etc. (Cameron & Quinn, 1999). The market operates primarily through monetary exchange, as competitiveness and productivity in these organizations are dependent on strong external positioning and control (Cameron & Quinn, 1999).

### *The Clan Culture*

The clan culture represents the third form of organization, and is similar to a family-type organization. A clan culture emphasizes teamwork and employee development, as customers are considered partners (Cameron & Quinn, 1999). This form of organization promotes a humane work environment, with the managerial goal of empowering employees by gaining their participation, commitment, and loyalty (Cameron & Quinn, 1999).

The clan culture, as assessed in the OCAI, is described as “a friendly place to work where people share a lot of themselves” (Cameron & Quinn, 1999). Leaders are considered mentors or parent figures, as loyalty, tradition, and commitment are emphasized (Cameron & Quinn, 1999). Through teamwork, participation, and consensus, a successful internal climate with a concern for people can be achieved (Cameron & Quinn, 1999).

### *The Adhocracy Culture*

Adhocracy is based on the term *ad hoc*, which refers to a temporary, specialized, dynamic unit (Cameron & Quinn, 1999). An organization possessing adhocracy can be seen in industries such as aerospace, software development, think-tank consulting, and filmmaking (Cameron & Quinn, 1999). The goal of these organizations is to be innovative and adaptable, as there is no form of centralized power or authority relationships (Cameron & Quinn, 1999). Within an adhocracy, “power flows from individual to individual or from task team to task team depending on what problem is being addressed at the time” (Cameron & Quinn, 1999). Therefore, individuals in an adhocracy are often unique risk takers who anticipate and understand change (Cameron & Quinn, 1999).

## **Sampling**

In this study, convenience sampling was used to identify undergraduate students for participation. Each student from the class lists of two health and exercise science courses was given the opportunity to complete the OCAI survey. Samples of convenience frequently allow the investigator the advantage of using intact groups of subjects (i.e. students from two health and exercise science courses taught by the researcher). Also, convenience sampling permits the investigator to collect a large amount of information, from a large number of people, and in a relatively small amount of time. Participating individuals had to be:

1. an undergraduate student in the Health and Exercise Science Department at Rowan University.
2. enrolled in one of the two courses taught by the researcher.

## **Data Collection Procedures**

The research strategy used in this study was a self-administered paper-and-pencil survey that took approximately 15-20 minutes to complete. Administering surveys to groups is relatively low in cost, fast, and may be supervised or unsupervised. Permission to administer the OCAI survey to students enrolled in the health education courses was obtained from the Department Chair as well as the Rowan University IRB prior to survey distribution. Once permission was granted, students were given the opportunity to voluntarily complete the anonymous survey. A research assistant was recruited to administer the survey to participants in order to ensure anonymity and prevent possible coercion. The research assistant completed IRB training and was given an oral script for explanation of the purpose and rationale of the study to students.



Students were informed that participation was completely voluntary, and were given the option to leave the classroom before survey administration. The research assistant specifically stated that there would be no grade or reward associated with survey participation, and that there would be no punishment for choosing not to participate. Participating students were then given an official letter of invitation, which explained the study in detail. After reviewing the letter of invitation, students received the survey. Once surveys were completed, students placed them in a locked box with an open slot. When all surveys were secured in the box, the research assistant collected the box and returned it to the researcher, who remained in the departmental office during the survey process. All information collected in the study was confidential and securely stored in a locked cabinet to which only the researcher had access. The information from the anonymous surveys was analyzed in aggregate for tabulation of results.

### **Data Analysis Methods**

Data obtained from each of the 50 submitted surveys were analyzed according to the OCAI scoring method. Average scores were computed for each of the letters (A, B, C, D) in the Now and Preferred columns. For example, all scores for A responses in the Now column were added together and then divided by 6. The same process was repeated for all B, C, and D responses in both the Now and Preferred columns. Each of the average A, B, C, and D scores related to a type of organizational culture alternative (A=Clan, B=Adhocracy, C=Market, D=Hierarchy). The scores were then plotted to draw a picture of the Health and Exercise Science Departmental Culture. The plot served as an organizational culture profile and is an important step in initiating a culture change strategy (Cameron & Quinn, 1999). Through assessment of this profile, one could determine the perceptions, thoughts, and feelings of students with regard to departmental culture. Also, one could conclude if student perceptions of departmental culture positively coincide with the overall mission, goals, and objectives of the department and university.

## **RESULTS**

### **Study Sample**

The study sample consisted of 50 subjects. Each subject was an undergraduate student at Rowan University participating in a Health Education class who voluntarily agreed to participate prior to survey administration. Administration of the survey was performed during a class period by a research assistant. This method of survey collection was done in order to ensure subject anonymity and also to prevent coercion of participants.

**Table I**

<i>Descriptive Statistics</i>					
Lettered Category	N	Minimum	Maximum	Mean	Std. Deviation
A Now	50	5.00	66.67	29.0916	11.7215
B Now	50	0.00	45.83	22.2298	7.8481
C Now	50	0.00	43.30	22.5346	8.7557
D Now	50	0.00	50.00	24.3804	9.0671
A Preferred	50	20.00	100.00	37.2384	19.1930
B Preferred	50	0.00	31.67	20.6712	6.8352
C Preferred	50	0.00	35.00	20.3394	8.3121
D Preferred	50	0.00	37.50	20.9550	8.0992
Valid N (listwise)	50				

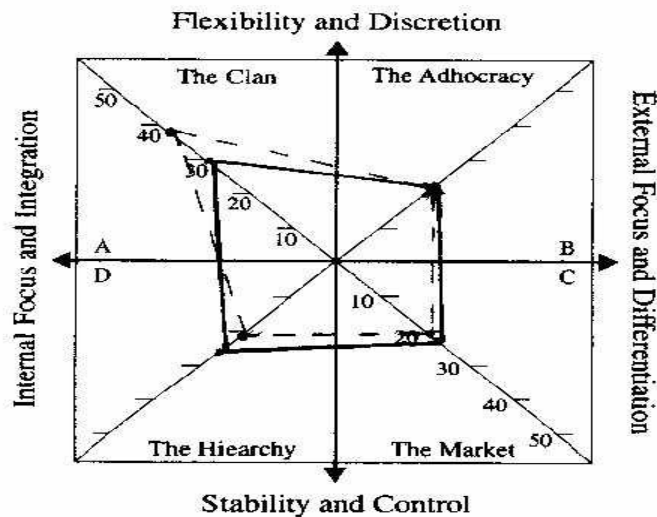


Figure 1

The Organizational Culture Profile Plot. The graphical interpretation of the results indicates that The Clan Culture describes the current and preferred organizational culture of the Health & Exercise Science Department at Rowan University.

### Analysis Of Results

When constructing the Rowan University organizational culture profile, the mean scores of the lettered cultural alternatives (A=Clan, B=Adhocracy, C=Market, D=Hierarchy) presented in Table I were illustrated on a four-quadrant plot. Average scores were computed and graphed for each of the letters (A, B, C, D) in the Now and Preferred columns of the OCAI survey distributed to the 50 participating students. As stated previously, the plot serves as an organizational culture profile and is an important step in initiating a culture change strategy (Cameron & Quinn, 1999). Through assessment of this profile, the researcher determined that the Clan Culture is the current and preferred organizational culture of the Health & Exercise Science Department at Rowan University. As interpreted through Cameron and Quinn (1999), the Clan Culture description is indicative of students feeling that the department is a very friendly place, where the professors share a lot of themselves. The leaders, or professors and department heads, are considered by students to be mentors or possibly parent figures. In the Clan Culture, the organization is held together by loyalty or tradition, and commitment is high. This implies that the department is currently achieving its objective of supporting student learning outcomes through the advising process. Through the use of the mentor approach, faculty members are collectively exhibiting the clan culture in this department, which is what the students prefer.

Further, results of the organizational profile also indicate that the department emphasizes the long-term benefit of human resources development and attaches great importance to cohesion and morale (Cameron & Quinn, 1999). Departmental and University objectives include developing and expanding professional experience opportunities for students and graduates in each discipline in order to increase people/communication skills and promote outside professional connections (Rowan University, 2004); therefore, provision of human resource development is being supported by the department.

In terms of success, the clan culture defines this in terms of sensitivity to customers and concern for people, with the organization placing a premium on teamwork, participation, and consensus (Cameron & Quinn, 1999). Student rating of the department as a Clan Culture indicates that faculty/staff are achieving the primary mission of the university, which is to provide a collaborative, learning-centered environment in which highly qualified and diverse faculty, staff, and students integrate teaching, research, scholarship, creative activity, and community service (Rowan University, 2004).

## **CONCLUSION**

In this study, we concluded that the Clan Culture is the current and preferred culture of the surveyed students in the Rowan University Health and Exercise Science Department. According to the students surveyed, the department exhibits a familial feeling, where faculty are seen as mentors or even parental figures. Commitment and cohesion are the two dominant characteristics of the department, as there is much emphasis on internal maintenance with flexibility, concern for people, and sensitivity to students (Cameron & Quinn, 1999).

Additionally, the graphic plot of the organizational culture of surveyed students indicated that the Clan Culture is the preferred culture that the students would like to see in the next five years. The results yielded an overall consensus that students feel faculty/staff are meeting departmental and university goals and objectives, and want that to continue and improve in the future.

This study identified the organizational culture of a university health and exercise science department in order to determine if mission, goals, and strategic objectives were being met. The study validates the need for further study on organizational culture at the university level. Future research may involve surveying the perceptions of more students from several departmental classes or surveying faculty/staff members in order to increase both the internal and external validity of the results in this study.

## **DISCUSSION**

Faculty, staff, and administrators in Health Education require a valid scientific knowledge base if they are to continue effectively educating and developing future professionals. The current study adds to this knowledge base, as the responses of the students in this study to the survey items presented have provided scientific data on the current and preferred culture of the Rowan University Health and exercise Science Department.

The present study may also provide a basis for future studies. It suggests the need for additional research on university cultures. These studies may need to incorporate methodologies and sample sizes beyond the scope of this study. The following additional studies are suggested:

- (1) Surveying of all students in the Health and Exercise Science Department
- (2) Surveying of Departmental Faculty, Staff, and Administrators
- (3) Nationwide Surveying of Health and Exercise Science Departments

The present study did not examine all students in the Health and Exercise Science Department at Rowan University. Therefore, an increased sample size would strengthen the validity of the results. By broadening the scope of the current study to include all departmental students, one could obtain a more collective view on the perceptions of the health majors vs. non-majors, and compare cultural preferences.

Further, departmental faculty, staff, and administrators could also complete the OCAI survey to determine their perceptions of the current and preferred culture. Assessment of faculty, etc. could add to the strength of the current study as well as serve as a template for departmental evaluation and improvement. Similarly, nationwide surveying of health and exercise science departments using the OCAI could significantly add to the health education literature on university organizational assessment, as there is currently very little information on this subject. A study of this type could also help facilitate the development of a generalizable, preferred organizational culture in health and exercise science departments that would foster the most effective environment for student success.

## LIMITATIONS OF THE STUDY

The purpose of this study was to explore the concept of culture at the university level. Limitations of the study design and of the data analyses caution against making definite conclusions. Some important limitations would include honesty of participants with survey responses and the generalizability of the results.

Regarding honesty of participants, one always must consider this when administering surveys in an academic environment. Students may not have felt that they could be completely honest about the current departmental culture due to fear of who would possibly see the results, and whether it would affect their academic status in some way. Although it was explained that the survey was completely anonymous and there would be no negative academic outcomes, this still may have influenced student responses to some degree.

Limitations also exist with regard to external validity. For example, results from this study may not be generalizable to all other students in the Rowan University Health and Exercise Science Department due to the fact that the students surveyed may not be representative of all students. Also, generalizability may be difficult due to the possibility of the Hawthorne effect (when students answer differently than they normally would simply because they know that they are part of a study).

## REFERENCES

- (1) Baldrige, J.V., Curtis, D.V., Ecker, G., & Riley, G.L. (1978). *Policy Making and Effective Leadership*. San Francisco: Jossey – Bass.
- (2) Bartell, M. (2003). Internationalization of universities: a university culture-based framework. *Higher Education*, 45, 43-70.
- (3) Bartell, M. (1984). A bibliographic introduction and review of some factors influencing the effectiveness of research and development teams: the agricultural context. *Agricultural Administration*, 16, 113-129.
- (4) Bennis, W. (1989). *Why Leaders Can't Lead*. San Francisco: Jossey-Bass.
- (5) Bennis, W.G., Spreitzer, G.M. and Cummings, T. (2001). *The Future of Leadership*. John Wiley & Sons, Inc.
- (6) Birnbaum, R. (1988). *How Colleges Work: The Cybernetics of Academic Organization and Leadership*. San Francisco: Jossey-Bass.
- (7) Cameron, K.S. & Quinn, R.E. (1999). *Diagnosing and Changing Organizational Culture Based on the Competing Values Framework*. Addison-Wesley Publishing Company, Inc.
- (8) Cameron, K.S. & Freeman, S.J. (1991). Cultural congruence, strength and type: relationships to effectiveness. *Research in Organizational Change and Development*, 5, 23-58.
- (9) California (1996). Policy statement on collegiality. Manual of California State University, Sacramento. Available online: <http://www.csus.edu/admbus/umanual/UMCO2250.htm>
- (10) Cohen, D.W. (1997). Understanding the globalization of scholarship, in Peterson, M.W., Dill, D.D., Mets, L.A. and Associates (eds.), *Planning and Management for a Changing Environment: A Handbook on Redesigning Postsecondary Institutions*. San Francisco: Jossey-Bass, 548-562.
- (11) Deal, T. & Kennedy, A. (1982). *Corporate Culture: The Rites and Rituals of Corporate Life*. Reading, PA: Addison-Wesley.
- (12) Deal, T. & Kennedy, A. (1999). *The New Corporate Culture: Revitalizing the Workplace After Downsizing, Mergers, and Reengineering*. Reading, MA: Perseus Books.

- (13) Dhillon, J.K. (2001). Challenges and strategies for improving the quality of information in a university setting: a case study. *Total Quality Management*, 12(2), 167-177.
- (14) Dill, D.D. (1982). The management of academic culture: notes on the management of meaning and social integration. *Higher Education*, 11, 303-320.
- (15) Hellawell, D. & Hancock, N. (2001). A case study of the changing role of the academic middle manager in higher education: between hierarchical control and collegiality? *Research Papers in Education*, 16(2), 183-197.
- (16) Hennessey, J. (1998). Reinventing government: does leadership make the difference? *Public Administration Review*, 58(6), 522-532.
- (17) Kosko, B. (1993). *Fuzzy Thinking: The New Science of Fuzzy Logic*. New York: Hyperion.
- (18) Lando, M. (2000). The framework for a successful merger. *Healthcare Executive*, 15(3), 7-11.
- (19) Masland, A.T. (1985). Organizational culture in the study of higher education. *Review of Higher Education*, 8, 157-168.
- (20) Mintzberg, H. (1989). *Mintzberg on Management*. New York: The Free Press.
- (21) Mintzberg, H. & Van der Heyden, L. (1999). Organigraphs: drawing how companies really work. *Harvard Business Review*, 77, 87-94.
- (22) Rowan University. (2004). Strategic Objectives for Rowan University 2004-2009. Available on-line: <http://www.rowan.edu>.
- (23) Schein, E.H. (1992). *Organizational culture and Leadership* (2<sup>nd</sup> ed.). John Wiley & Sons, Inc.
- (24) Schein, E.H. (1999). *The Corporate Culture Survival Guide: Sense and Nonsense About Culture*. San Francisco: Jossey-Bass.
- (25) Sporn, B. (1999). Managing university culture: an analysis of the relationship between institutional culture and management approaches. *Higher Education*, 32, 41-61.
- (26) Structural and Cultural Elements of Governance. (2003). *ASHE-ERIC Higher Education Report*, 30(1), 41-49.
- (27) Tierney, W.G. (1988). Organizational culture in higher education: defining the essentials. *Journal of Higher Education*, 95, 2-21.
- (28) Valentino, C.L. (2004). The role of middle managers in the transmission and integration of organizational culture. *Journal of Healthcare Management*, 49(6), 393-404.

**NOTES**