

# ***Organizational Culture and Academic Staff Job Satisfaction at St. Mary's University College***

***By***

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## **Abstract**

*The main purpose of this study was to examine and to gain a better appreciation of the relationships between the pattern of organizational culture and employees' job satisfaction among academic staff in a private higher educational institution context. A census of all academic staff, who were working in the 2010-2011 Academic Year in St. Mary's University College, were taken for the study from the study Organization. Data regarding organizational culture and job satisfaction was collected using the OCAI (Cameron & Quinn, 1999), and Minnesota Job Satisfaction Questionnaire (Weiss, Davis, England, & Lofquist, 1967) respectively. The data was then analyzed by using the latest version of statistical package for the social sciences (SPSS) software. Two types of statistics, namely, descriptive and inferential statistics were employed. While the research was expected to leverage on such descriptive statistical tools as frequency, mean, percentile and standard deviation, it also applied inferential statistics through analysis of variance (ANOVA), spearman rho correlations and ordinal regression model analysis. The findings of the present study revealed that SMUC tended to emphasize hierarchy culture. The results of this study also suggest that the hierarchy culture has a negative significant influence on overall teacher's job satisfaction and satisfaction with intrinsic, extrinsic and general satisfaction facets. Thus, since hierarchy culture negatively affects morale of instructors, it is then recommended that the University College should diagnose and change its organizational culture as it is desired by its staff. The desired culture type in most universities is clan culture which is characterized by people-orientation, encouragement, equitability, trust, and by allowing of greater academic freedom. Underpinned by a model adapted to the research purpose, the study complemented not only to the existing knowledge in the area, but it also contributed to the fact that there was no research made in non-western countries like Ethiopia over this interesting and potentially rich area.*

## **Background of the Study**

Job satisfaction of faculty is an important issue for institutions of higher education aiming for excellence and diversity. However, an essential first step in understanding this phenomenon is to examine what contributes to career satisfaction for academicians. Universities attempt to hire the highest quality faculty they can, but they are not always successful at retaining them. Furthermore, many organizations in Africa are plagued by poor performance, high turnover rates, and low productivity, largely due to the negative work attitudes of the workforce (Okpara, 2010). It is believed that organizational culture could somehow affect the level of job satisfaction. As a result of the importance of organizational culture and its effects on organizational outcomes (such as organizational commitment, job satisfaction and employee performance), it is currently one of the newest research topics in both academic research and the reputable business journals.

Research has confirmed, Yusof & Ali, 2000 as cited in Bashayreh (2009), that organizational culture is not only able to change, guide and display but also gives significant contributions by influencing the thought, feeling, interacting and performance in the organization. Although ongoing research is still required, employees' attitudes have been found to interact with environmental factors that influence job satisfaction. Job satisfaction is important to investigate because it is related to employee's turnover, and time missed.

Organizational culture stands as the center from which all other factors of human resource management derive (Bashayreh, 2009). It is believed that culture influences individuals' attitudes towards outcomes such as commitment, motivation, morale, and satisfaction. Moreover, Cameroon and Quinn (2006) indicated that clan-type cultures are most effective in domains

of performance relating to morale, satisfaction, internal communication and supportiveness.

Lund (2003) had found that job satisfaction was positively related to clan and adhocracy cultures and negatively related to market and hierarchy cultures. In addition, Choi, Martin, and Park (2008) found that the clan culture is the most desired cultural type to increase employees' job satisfaction as well as motivation for achieving organizational success.

Despite the existence of considerable body of organizational literature that has been conducted to examine the relationship between corporate culture and employees' satisfaction in various countries as well as industries (e.g., Lund, 2003; Bashayreh, 2009; Choi et al., 2008), there is no literature that recognizes organizational culture studies within the context of either private or public higher learning institutions in Ethiopia, particularly on how job satisfaction amongst employees is affected by organizational culture patterns.

## **Background of the Organization**

### **Brief History**

St. Mary's University College (SMCU) is an outgrowth of St. Mary's Language School and established in 1998 under St. Mary's General Education Development PLC with its Head Office in Awassa and a branch in Addis Ababa. Then, the College moved its Head Office from Awassa to Addis Ababa, Lideta Campus, in 1999 and opened the Department of Secretarial Science and Office Management (SSOM). In September 2002, the Institution made stride by employing new staff members and renting a new building at Maichew Square, which is located beside the Wabe-Shebelle

Hotel, where its current Head Office is located. The Mexico (Main) Campus, which houses the various academic and administrative offices of the University College, including the Office of the President, the Academic Vice President, and the Administrative Vice President, is located adjacent to the Wabe-Shebelle Hotel. SMUC is constructing its own building in the compound of the Distance Education Division. In the University College, it was planned to carry out the following activities to be carried out in the coming five years.

### **Programs in SMUC**

SMUC offers undergraduate and joint graduate programmes in many fields of studies. Excluding the Distance Education Division, the University College offers courses in ten departments organized under four faculties comprising the Faculties of Business, Law, Informatics and Education. These courses are run under two categories of programs, i.e. the Regular Program and the Extension Program. Students are trained in the specified levels: the certificate (10+1 and 10+2), the diploma (10+3) and the degree programs. In its College of Open and Distance Learning (CODL), SMUC runs both undergraduate and graduate programs in more than 20 fields of studies in 60 Coordinating Centers in different regions. The CODL trains students at both the undergraduate level (10+1 and 10+2) Certificate, 10+3 Diploma, and BA Degree) and post-graduate level (MA Degree). The postgraduate program is run in partnership with the Indira Gandhi National Open University (IGNOU).

## **Statement of the Problem**

There has been a long debate amongst researchers regarding the relationship between organizational culture and job satisfaction. Many researchers have found supporting evidence about the relationship between these two concepts (Odom et al., 1990; McKinnon et al., 2003; Lund, 2003; Sempene et al., 2002; Bashayreh, 2009; Choi et al., 2008; Shing, 2008 Yiing, 2008). With costs of human resource development are still skyrocketing, erosion of employees' loyalty to firms costing a lot in replacement and retraining. In addition, organizational secrets lost due to sabotage, defections, lawsuits and other forms of retribution by disaffected employees is affecting organizational performance (Cameron & Quinn, 1999). Furthermore, culture change, at its root, is intimately tied to individual change. Unless managers are willing to commit to personal change, the organization's culture will remain recalcitrant. As a result, without another kind of fundamental change, namely, a change in organizational culture, there is little hope of enduring improvement in organizational performance. While the tools and techniques may be at hand and the change strategy implemented with vigor, many efforts to improve organizational performance fail because of the fundamental culture of the organization - values, ways of thinking, managerial styles, paradigms, and approaches to problem solving - remains the same (Cameron & Quinn, 1999).

During the last two decades, universities worldwide have come under increasing pressures to adapt to rapidly changing social, technological, economic and political forces emanating from the immediate as well as from the broader post-industrial external environment. As noted by Wondesson Tamrat (2003), the Ethiopian higher education system has witnessed a remarkable change unprecedented in its history in the form of the

unanticipated emergence and expansion of private higher education institutions (PHEIs). St Mary's University College is one of those institutions which are found abreast of these changes. One way of embracing these changes is through the change of its rooted culture by the application of important suggestions from research findings in the area.

Previous studies which attempted to link organizational culture and employees' work outcomes (Chapman & Al-Khawaldeh, 2002 cited in Bashayreh, 2009) had limited outcomes in scope and were often affected by methodological constraints. In order to address the aforesaid limitations, this study attempts to contribute to the literature to fill the gap between the clear need for an analytical study that examines recognizable organizational culture pattern and facets of job satisfaction by using appropriate ordinal regression model and other statistical techniques. It is noted that even within the literature which are found from various databases, to much lesser degree, there are no pertinent research findings that focused on the African setting, and there are no research findings that are relevant or specific to the Ethiopian higher educational institutions. Hence, this study intended to contribute to the existing knowledge base, particularly within settings of the private higher education institutions from an Ethiopian perspective, namely, St Mary's University College (SMUC). Therefore, the study aimed at addressing the following basic research questions:

1. What is the dominant organizational culture of SMUC as it is measured by OCAI?

2. What level of job satisfaction do instructors perceive with each of the twenty job facets as measured by the Minnesota Satisfaction Questionnaire; its short form (MSQ)?
3. Is there statistically significant relationship between job satisfaction and organizational culture scores at SMUC? and
4. Which type(s) of organizational culture contribute(s) most to employees' job satisfaction at SMUC?

### **Definition of Terms**

- **Competing Values Framework or CVF** – is the framework compiled by Quinn and Rohrbaugh in 1983 and later perfected by Cameron and Quinn 1999; 2006 to understand and to organize the four organizational culture types.
- **Culture Types** – refer to the four categories identified from extensive research on effective organizations by Cameron and Quinn within the Competing Values Framework which is composed of clan, adhocracy, hierarchy, and market.
- **Extrinsic job satisfaction** is measured by the following facets of the MSQ: advancement, compensation, policies and practices, recognition, supervision-human relations and supervision-technical.
- **General job satisfaction** is measured by the following two facets of the MSQ: coworkers and working conditions.
- **Intrinsic job satisfaction** is measured by the following facets of the MSQ: ability utilization, achievement, activity, creativity, independence, moral values, responsibility, security, social service, social status, and variety.

- **Job satisfaction** is a function of the perceived relationship between what one wants from one's job and what one perceives it as offering (Locke, 1969).
- **Minnesota Satisfaction Questionnaire (MSQ)** - is a likert scale type instrument which was designed by Weiss, Dawis, England, and Lofquist (1967) for measuring job satisfaction for 20 facets of job.
- **Organizational culture** – is defined as “a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (Schein, 1993).
- **Organizational Culture Assessment Instrument (OCAI)** – is an instrument based on the Competing Values Framework used to identify the organizational culture profile based on the core values, assumptions, interpretations, and approaches that characterize organizations (Cameron & Quinn, 1999; 2006).
- **Overall job satisfaction** is an overall indicator and is measured by the following facets of the MSQ: ability utilization, achievement, activity, advancement, authority, compensation, coworkers, creativity, independence, moral values, policies and practices, recognition, responsibility, security, social service, social status, supervision-human relations, supervision-technical, variety, and working conditions.
- **Instructor/Teacher**— is any position of academic staff at St Mary's University College, including all individuals holding the title of graduate assistant, assistant lecturer, lecturer, assistant professor, associate professor or professor.

## **The Concept of Organizational Culture**

The term organizational culture has been defined in a variety of ways by management authors. Most of the definitions include such elements as shared values, beliefs, assumptions, patterns of relationships, and behaviours that guide the members of an organization. The term 'organizational culture' itself is used to differentiate the culture of the overall organization from the values, preferences, or inclinations of individuals (personal culture) or from the language, norms, or philosophies of a nation or civilization (societal culture) (Vogds, 2004).

There are over 150 definitions of culture that have been identified so far (Kroeber & Kluckhohn, 1952 cited in Cameron, 2004, p.3). However, the two main disciplinary foundations of organizational culture are the so called sociological (e.g., organizations have cultures) and anthropological (e.g., organizations are cultures). In each of these disciplines, there are two different approaches to culture that have been developed: a functional approach (e.g., culture comes out of collective behaviour) and a semiotic approach (e.g., culture dwells in individual interpretations and cognitions). The main differences are found between cultures as an attribute possessed by organizations versus culture as a metaphor for describing what organizations are. The former approach presumes that researchers and managers can identify differences among organizational cultures, can change cultures, and can empirically measure cultures. Conversely, the latter one assumes that nothing exists in organizations except culture, and one encounters culture anytime one rubs up against any organizational phenomena. In addition to this, culture is a potential predictor of other organizational outcomes (e.g., effectiveness) in the former perspective, whereas it is a concept to be

explained independent of any other phenomenon in the latter perspective (Cameron, 2004, p.3). In general, Yiing (2008) explains:

*The organizational culture is likened to a double-edged sword. A culture creates distinctions between one organization and others, conveys a sense of identity for its members, facilitates commitment towards the organization's goals, enhances the stability of the social system, reduces ambiguity, and serves as a control mechanism that guides and shapes the attitudes and behavior of employees. However, a culture can also become a liability when it becomes too strongly entrenched within the norms, values and mindsets of the employees and resist changes – a culture can become a barrier to change, diversity and other transformations required for the organization to adapt in today's dynamic, globalized business environment (p.11-12).*

According to Cameron and Quinn (1999), it was not until the beginning of the 1980s that organizational scholars had begun paying attention to the concept of culture. Further they expound the reason why culture is one of the few areas, in fact, where organizational scholars led practicing managers in identifying a crucial factor affecting organizational performance. They stated organizational culture had been ignored as an important factor in accounting for organizational performance because of the reasons states under.

First, it encompasses the taken-for-granted values, underlying assumptions, expectations, collective memories, and definitions present in an organization. Second, it represents “how things are around here.” It reflects the prevailing ideology that people carry inside their heads as well as it conveys a sense of identity to employees by providing unwritten and often unspoken guidelines for how to go through in the organization to enhance the stability of the social system that they have experienced. Third, people are unaware of their culture until it is challenged, until they experience a new culture, or until it is made overt and explicit through, for example, a framework or model.

Therefore, the above-stated factors make it difficult to be detectable (Cameron & Quinn, 1999).

Conversely, since the aforesaid period for some two decades, organizational culture has been an important theme in management and business research. One rationale for this is that organizational culture has the potential to affect a range of organizationally and individually desired outcomes (Chow et al., 2001).

### **Typologies of Organizational Culture**

As culture is extremely broad and inclusive in scope, there are so many dimensions (typologies) that have been proposed in organizational culture studies. According to Cameron & Quinn (1999), culture comprises a complex, interrelated, comprehensive, and ambiguous set of factors. Consequently, this set of factors makes it impossible to ever include every relevant factor in diagnosing and assessing organizational culture. Furthermore, the same authors point out that there has been one more element which can always be argued to be relevant. This is to determine the most important dimensions on which to focus. Therefore, it is important to use an underlying framework, a theoretical foundation that can narrow and focus the search for key cultural dimensions (Cameron & Quinn, 1999).

Yiing (2008) has proposed a number of typologies for analyzing organizational culture in his review of a number of past research literature. His study was based on Wallach's (1983) three types of culture identifications, namely, bureaucratic, innovative and supportive cultures. He also cited another typology example by Goffee and Jones (1998) who had categorized organizational culture into four main types based on two

dimensions: sociability and solidarity. The four types of culture identified by Goffee and Jones are communal, fragmented, networked and mercenary culture types. Furthermore, Bass (1991) and Bass and Avolio (1993 cited in Mullins, 2007, p.65), identified cultural theory by describing culture as transformational or transactional.

In 1999, Cameron and Quinn developed an approach to studying culture which they referred to as “competing values framework”. The Competing Values Framework (CVF) is one of the most influential and extensively used models in the area of organizational culture research (Wu & Yu, 2009). Compared with other models and scales, the CVF and its matched scale OCAI have better validity and reliability and are very convenient for practical operations. There are two value dimensions which gives meaning to CVF. The first value dimension is related to organizational focus (from an internal, micro emphasis on the well-being and development of people in the organization to an external, macro emphasis on the well-being and development of the organization itself). The second value dimension is related to organizational structure (from an emphasis on stability to an emphasis on flexibility). The value dimensions are summarized by the following table 1.

**Table 1 - Summary of value dimensions of the competing value framework (CVF)**

	Flexibility and discretion		
Internal focus and integration	<b>Clan</b>	<b>Adhocracy</b>	External focus and differentiation
	<b>Hierarchy</b>	<b>Market</b>	
	Stability and control		

Source: Adapted from Yu and Wi, (2009), *A review of study on the Competing Values Framework*, 37-42.

Cameron and Quinn (1999) further give the implications of the four types of organizational cultural types in CVF as follows:

### **Hierarchy Culture**

The hierarchy culture is based on Weber's theory of bureaucracy and values tradition, consistency, cooperation, and conformity. The Hierarchy Model focuses more on internal than external issues and values stability and control over flexibility and discretion. This is the traditional command and control model of organizations. This works well if the goal is efficiency and the organizational environment is stable and simple and if there are very few changes in customers, customer preferences, competition, technology, etc.

Before the middle of the twentieth century, Weber's hierarchy or bureaucracy was considered to be the ideal form of organization by nearly all management and organization scholars because it led to stable, efficient, highly consistent products and services. since the environment of hierarchy

culture are relatively stable, tasks and functions could be integrated and coordinated, uniformity in products and services was maintained, and workers and jobs were under control. Clear lines of decision-making authority, standardized rules and procedures, and control and accountability mechanisms were valued as the keys to success.

Large organizations and government agencies are generally dominated by a hierarchy culture, as evidenced by large numbers of standardized procedures, multiple hierarchical levels and an emphasis on rule reinforcement. Even in small organizations, a hierarchy culture can dominate.

### **Market Culture**

The market culture also values stability and control but focuses more on external (market) rather than internal issues. This culture tends to view the external environment as threatening and seeks to identify threats and opportunities as it seeks competitive advantage and profits.

It is important to keep in my mind that the term market is not synonymous with the marketing function or with consumers in the marketplace. Rather, it refers to a type of organization that functions as a market itself. It is oriented toward the external environment instead of internal affairs. It focused on transactions with (mainly) external constituencies such as suppliers, customers, contractors, licensees, unions, and regulators.

A market culture, as assessed in the OCAI, is a results-oriented workplace. Leaders are hard-driving producers and competitors. They are tough and demanding. The glue that holds the organization together is an emphasis on winning. The long-term concern is on competitive actions and achieving

stretch goals and targets. Success is defined in terms of market share and penetration. Outpacing the competition and market leadership are important.

### **Clan Culture**

The clan culture focuses on internal issues and values flexibility and discretion rather than seeking stability and control. The goal is to manage the environment through teamwork, participation, and consensus.

Shared values and goals, cohesion, participation, individuality, and a sense of “we-ness” permeated clan-type firms. They seemed more like extended families than economic entities. Instead of the rules and procedures of hierarchies or the competitive profit centers of markets, typical characteristics of clan-type firms were teamwork, employee involvement programs, and corporate commitment to employees. These characteristics were evidenced by semi-autonomous work teams that received rewards on the basis of team (not individual) accomplishment and that hired and fired their own members, quality circles that encouraged workers to voice suggestions regarding how to improve their own work and the performance of the company, and an empowering environment for employees.

### **Adhocracy Culture**

The adhocracy culture focuses on external issues and values flexibility and discretion rather than seeking stability and control; key values are creativity and risk taking. Organizational charts are temporary or nonexistent; roles and physical space are also temporary.

Adhocracy is an organizational form that is most responsive to the hyper turbulent, ever-accelerating conditions that increasingly typify the organizational world of the twenty-first century. The root of the word

adhocracy is ad hoc - implying something temporary, specialized, and dynamic. Most people have served on an ad hoc task force or committee, which disbands as soon as its task is completed.

The adhocracy organization may frequently be found in industries such as aerospace, software development, think-tank consulting, and film making. An important challenge for these organizations is to produce innovative products and services and to adapt quickly to new opportunities. Unlike markets or hierarchies, adhocracies do not have centralized power or authority relationships. Instead, power flows from individual to individual or from task team to task team, depending on what problem is being addressed at the time. Emphasis on individuality, risk taking, and anticipating the future is high as almost everyone in an adhocracy becomes involved with production, clients, research and development, and other matters.

Moreover, Cameron and Quinn (1999) identified the six key dimensions of organizational culture, which are Dominant Characteristics, Organizational Leadership, Management of Employees, Organizational Glue Strategic Emphasis, and Criteria for (judging) Success. Further description of the OCAI will be made during in the methodology section of this research paper.

### **Organizational Culture and Job Satisfaction**

Many researchers have investigated the relationship between job satisfaction and various organizational variables such as leadership, organizational climate, and commitment. For instance, several researchers have examined the relationship between job satisfaction and organizational commitment with organizational culture (Yiing, 2008; Silverthorne, 2004; Odom, Boxx & Dunn, 1990; McKinnon et al., 2007). Others have also examined the link between organizational culture, job satisfaction and leadership (Mullins,

2007; Aydin & Ceylan, 2009), Cohesion (Odom et al., 1990), notwithstanding with the preceding literature review, fewer studies have investigated the link between organizational culture and job satisfaction specifically in higher educational setting.

Lund (2003) conducted an empirical study to investigate the impact of the types of organizational culture on job satisfaction in a survey of marketing professionals in a cross-section of firms in the USA. The results of the mailed survey indicated that job satisfaction levels varied across organizational culture typology and job satisfaction is positively related to clan and adhocracy cultures and negatively related to market and hierarchy culture.

Kinnon et al., (2003) conducted a research to explore the association between organizational cultural values and employees' responses in a major diversified manufacturing company in Taiwan. They found out that there is strong positive association between organizational cultural values of respect for people; innovation, stability and aggressiveness, and employee response of organizational commitment, job satisfaction, propensity to remain with organization and information sharing behaviour.

Choi, Martin and Park (2008), examined the pattern of organizational culture and investigated the link between organizational culture and job satisfaction in the Korean Professional Baseball League (KPBL). The results of the study suggested that the clan culture has a significant influence on overall employee job satisfaction and satisfaction with co-workers, supervision and personal growth.

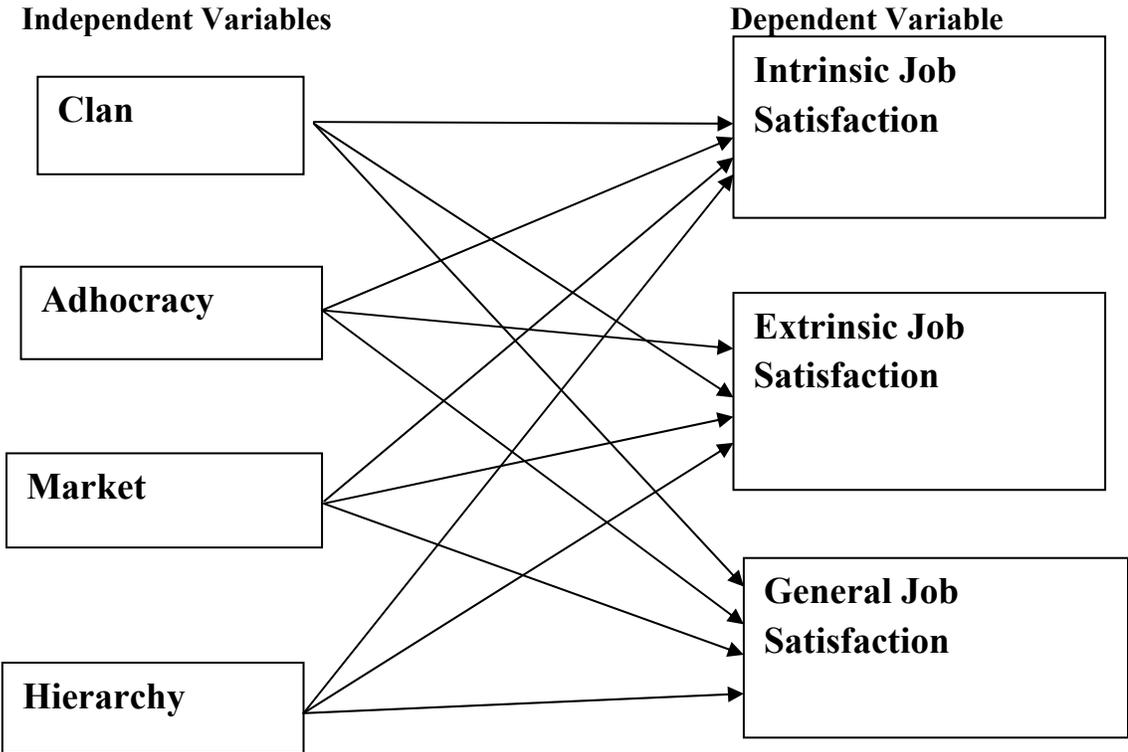
In 2008, Yiing investigated the association between different types of organizational culture and leadership behaviours and organizational commitment, job satisfaction and employee performance in the Malaysian setting. The finding of the study was only supportive to culture influenced the relationship between commitment and satisfaction. Sempane, Rieger and Roodt (2002) conducted a study to establish whether or not a relationship existed between the variables of job satisfaction and organizational culture in service industry. The Culture and Minnesota Job Satisfaction Questionnaires were administered to the sample of 160 employees and 121 usable responses were received. The findings of the study indicated that there was a positive relationship between organizational culture and job satisfaction.

Silverthorne (2004) examined the interaction of person organization fit and organizational culture with such concepts as job satisfaction and organizational commitment and the application of this concept in non-Western cultures like Taiwan. The results of this study indicate that P-O fit has been a key element in both levels of job satisfaction. Furthermore, the impact of specific types of organizational culture was also assessed. Involvement in an organization that had a bureaucratic organizational culture resulted in the lowest levels of job satisfaction and organizational commitment. An innovative culture was the next highest and a supportive culture which had had the highest level of employee's job satisfaction and organizational commitment.

## **Theoretical Framework**

The conceptual framework of this study focuses on the development of a theoretical organization cultural model as a systematic way in measuring the employee's job satisfaction. An examination of the relationship between the

organizational culture and job satisfaction should contribute to our knowledge of the relationship that exists between them as well as the particular organizational culture pattern type that affects academic staff's job satisfaction. The link between the patterns of organizational culture and employee's job satisfaction is illustrated in Figure 1. In this theoretical framework, organization cultural patterns are independent variables and employee's job satisfaction is a dependent variable. The present study thus attempted to bridge the gap by providing a basis for a thorough and insightful judgment of organizational culture and job satisfaction.



**Figure 1-- Relationship between the four cultural types and the three major facets of the job satisfaction, adopted from Choi, Martin & Park, 2004), Korea Institute of Sport Science, p. 66.**

## **Research Method**

A census of 146 instructors/teachers was taken and 107 questionnaires were found to be useful for the study. The Minnesota Satisfaction Questionnaire, short Form (Weiss et al., 1967) was chosen to measure satisfaction levels of instructors/teachers and the Organizational Culture Assessment Instrument by Cameron and Quinn (1999) was also used to measure the cultural type of St Mary's University College. Furthermore, a data form was used to collect information about instructors' background characteristics. Data collection was conducted from December 16, 2010 up to January 15, 2011. The student version 15.0 of the Statistical Package for the Social Sciences (SPSS, 1999) was used for statistical analyses. Reliability coefficients were computed for both the 20 MSQ job facet scales and the Organizational culture assessment instruments.

In addition, descriptive statistics like frequencies, percentages, and summary statistics were computed for personal characteristics of the instructors. The mean and standard deviation values were computed for each job-facet scale. The scores of intrinsic, extrinsic general and overall job satisfaction levels were computed by calculating the mean of each response category for each participant. To facilitate a comparison of teachers' each job satisfaction category levels the satisfaction levels of equal to and below the 25th percentile, between 26th and 74th percentile, and equal to and above the 75th percentile were computed. For the organizational culture instrument using an Ipsative rating scale, the respondents were invited to think about their workplace culture and assign a numerical value that described their current organizational culture. They were told to "divide" one hundred points in any way they wished by assigning value to alternative statements they reviewed. These statements are designed to identify the culture type as values and are

averaged for six content areas: *dominant characteristics, organizational leadership, management of employees, organizational glue, strategic emphasis, and criteria for success* (Cameron & Quinn, 2006). The content areas or characteristics ultimately generate the independent variables of the following culture types: clan, adhocracy, market, and hierarchy. A Spearman rho correlation analysis was made to determine the relationship between job satisfaction and organizational culture scores and, finally, ordinal multiple regression analysis was conducted to determine which cultural type will describe most the instructors' job satisfaction in St Mary's University College.

### **Data Gathering Tools**

The OCAI instrument was used to measure cultural type. The OCAI was developed by Cameron and Quinn (1999) based on an organizational culture framework built upon a theoretical model referred to as the Competing Values Framework. In this framework, an organization has either a predominant internal or external focus, or it strives for flexibility and individuality, or stability and control. The OCAI consists of two forms which are comprised of the same items: one form asked the respondents to assess the degree to which each of four statements is true regarding each of six dimensions; while the second required the respondents to assess the degree to which each of the four statements would describe the ideal approach to each of the six dimensions.

The OCAI is useful in determining underlying elements in the culture which may affect employee's job satisfaction. The OCAI consists of six organizational culture dimensions and four dominant culture types identified (i.e. clan, adhocracy, market, and hierarchy) in its framework. The OCAI is

used to determine the organizational culture profile based on the core values, assumptions, interpretations, and approaches that characterize organizations (Cameron & Quinn, 1999). A cultural profile can be constructed using the Competing Values Framework through the use of the OCAI - an organizational culture profile can be drawn by establishing the organization's dominant culture type characteristics. Using this framework, the overall culture profile of an organization can be identified as:

- **Clan:** an organization that concentrates on internal maintenance with flexibility, concern for people, and sensitivity for customers.
- **Hierarchy:** an organization that focuses on internal maintenance with a need for stability and control.
- **Adhocracy:** an organization that concentrates on external positioning with a high degree of flexibility and individuality.
- **Market:** an organization that focuses on external maintenance with a need for stability and control

This study has also conducted reliability tests using Cronbach's alpha, which is a satisfactory statistic to determine if the respondents of the study population of the instructors' rated the University College's culture consistently across all of the different questions used by the survey instrument. The results of these tests have demonstrated that there exists strong internal reliability and the results are very consistent with previous results. The reliability coefficients for the OCAI are summarized in Table 2.

**Table 2- The Reliability Coefficients for the OCAI**

Culture Type	Reliability Coefficients for current culture	Comparisons of Reliability Coefficients		
		Cameron & Quinn (1999)	Pierce (2010)	Berrio (2003)
Clan	.60	.82	.77	.80
Adhocracy	.69	.83	.68	.75
Market	.74	.67	.74	.90
Hierarchy	.79	.78	.69	.62

Source: Computed by the author, 2011.

The shortened version of the Minnesota Job Satisfaction Questionnaire by Weiss, Davis, England and Lofquist, (1967) was used for the measurement of job satisfaction. This commonly used survey instrument is a self-report instrument which consists of 20 items. It was derived in 1967 and revised in 1977. In addition to overall job satisfaction, MSQ provides three sub scales for measuring job satisfaction, namely, intrinsic (using 10 items), extrinsic (using 6 items) and general (using 2 items). Study participants marked their responses on a 5-point Likert-type scales, ranging from ‘very dissatisfied (1)’ to ‘very satisfied (5)’.

### **Methods of Data Analysis**

The purpose of the study was to test empirically whether there is relationship between organizational culture and job satisfaction level of academic staff in SMUC. The study examined the relationship of a set of predictor cultural type variables: clan, adhocracy, market and hierarchy with job satisfaction level of academic staff at the St Mary’s University College. In order to

achieve the study objectives, the researcher relied on the following descriptive and inferential statistical procedures:

- Descriptive statistics (mean standard deviations, percentage, percentile, frequencies, tables and graphs) – to describe the characteristics of respondents and to compare results.
- Parametric statistics (ANOVAs) - to test for statistically significance differences between the two groups (dominant culture difference among the highest degree held categories of respondents).
- Non- parametric statistics (Spearman's rho) – to determine the correlation between organizational culture type scores and job satisfaction scores.
- Ordinal regression - to identify the predictor variables that are responsible for the most significance variance in job satisfaction level of academic staff of the SMUC.

## **Means and Standard Deviation**

Means and standard deviation are techniques used to describe characteristics of study participants and to compare results (Kerr et al., 2002). The mean is measure of central tendency that measures what sets of measures are like on average. The standard deviation (SD) is a measure of the extent to which the values in a distribution cluster around the mean (Mujis, 2004). The mean and standard deviation were used to calculate and to plot the result of OCAI instrument and frequency of MSQ facets. The OCAI scores from each of the participants were entered onto SPSS software. Based on the provided formulae by the Competing Value Framework, the calculation of cultural type mean scores was done as follows:

**Clan Culture** = Mean ( *Mean score of Clan for the first respondent + Mean score of Clan for the second respondent + Mean score of Clan for the third respondent+,, + Mean score of Clan for the one hundred seventh respondent*). Here, **mean score of Clan for the respondents**= mean (*Dominant characteristics dimension A+ Organizational leadership dimension A+ Management of Employees dimension A + Organizational glue dimension A+ strategic emphasis dimension A+ Criteria for success dimension A*).

**Adhocracy Culture** = Mean (*Mean score of Adhocracy for the first respondent + Mean score of Adhocracy for the second respondent + Mean score of Adhocracy for the third respondent+,,+ Mean score of Adhocracy for the one hundred seventh respondent*). In which, **mean score of Adhocracy for the respondents**= mean (*Dominant characteristics dimension B+ Organizational leadership dimension B+ Management of Employees dimension B + Organizational glue dimension B+ strategic emphasis dimension B+ Criteria for success dimension B*).

**Market Culture** = Mean (*Mean score of Market for the first respondent + Mean score of Market for the second respondent + Mean score of Market for the third respondent+,, + Mean score of Market for the one hundred seventh respondent*). In which **mean score of Market for the respondents**= mean (*Dominant characteristics dimension C+ Organizational leadership dimension C+ Management of Employees*

*dimension C + Organizational glue dimension C+ strategic emphasis dimension C+ Criteria for success dimension C) .*

**Hierarchy Culture** = Mean (*Mean score of Hierarchy for the first respondent + Mean score of Hierarchy for the second respondent + Mean score of Hierarchy for the third respondent+,,,+ Mean score of Hierarchy for the one hundred seventh respondent*). In which **mean score of Hierarchy for the respondents**= mean (*Dominant characteristics dimension D+ Organizational leadership dimension D+ Management of Employees dimension D + Organizational glue dimension D+ strategic emphasis dimension D+ Criteria for success dimension D*).

The next step was then to plot the combined mean scores on a quadrant using a radar chart to depict the profile of culture of the St Mary's University College.

The scores of Overall, General, Intrinsic and Extrinsic Job Satisfaction levels were computed by summing the response weights across the appropriate 20 items for each participant. The results identified the number of chairpersons for each of the five response choices. Scores between 20 and 30; 31 and 50; 51 and 70; 71 and 90; 91 and 100 corresponded to very dissatisfied, dissatisfied, neither dissatisfied nor satisfied, satisfied, and very satisfied respectively. Measures of central tendency and dispersion were also computed for General job satisfaction. To facilitate a comparison of chairpersons' job satisfaction levels with the levels of academic staff, the satisfaction levels of equal to and below the 25<sup>th</sup> percentile, between the 26<sup>th</sup> and 74<sup>th</sup> percentile, and equal to and above the 75<sup>th</sup> percentile were

computed. According to Weiss (1967), these percentiles represent low, medium, and high levels of job satisfaction respectively.

## **Ordinal Regression Model**

Regression is used when a researcher is interested in the relationships between two or more variables. A plot of the subjects' scores on the two variables is called a scatter gram. The line of best fit through the data points is termed the regression line. The regression line may be defined by the equation  $Y = a_0 + b_i X_i + e$ . In this equation,  $a$  is the  $Y$ -intercept,  $b$  is the slope of the line and  $e$  is the residual. If one knows the intercept and slope of the regression line, one may predict the value of  $Y$  for any value of  $X$ . The accuracy of the prediction depends on the strength of the relationship between the two variables. The stronger the relationship, the more accurate is the prediction. The strength of the relationship between two variables may be determined by calculating the correlation coefficient or  $r$ . Correlation coefficients have a possible range from  $-1$  to  $+1$ . The null hypothesis for a correlation states that there will be no significant relationship between the two variables (i.e.  $r = 0$ ). As the  $r$ -value approaches  $\pm 1$  the strength of the relationship increases. A positive correlation indicates that the two variables co-vary in the same direction. A negative sign indicates co-variation in the opposite direction. To make the correlation coefficient more meaningful, the coefficient of determination may be calculated. The coefficient of determination is simply  $r^2 \times 100$  and is expressed as a percentage. This value indicates the percentage of variance in one variable that is accounted for by the variance in the other variable (Kerr and others, 2002). There are several forms of regression available, but for the purpose of this study ordinal regression model was employed (Mujis, 2004).

Many variables of interest are ordinal. That is, one can rank the values, but the real distance between categories is unknown. Survey respondents choose answers on scales from *strongly agree* to *strongly disagree*. One can use ordinal categorical variables as predictors, or factors, in many statistical procedures, such as linear regression. However, when your dependent variable is ordinal you also face a quandary. You can forget about the ordering and fit a multinomial logit model that ignores any ordering of the values of the dependent variable. You fit the same model if your groups are defined by color of car driven or severity of a disease. You estimate coefficients that capture differences between all possible pairs of groups. Or you can apply a model that incorporates the ordinal nature of the dependent variable.

The SPSS Ordinal Regression procedure, or PLUM (**P**olytomous **U**niversal **M**odel), is an extension of the general linear model to ordinal categorical data. You can specify five link functions as well as scaling parameters. The procedure can be used to fit heteroscedastic probit and logit models.

The same logistic model can be written in different ways. The version that shows what function of the probabilities results in a linear combination of parameters is

$$\ln ( \text{prob [event]}/[1-\text{prob[event]}] ) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_K X_K$$

In the above model, the quantity to the left of the equal sign is called a **logit**. It is the **log of the odds** that an event occurs. (The odds which an event occurs is the ratio of the number of people who experience the event to the number of people who do not. This is what we get when we divide the probability that the event occurs by the probability that the event does not

occur, since both probabilities have the same denominator and it cancels, leaving the number of events divided by the number of non-events. The coefficients in the logistic regression model tell us how much the logit changes based on the values of the predictor variables.

The ordinal logistic model is one of many models subsumed under the title of generalized linear models for ordinal data. The model is based on the assumption that there is a latent continuous outcome variable and that the observed ordinal outcome arises from discretizing the underlying continuum into  $j$ -ordered groups.

### **Choosing the Link Function that best fits the Research Question**

The link function is the function of the probabilities that results in a linear model in the parameters. It defines what goes on the left side of the equation. It's also the link between the random component on the left side of the equation and the systematic component on the right. In this study, the link function is the logit function, since the log of the odds results is equal to the linear combination of the parameters under consideration. That is,  $\beta_0, \beta_1 X_1, \beta_2 X_2, \dots, \beta_k X_k$ .

In ordinal regression, one should remember that the probability of an event is redefined in terms of cumulative probabilities. The observed probabilities are replaced with the value of the standard normal curve below which the observed proportion of the area is found. *Probit and logit models* are reasonable choices when the changes in the cumulative probabilities are gradual. If there are abrupt changes, other link functions should be used. The complementary log-log link may be a good model when the cumulative probabilities increase from 0 fairly slowly and then rapidly approach 1. If the

opposite is true, namely, that the cumulative probability for lower scores is high and the approach to 1 is slow, the negative log-log link may describe the data. If the complementary log-log model describes the probability of an event occurring, the log-log model describes the probability of the event not occurring.

Two commonly used link functions, e.g., Negative log- log and logit link were chosen to build the ordinal regression model. When the frequency distribution of the ordered categorical outcome exhibited that the data points were evenly distributed in various categories, the logit link function was used. However, when the frequency distribution of the ordered categorical outcome showed that a large percent of instructor/teacher respondents were in lower categories such as low satisfaction category, and then the Negative log-log link function was used. In fact, there was no clear-cut choice of link functions. This is because, when one link function did not provide a good fit to the data, then the other link function might be a viable alternative (Chen & Hughes, 2004).

As a result, the alternative link functions were tested to see if the model turned out to be the better one. In addition, the model assumption of parallel lines across the corresponding response categories in the link functions was carefully examined to determine the model adequacy. Because the link functions were used to form the ordinal regression models under a strong assumption of parallel lines, any departures from this assumption might result in the incorrect analysis and conclusion (McCullagh, 1980). Furthermore, the contingency or confusion table showing the accuracy of the classification for the ordered categorical outcome was evaluated to determine which link function was superior.

In order to interpret the ordinal regression model, we first look at the signs of the regression coefficients. These signs give a great deal of insight into the effects of the predictor variables on the ordinal outcome. The positive regression coefficient indicated that there was a positive relationship between the predictor variable and the ordinal outcome. For the opposite direction, the negative regression coefficient indicated that there was a negative relationship between the explanatory variable and ordinal outcome. If the logit link (or Negative log-log link) was a choice of the modeling equation, the magnitude (e.g., odds or  $e\beta$ ) of the effect of a specific predictor variable would be used to indicate that an average of one unit change on a specific predictor variable (Cultural score) affects on the change of the odds (or relative risk) of the event occurrence by a factor of  $e\beta$ , holding other predictor variables as constant.

The model construction generally involves the use of the reduced models along with negative log- log and logit link functions to create a pool of the candidate models. By examining one candidate model at a time, the test of parallel lines was used as the fundamental step to assess the validity of the model assumption. Certain candidate models in a pool were discarded if they failed to provide the evidence of satisfying the model assumption. Additionally, the model fitting statistics, e.g., pseudo R squares, and the accuracy of classification results was used as criteria to screen the candidate models and choose the appropriate ones. When these sound appropriate models were chosen, a few observations or insignificant Predictor variables (say, one or two) on the questionnaire was eliminated to investigate the stability of the modified models (e.g., model parameters slightly changed

after the temporary elimination). When the modified models exhibited instability, they needed to be discarded immediately.

The model-fitting statistic, namely the pseudo R square, measured the success of the model in explaining the variations in the data. The pseudo R square was calculated depending upon the likelihood ratio. For example, the McFadden's R square compared the likelihood for the intercept only model to the likelihood for the model with the explanatory variables in order to assess the model goodness of fit. The interpretation of pseudo R square in the ordinal regression model was similar to that of the R square (e.g., Coefficient of the Determination) in the linear regression model. The pseudo R square indicated that the proportion of variations in the outcome variable was accounted for by culture variable. The larger the pseudo R-square was, the better the model fitting was.

The generalized formula using location model for the ordinal regression model is indicated as follows:

$$\text{Link } (\gamma_j) = \theta_j - [\beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k]$$

Where:

$\gamma_j$  is the cumulative probability for the  $j$ th job satisfaction category,

$\theta$  is the threshold for the  $j$ th category,

$\beta_1 \dots \beta_k$  are the regression coefficients,

$X_1 \dots X_k$  are the predictor cultural score variables,

And  $k$  is the number of predictors.

**For the logit link:**

$$\text{Ln } (\gamma/1-\gamma) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

**For Negative log-log link:**

$$-\ln (-\ln (\gamma)) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

## **Major Findings of the Study**

### **Respondents Profile**

Frequency analysis was used to examine the socio-demographic characteristics of the respondents from academic staff at St Mary's University College. Data on variables like gender, age, and education level, years of experience and terms of employment presented below. More than half of the instructors/teachers (54.2%) were found to be within the category of 31-40 years. About thirty-seven percent (36.4 %) of the instructors/teachers were found within the age bracket of 21-30 years. The oldest participants, 2.8% fell within the category of 51-60 years and, finally, 6.5% of the respondents' ages fell within the category of 41-50 years. In addition, of the 107 participants in this study, 91.6 % (n = 93) were males and 3.7 % (n = 3) were females. Five participants did not respond to the gender item of the questionnaire.

Moreover, the majority of the instructors, 68.2% (n = 73) have obtained a master's degree, and 1.9 % (n = 2) a doctorate degree, whereas 26.2% (n = 28) earned bachelor's degree and 3.7% (n=4) earned other type(s) of educational status like advanced diploma, and diploma. Overall, the instructors appear to be moderately highly educated professionals with 70.1% holding a second degree and above. These implied that there had been only few highly educated staff (only 2 PhD holders) as far as academic of certification are concerned. Regarding employment status of the respondents, 54.2% (n = 58) of them were permanent full-time employees, 25.2 % (n=14) were part-timers, 13.1% (n=14) were joint staff and, finally, 7.5% (n=8) were contract employees.

## Levels of Job satisfaction

If one looks into a hierarchy of the 20 facet-specific MSQ scales, the mean and standard deviation for each scale were documented (see Table 3. Job facets of relatively greater satisfaction included independence, co-workers, and activity as reflected by their means of 3.8, 3.7 and 3.59, respectively. Job facets of relatively lesser satisfaction included company policies and practices, social status, recognition, advancement and compensation, as reflected by their means of 2.9, 2.8, 2.45, 2.4 and 1.9, respectively.

**Table 3 - Hierarchy of MSQ Scales**

<b>Job Satisfaction Facets</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
1. Independence	107	3.8037	.82918
2. Co-workers	107	3.7570	.77510
3. Activity	106	3.5943	.90268
4. Social service	106	3.5000	.81941
5. Creativity	107	3.4766	1.00326
6. Authority	107	3.4766	.85059
7. Ability utilization	107	3.4486	.98320
8. Moral values	103	3.4272	.90317
9. Achievement	107	3.4112	.92096
10. Security	106	3.3396	.93490
11. Responsibility	107	3.3084	1.00387
12. Supervisor technical	107	3.2523	1.18237
13. Supervisor human relations	107	3.2243	1.25374
14. Working conditions	106	3.1604	1.10528
15. Variety	105	3.0571	1.08156

16. Company policies & practice	107	2.9159	1.07389
17. Social status	105	2.8571	1.34757
18. Recognition	106	2.4528	1.31752
19. Advancement	107	2.4019	1.24279
20. Compensation	107	1.9252	1.05241
<b>Valid N (list wise)</b>	<b>98</b>		

Source: Computed by the researcher, 2011.

The above results were explored further using frequencies to see the distribution of lesser satisfaction facets that are mentioned above. Considering the job facets of relatively lesser satisfaction (*see Table 4*), 42.1 % of the respondents were dissatisfied with company's policies and practices. More than 26.2% of the respondents were very dissatisfied on social status of teaching profession. Moreover, 33.6% and 17.8 % of respondents were very dissatisfied and dissatisfied over the recognition they received from the University College respectively. Furthermore, 33.6% and 19.6% of the instructors expressed their very dissatisfaction and dissatisfaction over advancement. Finally, 45.8% and 28.0% of the respondents were very much dissatisfied and dissatisfied respectively with compensation package of the University College.

**Table 4 - Frequencies and Percentages of Dissatisfaction/Satisfaction  
Ratings of 20 Job Facets as Measured by the MSQ (N = 107)**

Job facets	Very dissatisfied		dissatisfied		neutral		Satisfied		Very satisfied	
	n	%	n	%	n	%	n	%	n	%
1.Ability utilization	4	3.7	9	8.4	46	43	31	29.0	17	15.9
2.Achievement	4	3.7	9	8.4	44	4.4	39	36.4	11	10.3
3.Activity	3	2.8	10	9.3	25	23.4	57	53.3	11	10.3

Job facets	Very dissatisfied		dissatisfied		neutral		Satisfied		Very satisfied	
	n	%	n	%	n	%	n	%	n	%
4.Advancement	36	33.6	21	19.6	25	23.4	21	19.6	4	3.7
5.Authority	0	0	11	10.3	48	44.9	34	31.8	14	13.1
6.Company policies	4	3.7	45	42.1	23	21.5	26	24.3	9	8.4
7.Compensation	49	45.8	30	28	16	15	11	10.3	1	.9
8.Co-workers	0	0	9	8.4	21	19.6	64	59.8	13	12.1
9.Creativity	5	4.7	8	7.5	42	39.3	35	32.7	17	15.9
10.Independence	2	1.9	6	5.6	19	17.8	64	59.8	16	15
11.Moral values	3	2.8	8	7.5	46	43	34	31.8	12	11.2
12.Recognition	36	33.6	19	17.8	27	25.2	15	14	9	8.4
13.Responsibility	5	4.7	15	14	41	38.3	34	31.8	12	11.2
14.Security	5	4.7	14	13.1	32	29.9	50	46.7	5	4.7
15.Social service	0	0	9	8.4	48	44.9	36	33.6	13	12.1
16.Social status	28	26.2	9	8.4	28	26.2	30	28	10	9.3
17.Supervision Relation	6	5.6	36	33.6	13	12.1	32	29.9	20	18.7
18.Supervision-technical	4	3.7	34	31.8	18	16.8	33	30.8	18	16.8
19.Variety	5	4.7	32	29.9	31	29	26	24.3	11	10.3
20.Working conditions	3	2.8	35	32.7	23	21.5	32	29.9	13	12.1

Source: Outputs of own survey data analysis, 2011.

### Levels of Job Satisfaction for Each Facet Categories

Weiss (1967) suggests the importance of looking at the percentile scores when interpreting MSQ scores. A low level of satisfaction is reflected by percentile scores equal to 25 or less, a medium level by percentile scores between 26 and 74, and a high level is usually represented by a percentile score equal to 75 and above.

**Table 5 - Levels of Intrinsic Job Satisfaction**

Satisfaction level	Percentile	Score range	frequency	percent
low	<=25	<= 60	42	39.3
medium	26-74	61-77	34	31.8
high	>= 75	>= 78	23	21.5
<b>Total</b>			<b>99</b>	<b>92.6</b>

Source: Own survey, 2011.

Table 5 shows that approximately 39.3% of the participants have reported a low level of intrinsic job satisfaction, 31.8% a medium intrinsic job satisfaction level, and 21.5% a high intrinsic job satisfaction level. The score ranges for the low, medium, and high percentiles were <= 60, 61 – 77, and >= 78, respectively. The existence of high low level of intrinsic satisfaction can be as a result of the following dyadic factors. Primarily, among the 20 job facets, 73.8% instructors were not satisfied with compensation package of the Institution. As a result, instructors were not freed from concern about their lower level needs which, in turn, affect their professionalism (Cohen, 1974). On the other hand, 51.4% of instructors felt that they do not receive recognition for their job. This implies that instructors are stressed on their Job because of the inadequate recognition they receive out of it (August & Waltman, 2004).

**Table 6 - Levels of Extrinsic Job satisfaction**

Satisfaction level	Percentile	Score range	frequency	percent
low	<=25	<= 30	29	27.1
medium	26-74	31-67	50	46.7
high	>= 75	>= 68	27	25.2

Satisfaction level	Percentile	Score range	frequency	percent
<b>Total</b>			<b>106</b>	<b>100.0</b>

Source: Own survey results, 2011.

Table 6 shows that approximately twenty-seven percent of the participants reported a low level of extrinsic job satisfaction, 46.7% a medium extrinsic job satisfaction level, and 25.2% a high extrinsic job satisfaction level. The score ranges for the low, medium, and high percentiles were  $\leq 30$ , 31 – 67, and  $\geq 68$  respectively. This implies that instructors were moderately satisfied with extrinsic satisfaction factors. This also refers to instructors are neither highly satisfied nor very dissatisfied with the extrinsic job satisfaction facets.

**Table 7 - Levels of General Job Satisfaction**

Satisfaction level	Percentile	Score range	frequency	percent
low	$\leq 25$	$\leq 60$	53	49.5
medium	26-74	61-80	40	37.4
high	$\geq 75$	$\geq 81$	13	12.1
<b>Total</b>			<b>106</b>	<b>100.0</b>

Source: Own survey findings, 2011.

Table 7 shows that approximately 49.5% of the participants reported a low level of general job satisfaction, 37.4% a medium general job satisfaction level, and 12.1% a high general job satisfaction level. The score ranges for the low, medium, and high percentiles were  $\leq 60$ , 61 – 80, and  $\geq 81$ , respectively. Therefore, almost half of the respondents were not satisfied with their coworker relationship as well as their work environment. This can

be as a result of the dominant hierarchy culture of the institution which creates low morale over employees (Cameroon & Quinn, 2004).

**Table 8 - Levels of Overall Job Satisfaction**

Satisfaction level	Percentile	Score range	frequency	percent
low	<=25	<= 51	30	28.0
medium	26-74	52-74	43	40.2
high	>= 75	>= 75	25	23.4
<b>Total</b>			<b>98</b>	<b>91.6</b>

Source: Results of own survey, 2011.

Table 8 shows that 28% of the participants reported a low level of overall job satisfaction, 40.2% a medium overall job satisfaction level, and 23.4% a high overall job satisfaction level. The score ranges for the low, medium, and high percentiles were <= 51, 52 – 74, and >= 75 respectively. In general, one can say that instructors are moderately satisfied with their current job. This implies that those teachers are neither highly satisfied nor less satisfied in their job.

### **The Dominant Organizational Type at SMUC**

The findings of the study indicate that in St. Mary’s University College the perceived dominant organizational culture is the hierarchical one. Table 9 illustrates the perceived the dominant culture type of SMUC. An analysis of the highest mean scores obtained (Mean= 32.07) shows that the dominant culture type for SMUC is the Hierarchy culture.

**Table 9 -The Dominant Organizational Culture of St Mary’s University College**

Culture Type	Mean	Std. Deviation	df	f	P
Clan	24.1830	6.73770	73	2.28	.002
Adhocracy	20.3894	5.31468	73	4.63	.000
Market	23.1893	8.94372	73	4.48	.000
Hierarchy	32.0732	8.99517			
* p < .05 Note: Mean scores could range from 0 to 100. Representing a percentage out of 100.					

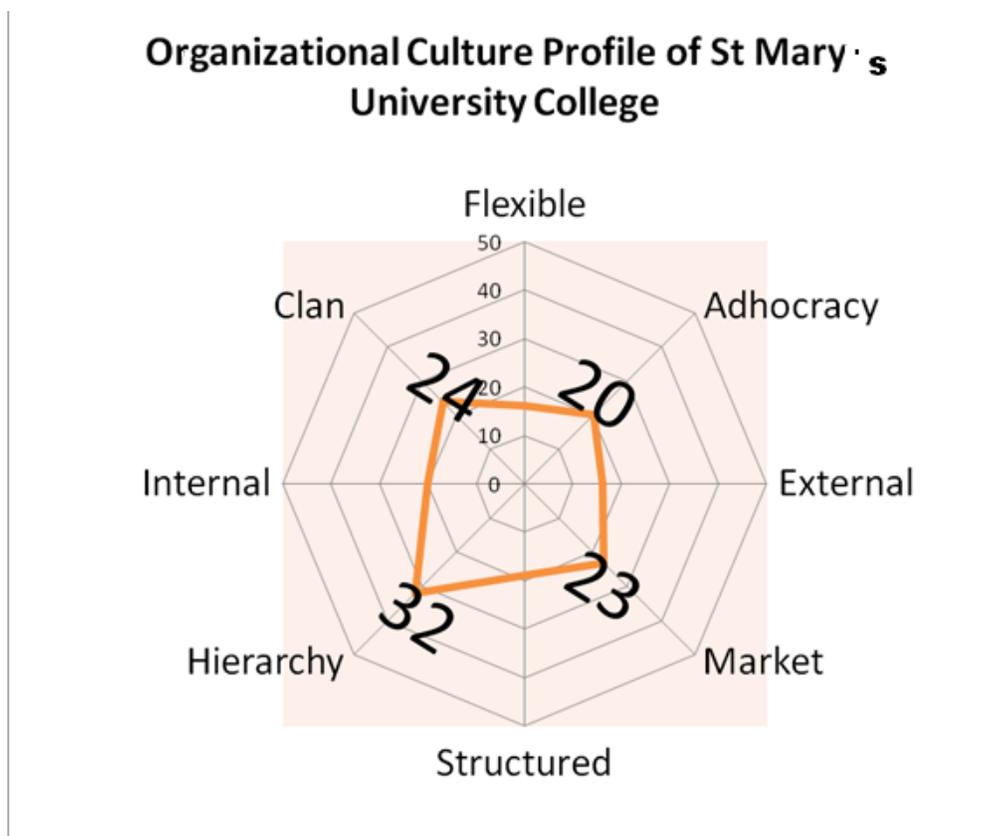
Source: Results of primary data analysis, 2011.

**Dominant Culture Type Strength**

The strength of the dominant culture type exhibited by St. Mary’s University College is related to the number of points assigned to a specific culture type. The Hierarchy culture type is found to be stronger. In the case of the dominant Hierarchy culture type exhibited by SMUC instructors, a mean score of 32.08 was considered stronger than 24.18, 23.18, and 20.38 mean scores of the Clan, Market and Adhocracy culture types’ respectively. When the mean scores of the culture types Clan, Market, and Adhocracy, are compared with the mean score of the dominant Hierarchy culture exhibited by SMUC instructors, statistically significant differences are found between the dominant Hierarchy culture and the Clan, Market and Adhocracy culture types. This finding suggests that the dominance of the characteristics of Hierarchy culture type in the University College.

As shown in above tables, the dominant culture type exhibited by SMUC in all respondents under category labeled as Age range, academic rank in terms of highest degree held, terms of employment indicated hierarchy as the

current dominant culture. Only the group categories labeled as academic rank - associate professor had a clan dominant culture for the current situation. However, this finding is not statistically significant with a p-value of 0.33. The hierarchical classification applied to SMUC portrays that the organizational culture compatible with this form (and as assessed in the OCAI) is characterized by a formalized and structured place to work. Procedures govern what people do. Effective leaders are good coordinators and organizers. The act of maintaining a smooth running organization is important. The long-term concerns of the organization are stability, predictability, and efficiency. Formal rules and policies hold the organization together.



**Figure 2 -- Radar chart for Graphical Representation of the Highest Mean Scores in the Four Culture Types of St Mary's University College.**

Source: Developed by the author, 2011.

**Level of Job Satisfaction and Institutional Culture Types**

The Spearman's Rho Correlation test was conducted to see the association between the four types of culture types and the levels of intrinsic, extrinsic, general and overall Job satisfaction to see which among the four categories will have a higher correlation with any of the four cultures. The result is presented in Table 10.

It was found that the intrinsic satisfaction and overall satisfaction are having the highest coefficient of correlation as compared to extrinsic satisfaction scores with the market culture. Mujis (2004) suggest a cut off point of 0.3 as modest .Therefore; we can say that there is a modest positive correlation between the scores of intrinsic, overall satisfaction score and market culture. In contrary to this finding, there are statistically significant correlations between the intrinsic, extrinsic, general, overall satisfaction scores and the dominant hierarchy culture. Extrinsic satisfaction scores showed a strongest modest statistically negative relationship with hierarchy ( $r = - 0.336, p < 0.01$ ) followed by overall satisfaction scores ( $r = 0.3, p < 0.01$ ), then by intrinsic ( $r = - 0.296, p < 0.01$ ) and general satisfaction scores ( $r = - 0.269, p < 0.01$ ). However, there is no statistically significant relationship between all job satisfaction scores categories and clan as well as adhocracy cultures scores.

**Table 10 - Spearman rho Correlations Levels of Job Satisfaction and Organizational Culture Types**

<b>Job satisfactio</b>		<b>Organizational Culture Types</b>			
		<b>Clan</b>	<b>Adhocrac</b>	<b>Market</b>	<b>Hierarch</b>
<b>Intrinsic</b>	Correlation	-.044	-.065	.317(**)	-.296(**)
	Sig.(2-tailed)	.656	.505	.001	.002
<b>Extrinsic</b>	Correlation	-.029	.038	.231(*)	-.336(**)
	Sig. (2-	.764	.695	.016	.000
<b>General</b>	Correlation	.065	.060	.080	-.269(**)
	Sig. (2-	.509	.537	.411	.005
<b>Overall</b>	Correlation	-.093	-.071	.301(**)	-.300(**)
	Sig. (2-	.340	.468	.002	.002
	N	107	107	107	107

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Source: Outputs of own survey data analysis, 2011.

## **Ordinal Regression Analysis**

### **Ordinal Regression Model for Intrinsic Satisfaction Facets**

Based on the assumptions made in the methodology section of this paper, the study results for the reduced model containing all categories of satisfaction facets revealed the following findings. Within the reduced models, the negative log-log link was the better choice because of its satisfying ‘parallel lines’ assumption and larger model fitting statistics, which will be discussed later.

**Table 11 - Parameter Estimates of Intrinsic Job Satisfaction Facet**

		<b>Estimate</b>	<b>Std. Error</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>
Threshold	[intrinsic= 1.00]	-1.194	.503	5.639	1	.018
	[intrinsic= 2.00]	.028	.511	.003	1	.956
Location	hierarchy	-.042	.016	7.127	1	.008

Link function: Negative Log-log.

Source: Own study results, 2011.

Using the reduced model with the negative log-log link, Table 11 shows that the first threshold of the model equation was significantly different from zero and substantially contributed to the values of the response probability in low satisfaction category. In addition, the satisfaction of the intrinsic satisfaction facet was significantly associated with the Hierarchy culture. The Hierarchy culture exhibited negative regression coefficients, indicating that instructors who rated higher scores for Hierarchy culture was likely to rate a lower satisfaction scores for intrinsic job satisfaction facet. Furthermore, using the reduced model with the logit link and clog log link to build the ordinal regression model, the intrinsic job satisfaction facet was found to be significantly associated with Hierarchy culture. However, since both reduced models with the logit link and clog log link failed to provide the evidence of superior satisfying ‘parallel lines’ assumption and model fitting statistics, they were discarded. Thus, it is also unnecessary to prepare a table that contains item name, regression coefficient, and p-value in this paper.

The pseudo R-squares for McFadden (.40), Cox and Snell (.081), and Nagelkerke (.092) in the complete model with the negative log -log link were found to be larger than those for McFadden (.031), Cox and Snell (.065), and

Nagelkerke (.074) in the complete model with the clog log link and McFadden (.038), Cox and Snell (.078), and Nagelkerke (.089) in the complete model with the logit link. The additional model fitting statistic, the Pearson's chi-square, ( $\chi^2 = 8.2$ ,  $df=1$ , and  $p = .004$ ) for the complete model with the negative log log link had indicated that the observed data were not consistent with the estimated values in the fitted model. However, this chi-squared goodness of fit statistics may not be appropriate for this data since cultural scores are continuous in this study (SPSS 15, 2006; Chen & Hughes, 2004). The continuous nature of the predictor variable will result in large percent of cells with zero value which leads to inaccurate chi-square test for the model fitting. Therefore, the study is not dependent on the model fitting interpretations.

The test of parallel lines was designed to make judgment concerning the model adequacy. The null hypothesis stated that the corresponding regression coefficients were equal across all levels of the outcome variable. The alternative hypothesis stated that the corresponding regression coefficients were different across all levels of the outcome variable. The chi-square test result ( $\chi^2 = .200$ ,  $df=1$ , and  $p = .655$ ) indicated that there was no significant difference for the corresponding regression coefficients across the response categories. Therefore, these findings suggest that the model assumption of parallel lines was not violated in the complete model with the negative log log link. Principle of parsimony, similar to linear and logistic regression modeling techniques, was applicable to the construction of this ordinal regression model. As a result, if the complete models containing all organizational culture variables were too complex, it could result in inaccurate estimation of the parameters and instability of the model structure (Chen & Hughes, 2004). Based on the above modeling strategy, the reduced

model with the negative log log links was constructed to include only the dominant Hierarchy and the bottom low satisfaction category variables.

### **Evaluating the Model**

In order to evaluate the model, we need to examine the predictions generated by the model. However, the main interest in this study was to determine how often the model can produce correct predicted categories based on the values of the predictor variables. To see how well the model does, we first analyze the distribution of the actual response categories of the intrinsic satisfaction level. The histogram chart below displays distribution of values for the outcome intrinsic satisfaction variable.

From the histogram chart displayed below, the bulk of cases in the actual response were lower satisfaction categories (42%). The lower categories were also where most of the "action" is, since teachers who rated higher scores for Hierarchy culture were likely to rate a lower satisfaction scores. Therefore, we need to know whether the model was doing a respectable job of predicting the lower satisfaction outcome categories or not. In order to do this, the cross-tabulating method was used to categorize the classified and the actual responses into a 3 by 3 classification table. Table 12 displays the accuracy of the classification results for the intrinsic satisfaction response categories.

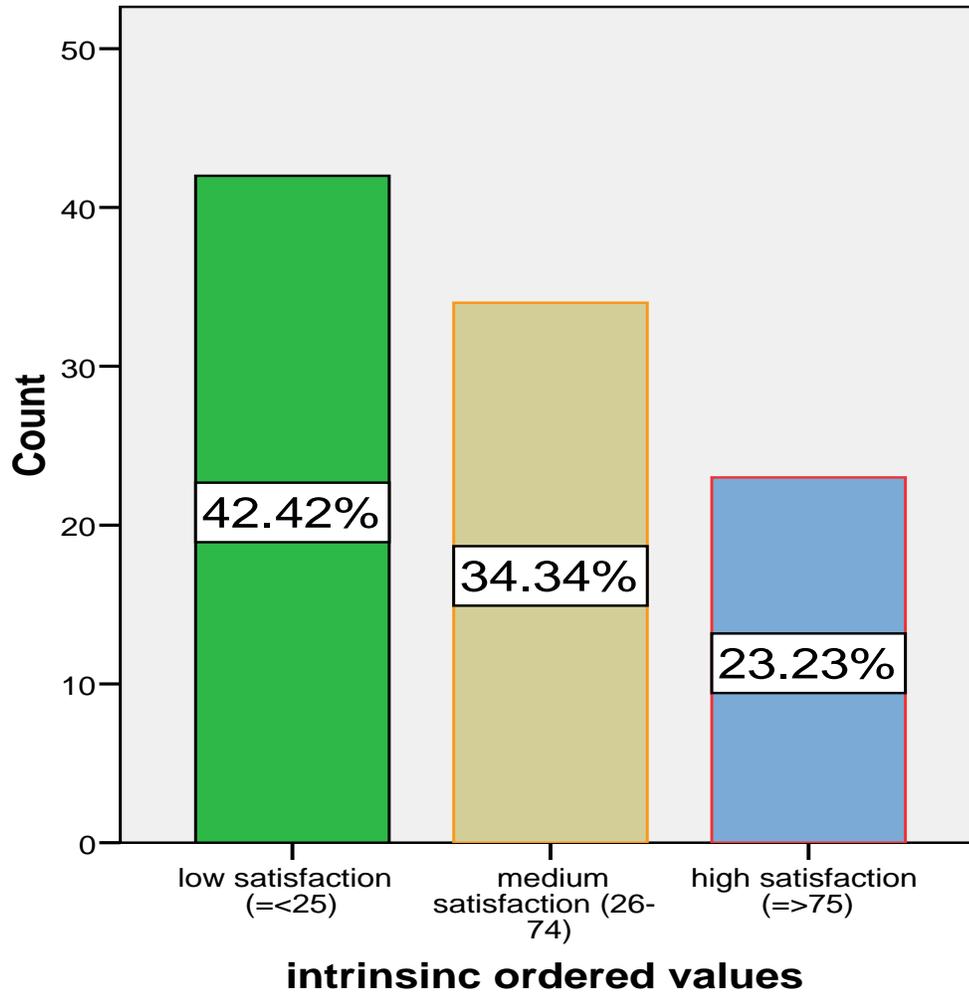


Figure 3 -- Histogram chart for distribution of intrinsic satisfaction outcome variables  
 Source: Own survey, 2011.

**Table 12 - Confusion Matrix for Intrinsic Facets**

Job satisfaction			Predicted Response Category				Total
			low satisfaction (= < 25)	medium satisfaction (26-74)	high satisfaction (=> 75)	low satisfaction (= < 25)	
Actual Intrinsic ordered values	low satisfaction (= < 25)	Count	32	10	0		42
		% within intrinsic	76.2%	23.8%	.0%	100.0%	
		<b>% of Total</b>	32.3%	10.1%	.0%	42.4%	
	medium satisfaction (26-74)	Count	17	15	2		34
		% within intrinsic	50.0%	44.1%	5.9%	100.0%	
		<b>% of Total</b>	17.2%	15.2%	2.0%	34.3%	
	high satisfaction (=> 75)	Count	13	10	0		23
		% within intrinsic	56.5%	43.5%	.0%	100.0%	
		<b>% of Total</b>	13.1%	10.1%	.0%	23.2%	
<b>Total</b>		Count	62	35	2		99
		% within intrinsic	62.6%	35.4%	2.0%	100.0%	
		<b>% of Total</b>	62.6%	35.4%	2.0%	100.0%	

Source: Outputs of own survey, 2011.

The complete model with the negative log -log link classified the categories of “low satisfaction” (76.2%), “medium satisfaction” (44.1%), and “High satisfaction” (.0%). The model seems to be doing a respectable job of predicting for the most frequent low satisfaction categories. The model correctly classifies 76.2 % of the low satisfaction category cases and 44.1% of the medium satisfaction category cases. In addition, cases in predicted medium satisfaction (50.0%) and high satisfaction categories (56.5%) were more likely to be classified as low satisfaction category than actual medium

satisfaction (44.1%) and high satisfaction categories (.0%). Hence, one can say that instructors who rated higher scores for Hierarchy culture were likely to rate a lower satisfaction scores on Minnesota job satisfaction questionnaire. Based on the ordinal regression model, only Hierarchy culture emerged as significant predictor of intrinsic job satisfaction facets.

### **Ordinal Regression Model for Extrinsic Satisfaction Facets**

Within the reduced models, the negative log-log link was the better choice than both complementary log log and logit links because of its satisfying a better ‘parallel lines’ assumption and larger model fitting statistics, which will be discussed later. Using the reduced model with the negative log-log link, Table 12 illustrates that the second threshold of the model equation was significantly different from zero and substantially contributed to the values of the response probability in medium satisfaction category. In addition, the satisfaction of the extrinsic satisfaction facets was significantly associated with the Hierarchy culture. The Hierarchy culture exhibited negative regression coefficients (-.042), indicating that teachers who rated higher scores for hierarchy culture were likely to rate a lower medium satisfaction scores for intrinsic job satisfaction facet. Furthermore, using the reduced model with the logit link and clog log link to build the ordinal regression model, the intrinsic job satisfaction facet was found to be significantly associated with Hierarchy culture. However, since both reduced models with the logit link and clog log link failed to provide the evidence of superior satisfying ‘parallel lines’ assumption and model fitting statistics, they were discarded from analysis in this study.

**Table 13 - Parameter Estimates of Extrinsic Job Satisfaction Facet**

Parameter Estimates		Estimate	Std. Error	Wald	df	Sig.
Threshold	[extrinsic =1.00]	-1.629	.465	12.279	1	.000
	[extrinsic = 2.00]	-.072	.462	.025	1	.875
Location	hierarchy	-.042	.014	8.633	1	.003

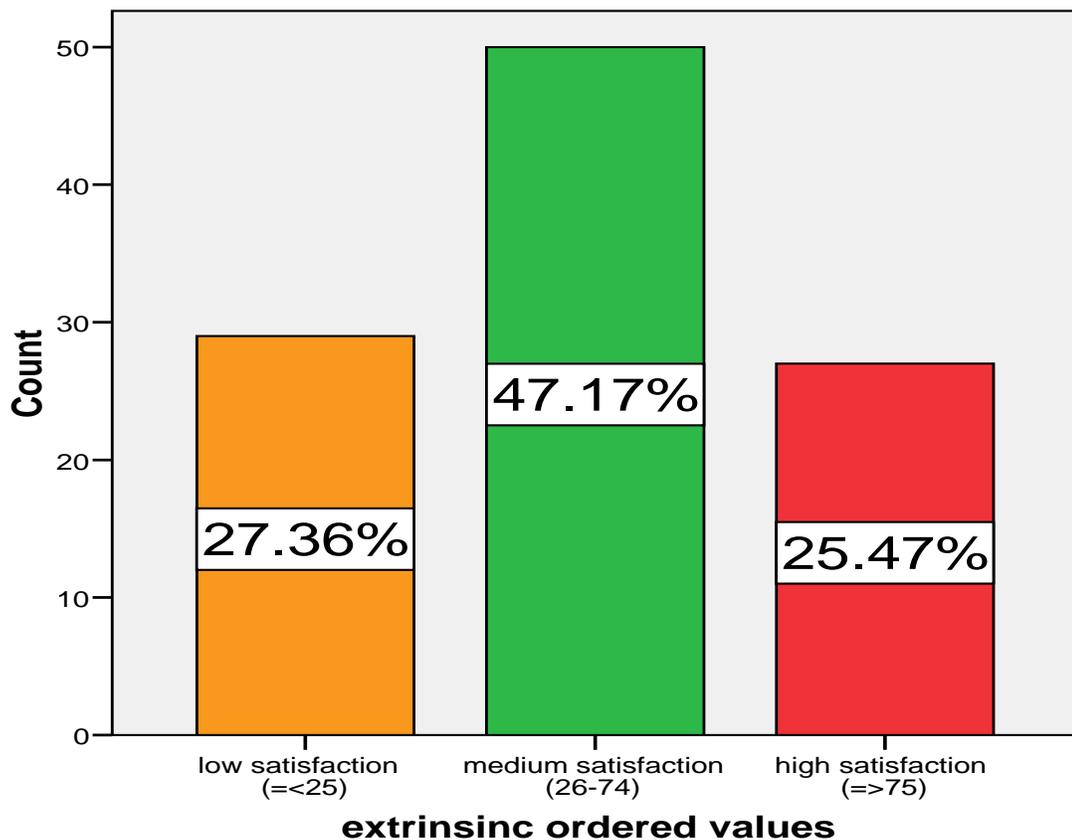
Link function: Negative Log-log.

Source: Outputs of own survey data analysis, 2011.

The pseudo R-squares for McFadden (.086), Cox and Snell (.093), and Nagelkerke (.043) in the complete model with the negative log-log link were larger than those for McFadden (.052), Cox and Snell (.060), and Nagelkerke (.025) in the complete model with the clog log link and McFadden (.073), Cox and Snell (.083), and Nagelkerke (.036) in the complete model with the logit link.

Similar to the previous model, the additional model fitting statistic the Pearson's chi-square, ( $\chi^2 = 9.5$ ,  $df=1$ , and  $p = .002$ ) for the complete model with the negative log log link were not also appropriate for this model. The chi-square test results ( $\chi^2 = .000$ ,  $df=1$ , and  $p = .994$ ) indicated that there was no significant difference for the corresponding regression coefficients across the response categories, suggesting that the model assumption of parallel lines was not violated in the complete model with the negative log link. Similar to the previous model, principle of parsimony was also applied to the construction of this ordinal regression model. Based on the above modeling strategy, the reduced model with the negative log log link was constructed to include only the dominant Hierarchy and the medium satisfaction category variables.

From the histogram chart displayed below, the bulk of cases in the actual response were medium satisfaction categories (47.17%). The medium categories were also where most of the "action" is, since teachers who rated higher scores for hierarchy culture were likely to rate a lower medium satisfaction scores. Hence, the focus was to know whether the model is doing a respectable job of predicting the medium satisfaction outcome categories or not.



**Figure 4 -- Histogram chart for distribution of extrinsic satisfaction outcome variable**

Source: Outputs of own survey data analysis

## Evaluating the Model

In order to evaluate the model, let us consider confusion matrix for extrinsic facets like the previous job satisfaction facet as follows.

**Table 14 - Confusion Matrix for Extrinsic Facets**

			Predicted Response Category			Total
			lo	mediu	high	
Actual extrinsic ordered values	low satisfaction (= < 25)	Count	0	28	1	29
		%within extrinsic actual responses	.0 %	96.6%	3.4%	100.0%
	medium satisfaction (26-74)	Count	4	46	0	50
		%within extrinsic actual responses	8.0 %	92.0%	.0%	100.0%
	high satisfaction (=> 75)	Count	2	24	1	27
		%within extrinsic actual responses	7.4 %	88.9%	3.7%	100.0%
Total		Count	6	98	2	106
		%within extrinsic actual responses	5.7 %	92.5%	1.9%	100.0%

Source: Outputs of own survey data analysis, 2011.

The cross-tabulation method on Table 14 displays the classified and the actual responses into a 3 by 3 classification table. The reduced model with the negative log -log link classified the categories of “low satisfaction” (0 %), “medium satisfaction” (92.0%), and “high satisfaction” (3.7%). The model seems to be doing a respectable job of predicting for the most frequent medium satisfaction categories. The model correctly classifies 92.0 % of the

medium satisfaction category cases. In addition, cases in predicted low satisfaction category (96.6%) and high satisfaction categories (88.9%) were more likely to be classified as medium satisfaction category than low satisfaction (.0%) and high satisfaction categories (3.7%). One can deduce that instructors who have rated higher scores for hierarchy culture were likely to rate a lower medium satisfaction scores on Minnesota job satisfaction questionnaire. As a result, only Hierarchy culture variable emerged as significant predictors of extrinsic job satisfaction facets.

### **Ordinal Regression Model for General Job Satisfaction Facets**

The logit link was found to be superior to complementary log-log and negative log-log links with better ‘parallel lines’ assumption and larger model fitting statistics. Using the reduced model with the logit link, Table 15 illustrates that both the first and second thresholds of the model equation were significantly different from zero and substantially contributed to the values of the response probability in low satisfaction category. In addition, the satisfaction level of the general job satisfaction facets was significantly associated with the Hierarchy culture. The Hierarchy culture exhibited negative regression coefficients (-.071), indicating that instructors who rated higher scores for Hierarchy culture were likely to rate a lower satisfaction scores for general job satisfaction facet. Furthermore, using the reduced model with the negative log-log link and clog log link to build the ordinal regression model, the general job satisfaction facet was found to be significantly associated with hierarchy culture. However, both models failed to provide a better ‘parallel lines’ assumption and model fitting statistics. Therefore, they were discarded from analysis in this study.

**Table 15 - Parameter Estimates of General Job Satisfaction Facet**

**Parameter Estimates**

		Estimate	Std. Error	Wald	df	Sig.
Threshold	[general=1.00]	-2.253	.790	8.128	1	.004
	[general = 2.00]	-.163	.763	.046	1	.830
Location	hierarchy	-.071	.024	8.571	1	.003

Link function: Logit.

Source: Results of own survey data analysis, 2011.

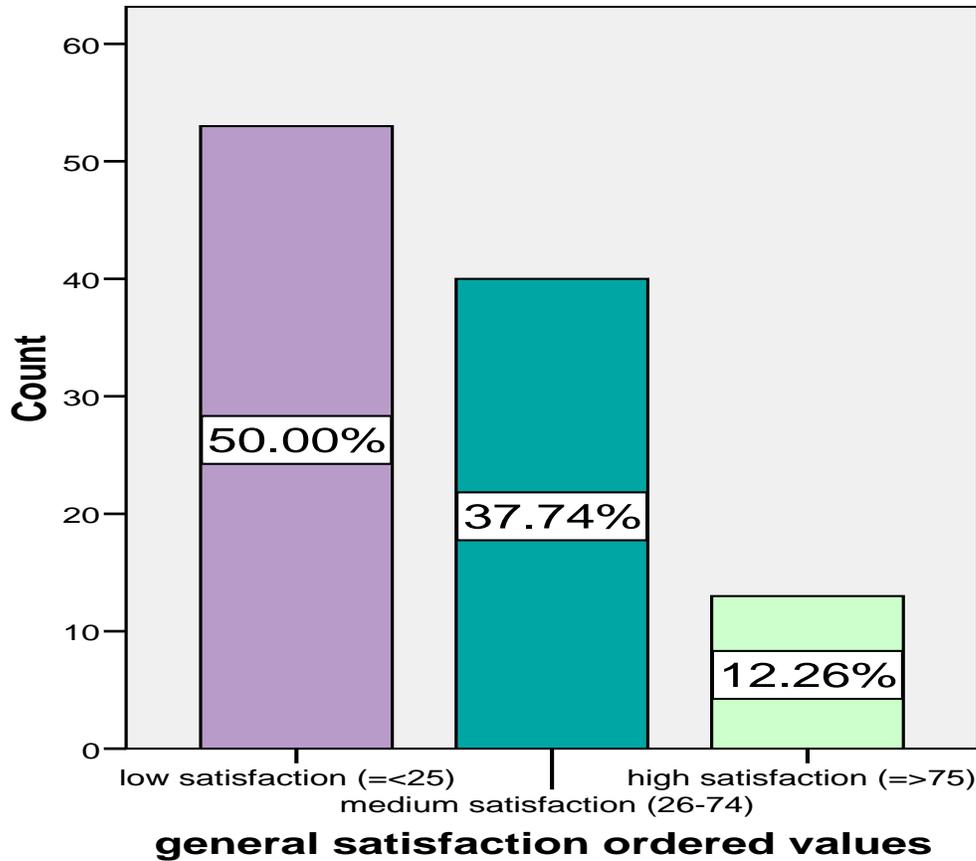
The pseudo R squares (see appendix C) for McFadden (.043), Cox and Snell (.081), and Nagelkerke (.094) in the complete model with the logit link were larger than those for McFadden (.037), Cox and Snell (.080), and Nagelkerke (.069) in the complete model with the clog log link and McFadden (.039), Cox and Snell (.083), and Nagelkerke (.073) in the complete model with the negative log-log link. Similar to the previous two models, the additional model fitting statistic for the Pearson's chi square, ( $X^2 = 8.904$  with d.f. of 1 and  $p = .003$ ) reduced model with the logit link were not appropriate for this model.

The chi-square test result of ( $\chi^2 = .005$ ,  $df=1$ , and  $p = .945$ ) indicated that there was no significant difference for the corresponding regression coefficients across the response categories. These findings thus suggest that the model assumption of parallel lines was not violated in the reduced model with the logit link. A kin to the previous models, principle of parsimony was also applied to the construction of this ordinal regression model. Based on the above modeling strategy, the reduced model with the logit link was constructed to include only the dominant Hierarchy culture and the low general job satisfaction category variables.

**Table 16 – Predicted Response Category of Actual Response Category for General Job Satisfaction Facet Parameter Estimates**

Job satisfaction facets			Predicted Response		Total
			low	medium	
Actual Response Category general satisfaction levels	low satisfaction (= < 25)	Count	41	12	53
		% within general satisfaction ordered values	77.4%	22.6%	100.0%
	medium satisfaction (26-74)	Count	20	20	40
		% within general satisfaction ordered values	50.0%	50.0%	100.0%
	high satisfaction (= > 75)	Count	6	7	13
		% within general satisfaction ordered values	46.2%	53.8%	100.0%
<b>Total</b>		Count	67	39	106
		% within general satisfaction ordered values	63.2%	36.8%	100.0%

**Source:** Outputs of own survey data analysis, 2011.



**Figure 5 -- Distribution of General Satisfaction Outcome Variable**

From the above histogram chart, the bulk of cases in the actual response category were low satisfaction categories (50.00 %). The low satisfaction category was where the "action" concentrated, since instructors who rated higher scores for Hierarchy culture were likely to rate a lower satisfaction scores. Hence, the focus was to know whether the model is doing a respectable job of predicting the low satisfaction outcome categories or not. The cross-tabulation method below depicts the classified and the actual responses into a 3 by 3 classification table.

The complete model with the logit link classified the categories of “low satisfaction” (77.4 %) and “medium satisfaction” (50.0%). The model seems to be doing a good job of predicting for the most frequent low satisfaction level categories. The model correctly classified 77.4 % of the low satisfaction category cases. Hence, instructors who rated higher scores for Hierarchy culture were likely to rate a lower levels of satisfaction scores on the general job satisfaction facets. As a result, only Hierarchy culture emerged as significant predictor of general job satisfaction facets (see table 16).

### **Ordinal Regression Model for the Overall Job Satisfaction**

#### **Facets**

The Negative log-log link was more better than complementary log- log and logit links with healthier ‘parallel lines’ assumption and larger model fitting statistics.

**Table 17 - Parameter Estimates of Overall Job Satisfaction Facets**

#### **Parameter Estimates**

		Estimate	Std. Error	Wald	df	Sig.
Threshold	[overall = 1.00]	-1.690	.499	11.464	1	.001
	[overall = 2.00]	-.217	.494	.193	1	.660
Location	hierarchy	-.047	.015	9.167	1	.002

Link function: Negative Log-log.

Source: Outputs of the survey data analysis, 2011.

Using the reduced model with the negative log-log link, the Table 20 displays that the first threshold of the model equation was significantly different from zero and substantially contributed to the values of the

response probability in low satisfaction category. In addition, the overall job satisfaction facet was significantly associated with the hierarchy culture. The hierarchy culture exhibited negative regression coefficients (-.047), indicating that teachers who rated higher scores for hierarchy culture were likely to rate a lower satisfaction scores for the overall job satisfaction facet. Furthermore, using the reduced model with the logit link and clog log link to build the ordinal regression model, the overall job satisfaction facets were significantly associated with hierarchy culture. Nevertheless, both models were discarded from analysis since they failed to provide a better 'parallel lines' assumption and model fitting statistics.

The pseudo R-squares (see Appendix C) for McFadden (.048), Cox and Snell (.097), and Nagelkerke (.110) in the complete model with the negative log-log link was larger than those for McFadden (.041), Cox and Snell (.085), and Nagelkerke (.096) and also McFadden (.033), Cox and Snell (.068), and Nagelkerke (.077) in both clog log link and the logit link reduced models respectively. Like the previous three models, the additional model fitting statistic for the Pearson's chi square, ( $\chi^2 = 10.023, df=1$ , and  $p = .002$ ) was not appropriate for this model.

The chi-square test result of ( $\chi^2 = .001$ ,  $df=1$ , and  $p = .970$ ) indicated that there was no significant difference for the corresponding regression coefficients across the response categories, signifying that the model assumption of parallel lines was not violated in the reduced model with the negative log-log link. Akin to the previous models, principle of parsimony was also applied to the construction of this ordinal regression model. Based on the above modeling strategy, the reduced model with the negative log-log

link was constructed to include only the dominant hierarchy culture and the low and medium overall job satisfaction category variables.

### Evaluating the Model

From Figure 6, the bulk of cases in the actual response were medium satisfaction categories (43.33 %) followed by low satisfaction categories (30.61%). In both low and medium satisfaction category, the "action" was strong. As our aim was to identify teachers who rated higher scores for hierarchy culture to rate most likely lower satisfaction scores, the focus was to determine whether the model is doing a respectable job of predicting the low satisfaction outcome categories or not .

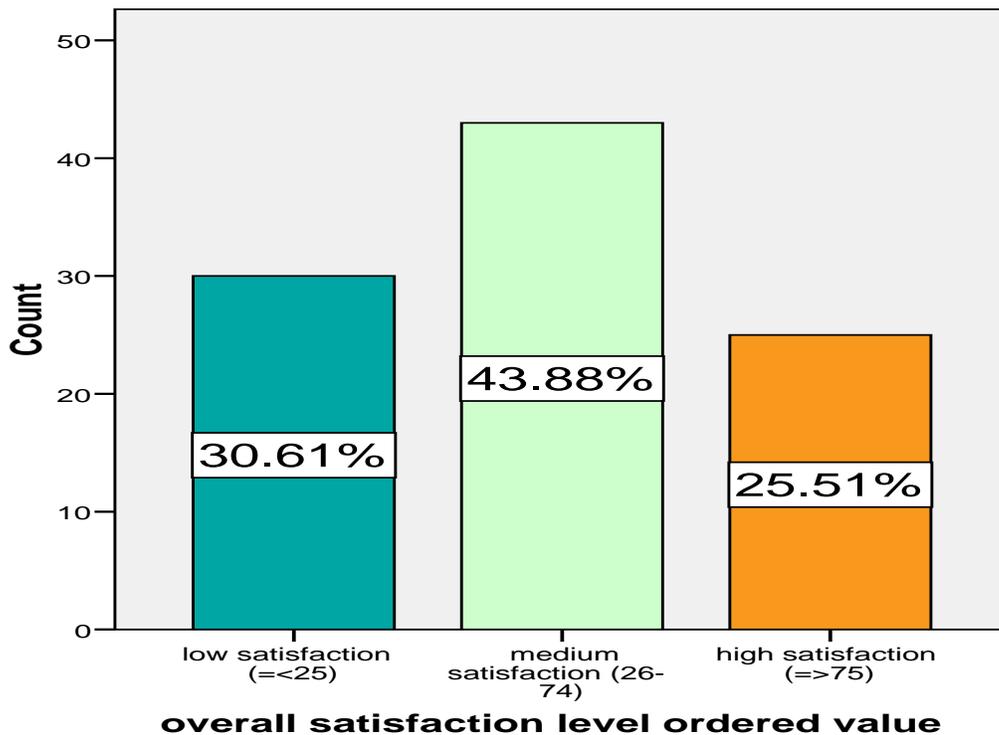


Figure 6 -- Distribution of General Satisfaction Outcome Variable

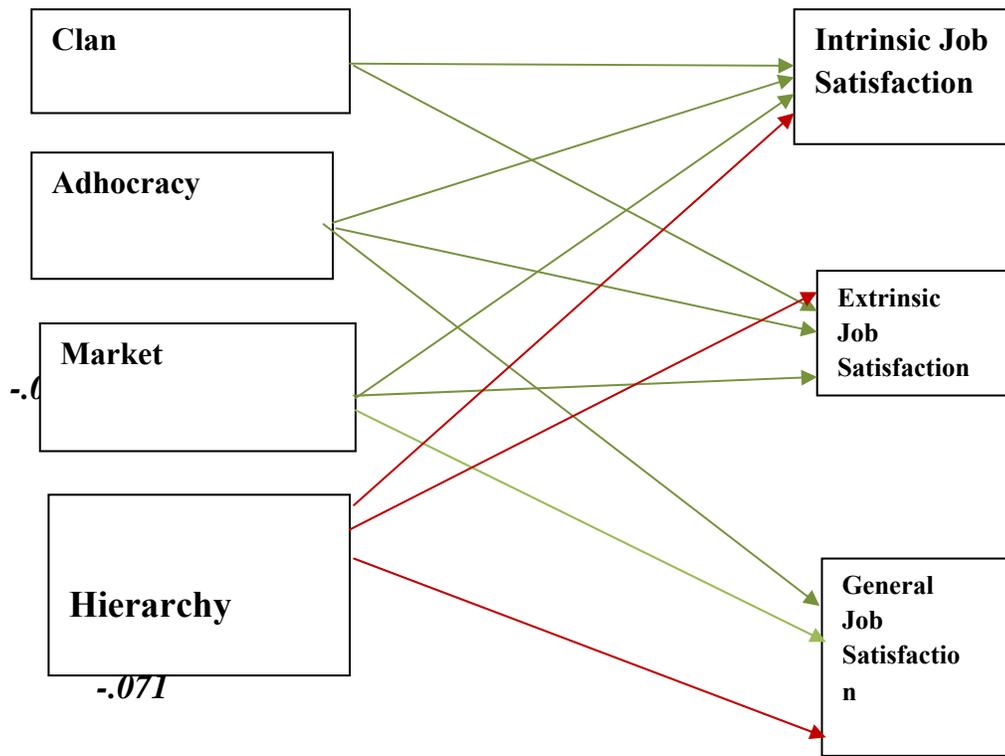
The cross-tabulation method on Table 18 displays the classified and the actual responses into a 3 by 3 classification table. The complete model with the logit link classified the categories of “low satisfaction” (80.0 %), “medium satisfaction” (79.1.0%) and “high satisfaction” (4.0 %). The model seems to be doing a good job of predicting for low satisfaction level categories. The model correctly classified 80.0 % of the low satisfaction category cases. Hence, instructors who rated higher scores for Hierarchy culture were likely to rate a lower satisfaction scores levels on the overall job satisfaction facets. Furthermore, similar to the above models Hierarchy culture emerged as significant predictor of overall job satisfaction facets.

**Table 18 - Confusion Matrix for Overall Satisfaction Facets**

			Predicted Response Category			Total
			low	medium	high	
overall satisfaction level ordered value	low satisfaction	Count	24	6	0	30
		%within overall satisfaction level	80.0%	20.0%	.0%	100.0%
	medium satisfaction	Count	8	34	1	43
		% within overall satisfaction level	18.6%	79.1%	2.3%	100.0%
	high satisfaction	Count	3	21	1	25
		%within overall satisfaction level	12.0%	84.0%	4.0%	100.0%
Total		Count	35	61	2	98
		% within overall satisfaction level	35.7%	62.2%	2.0%	100.0%

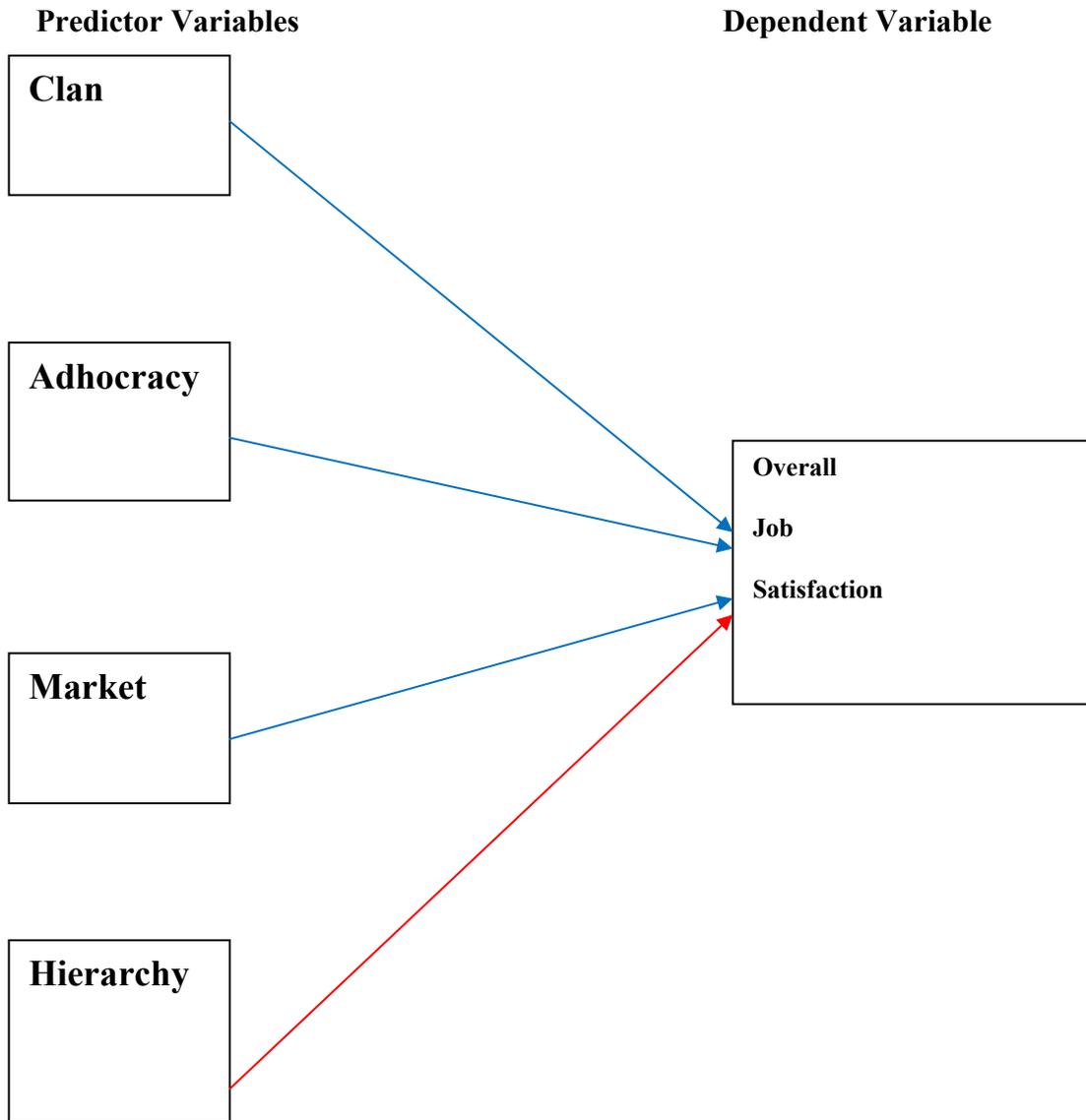
Source: Results of data analysis, 2011.

In general, the findings of the ordinal regression model can be summarized by the following figure:



**Figure 7 -- Relationship between the Four Cultural Types and the Four Dimensions of the Job Satisfaction Scale**

Source: Designed by the author, 2011.



 The red lines represent significant relationship between variables.  
 The blue lines represent no significant relationship between variables.

**Figure 8 --Relationship between the four cultural types and overall job satisfaction**

Source: Outputs of data analysis, 2011.

## **Summary, Conclusion and Recommendation**

### **Summary**

This part of the paper presents summary of major findings, and then the conclusions drawn from those empirical-based findings. Finally, the researcher suggests some recommendations based on the major findings and conclusions of the study. Next, let us present and describe summaries on demographic profiles of the respondents and their levels of job satisfaction, the existing organizational culture types in the University College and results of the ordinal regression analyses on those variables considered in the study.

### **Demographic Profiles of Respondents**

A summary of descriptive statistics yielded the following composite picture of St Mary's University College academic staff. The personal demographic profiles showed that the majority of the instructors, 54.2%, fell within the category of 31-40 years of age. The second majority 36.4 % of the teachers were found within the category of 21-30 years. The oldest participants, 2.8% fell within the category of 51-60 and finally 6.5% of respondents fell within the category of 41-50 years of age. Almost 91.6 % of the respondents were male, 3.7 % were female and the rest 4.7% didn't specify their gender. The majority of the teachers, 68.2% obtained a master's degree and 1.9 % a doctorate, 26.2%, earned bachelor's degree and 3.7% earned an advanced diploma. Overall, the instructors in the study appear to be moderately educated with 70.1% of them are holding a second degree and above.

The findings for the demographic profiles with respect to academic rank showed that the majority of instructors, 70.1 % of them hold an academic rank of lecturer .26.2% of the instructors were graduate assistants and

assistant lecturers. Furthermore, the remaining 2.8% and 0.9% of the respondents were professors and assistant professors respectively. In addition to this, 54.2% of respondents were permanent full-time employees, 25.2 % were part-timers, also 13.1% were joint staff and, finally, 7.5% were found to be contract employees.

### **Level of Job Satisfaction**

Job facets of relatively greater satisfaction included independence, co-workers, and activity as reflected by their means of 3.8, 3.7 and 3.59, respectively. As reflected by their means of 2.9, 2.8, 2.45, 2.4 and 1.9, respectively, job facets of relatively lesser satisfaction included company policies and practices, social status, recognition, advancement and compensation. Considering the job facets of relatively lesser satisfaction and expressing the results using frequencies, 42.1 % of the respondents were dissatisfied with company policies and practices. Over 26.2% of the respondents were very dissatisfied on social status of teaching profession. 33.6% and 17.8 % of respondents were very dissatisfied and dissatisfied respectively over the recognition they received from the University College. Furthermore, 33.6% and 19.6% of the instructors expressed their very dissatisfaction and dissatisfaction over advancement or promotion. Finally, 45.8% and 28% of the respondents were very dissatisfied and dissatisfied with compensation package of the University College respectively.

The participants reported low (39.3%), medium (31.8%) and high (21.5%) levels of intrinsic job satisfaction respectively. The existence of high low level of intrinsic satisfaction can be as a result of the following dyadic factors. Primarily, among the 20 job facets, 73.8% of the instructors were not

satisfied with compensation package of the University College. As a result, instructors were found to be not free from concern about their lower level needs which, in turn, affected their intrinsic satisfaction level (Cohen, 1974). On the other hand, 51.4% of instructors felt that they had not received proper recognition for their efforts on the job assigned. This implies that the instructors get bored and stressed on their jobs because of the inadequate recognition they have given out of it. (August & Waltman, 2004).

The majority of participants (46.7%) reported a medium extrinsic job satisfaction level, whereas the rest of the participants reported a low (27.1 %) and high (25.2%) levels of extrinsic job satisfaction respectively. This implies that instructors were moderately satisfied with extrinsic satisfaction factors. Furthermore, 49.5% of the participants reported a low level of general job satisfaction; whereas 37.4% and 12.1% of participants reported a medium and a high general job satisfaction levels respectively. Therefore, almost half of the respondents were not satisfied with their coworker relationships as well as their working environment. This can be as a result of the existence of dominant Hierarchy culture in the Institution which is far from collegiality and creates low morale over employees (Cameroon & Quinn, 2004). Finally, 28%, 40.2% and 23.4% of the participants reported low, medium and high levels of overall job satisfaction in that order. Generally, one can argue that the instructors are moderately satisfied with their current jobs.

### **Organizational Culture**

The highest mean scores (Mean= 32.07) showed that the dominant culture type for SMUC in the current situation had been the Hierarchy culture, followed by Clan (Mean= 24.18), Market (Mean= 23.18) and Adhocracy (Mean= 20.38)

culture types respectively. The hierarchical classification applied to SMUC portrays that the organizational culture compatible with this form (and as assessed in the OCAI) has been characterized by a formalized and structured place to work. That is, procedures govern what people do. Effective leaders are good coordinators and organizers. The Hierarchical culture in the Organization maintains a smooth running organization is important. The long-term concerns of the organization are stability, predictability, and efficiency. Formal rules and policies hold the organization together. The strength of the culture is determined by the number of points coincide to a specific culture type. In the current situation, the Hierarchical culture type exhibited by SMUC is moderately strong which indicates that the dominant Hierarchy culture in SMUC has been Hierarchy. This finding is in harmony with what research has revealed about organizations that possess strong cultures, they are associated with having homogeneity of effort, clear focus, and higher performance in environments where unity and common vision are required (Cameron & Quinn, 1999).

Only one demographic group considered in this study displayed a different culture type from the overall dominant Hierarchy culture of SMUC. The demographic group labeled as academic rank of associate professor had a Clan dominant culture for the current situation. However, this finding is not statistically significant with a p- value of 0.33.

### **Regression Analysis**

Only Hierarchy culture with all satisfaction categories related to the satisfaction of the instructors (i.e., intrinsic, extrinsic, general and overall satisfaction levels) was identified in the residual ordinal regression model. Hierarchy culture significantly contributes to the probability of the instructors' expression of their satisfaction as indicated with the intrinsic,

extrinsic, general and overall satisfaction scores. The satisfaction of the intrinsic satisfaction facet was significantly associated with the Hierarchy culture. The Hierarchy culture exhibited negative regression coefficients (-0.042) indicating that the instructors who had rated higher scores for hierarchy culture were likely to rate a lower satisfaction scores for intrinsic job satisfaction facet. Furthermore, the satisfaction of the extrinsic satisfaction facets was significantly associated with the Hierarchy culture. The Hierarchy culture exhibited negative regression coefficients (-.042) indicating that the instructors who had rated higher scores for Hierarchy culture were likely to rate a lower medium satisfaction scores for intrinsic job satisfaction facet. In addition, the satisfaction level of the general job satisfaction facets was significantly associated with the Hierarchy culture. The Hierarchy culture exhibited negative regression coefficients (-.071) indicating that the instructors who rated higher scores for hierarchy culture were likely to rate a lower satisfaction scores for general job satisfaction facet. Finally, the overall job satisfaction facet was also significantly associated with the Hierarchy culture. The Hierarchy culture exhibited negative regression coefficients (-.047) which indicates that the instructors in the study who had rated higher scores for Hierarchy culture were likely to rate a lower satisfaction scores for the overall job satisfaction facet.

## **Conclusion**

The findings of this study show that instructors are moderately satisfied with their overall job satisfaction. According to Shing (2008), intrinsic job satisfaction facets are concerned more with how people feel about the nature of their job and extrinsic as well as general job satisfaction facets which are how they feel about elements of work situations that are external to the job

tasks itself. Thus, the impact of job satisfaction is more intrinsic one than extrinsic or general ones. Therefore, one can argue that St Mary's University College's instructors are less satisfied with their jobs .A close view of specific job facets indicates the highest satisfaction levels to occur in the areas of independence, co-workers, and activity. Company policies and practices, social status, recognition, advancement and compensation are the facets reflecting the lowest satisfaction levels.

Even though studies which are made on administrators, students and department chair persons of universities in developed countries had concluded that the Clan culture as the most effective culture type for colleges and universities (Berrio, 2005; Smart & John, 1996). The findings of this study were not in agreement with the above-stated studies since the dominant culture type was found to be Hierarchy in SMUC. Hierarchy cultures, like Clan cultures, have an internal emphasis, a short-term orientation, and an emphasis on smoothing activities, but differ in their emphasis on stability, control, and predictability (as opposed to the emphasis on flexibility, individuality, and spontaneity in Clan cultures). The dominant leadership style in Hierarchy cultures is that of the coordinator or organizer, rules and policies are the primary bonding mechanisms, and the strategic emphasis is on permanence and stability (Cameroon& Quinn, 2004). This more Weberian image of organizations was also once a common framework for viewing the organizational patterns and administrative activities of colleges and universities, but was never an image of organizations that was highly compatible with the basic instincts of many faculties who frequently emphasize collegiality over standardized rules and procedures (Smart & John, 1996).

The main purpose of the study was to determine whether a relationship existed between organizational culture types and job satisfaction or not. It was found that a significant, negative correlation had existed between the Hierarchy culture type and intrinsic, extrinsic, general and overall satisfaction facets. These results also correlate with the study conducted by Lund (2003). Moreover, There was a significant positive correlation between the Market culture type and intrinsic, extrinsic, and overall satisfaction facets. However, there was no significant correlation between Clan and Adhocracy culture types and all facets of job satisfaction.

The study tried to test a conceptual model of the effect of organizational culture types on academic staff job satisfaction using an ordinal regression model. The results suggest that Hierarchy culture has a significant influence on overall instructors' job satisfaction as it predicted overall job satisfaction as well as three distinct categories of job satisfaction facets, namely, intrinsic, extrinsic and general satisfaction. These imply that the instructors who have rated higher scores for Hierarchy culture are likely to rate a lower satisfaction scores for each of job satisfaction facets, namely, intrinsic, extrinsic, general and overall satisfaction. These results are consistent with those of the study conducted by Lund (2003) which found that there was a negative relationship between job satisfaction and Hierarchy culture. Given that the Hierarchy culture is primarily associated with low employee morale, the finding is an anticipated one. The negative impact of the Hierarchy culture on employee job satisfaction can be explained by the fact that Hierarchy culture was strongly associated with formalization, resistance to change, stability, a reactive orientation toward change, and low morale of employees at colleges (Cameroon & Quinn, 2004). However, the lower level of satisfaction scores as a result of hierarchy culture does not imply neither

higher nor lower employee performance (Lund, 2003). Moreover, Odom, Boxx and Dunn (1990) found that the dominant bureaucratic (Hierarchy) culture is not most conducive to the creation of employee commitment, job satisfaction, and work-group cohesion.

It is also interesting to note that the findings on culture types and job satisfaction are also theoretically consistent with the competing values model from which the study conceptual framework was derived (Cameroon & Quinn, 2004). For example, firstly, institutions that had Clan-type cultures were most effective in domains of performance relating to morale, satisfaction, internal communication, and supportiveness. Secondly, Adhocracy-type cultures were most effective in domains of performance relating to adaptation, system openness, innovation, and cutting-edge knowledge. Thirdly, institutions that had a Market-type culture were most effective in domains of performance relating to their ability to acquire needed resources such as revenues, good faculty, and institutional visibility. Finally, those institutions with Hierarchy cultures did not excel in any of the performance domains.

## **Recommendation**

1. The Administrators in St Mary's University College should be concerned about the impact of organizational culture on academic staff's job satisfaction because of its impact on variables such as turnover, commitment, morale, development and strength of academic staff's solidarity and cohesion, grievances and performance. Therefore, if the management desires to create greater levels of satisfaction over their employees, it should begin a concerted effort to diagnose and change the prevalent Hierarchy culture. The new culture should be Clan which is

characterized by people-orientation, encouragement, equitability, trust, and allowing of greater academic freedom. An attempt to remove bureaucratic barriers may contribute somewhat to creating satisfaction but significant improvement will occur only when positive action to increase the collegiality dimension is taken. Those organizational cultures with characteristics expressed in terms of collegiality and collaboration are generally those types that promote satisfaction and feelings of professional involvement of instructors. Other types of cultures that create, maintain, and reinforce isolation do little to help the instructors to resolve issues or to learn new techniques to help them teach. These cultures of isolation and balkanization (Ma & Macmillan, 1999) actually contribute to instructors' dissatisfaction and to a loss of certainty about their professional competence.

2. The current study is a warning to SMUC management that should take it for granted that the existing organizational culture phenomenon could lead to a lesser job satisfaction level on academic staff. Alternatively, this could mean that management should work towards implementing those cultural types which boost the morale of employees in the work place. The negative significant relationship between the prevalent Hierarchy culture and job satisfaction level of academic staffs in SMUC is confirmed by the findings of different previous studies conducted elsewhere in the world (e.g., Lund, 2003; Choi et al., 2008).

3. St Mary's University College proclaims itself as an Institution which stands for quality of education. However, a low moral of the instructors will mitigate the success of the aforementioned motto of the University College since it results in low level of student's achievement (Endaweke, 2008). Therefore, the management of SMUC should stress the need to

monitor organizational culture and to evolve better management practices so that employees' satisfaction can be maintained at a high level.

4. "Counting the hours instructors spend on the job or 'evaluating them' by observing them in the classroom may satisfy the external auditors, but it does not affect directly instructor's motivation" (Cohen, 1974). Therefore, the question should be what can be done to enhance satisfaction? If the variables leading to dissatisfaction in SMUC are intrinsic, then satisfaction can best be enhanced by removing obstacles on these facets of job satisfaction. This can be accomplished most readily by providing them with better compensation package so that they may get free from concern about lower-order needs and, in turn, they can boost their social status in the community. However, compensation package is not the only factor which makes employees get satisfied in their jobs. In fact, it is the overall organizational culture which makes the employees to become satisfied and to retain them within Organization.

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