Professional culture fit and work-related quality of life in academic departments: A phenomenographic approach.

A DISSERTATION
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA
BY

Tatiana Andrea Canales Opazo

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

David W. Johnson

January, 2011

Acknowledgements

I heard somewhere that finishing a doctoral program was not less an emotional test than an academic one. They were right.

I would like to thank everybody who was involved in this effort.

- *To David, for his endless patience and undeniable trust.*

- *To Oscar, Virginia and Mauricio, for believing in this project and letting me go away when needed.*

- *To Macarena, for inspiring me and being proud of me, no matter what.*

- *To the Dickinson family, for giving me a home away from home.*

- *To Nadia and Pedro, for their support in so many different ways.*

- *To the whole CICAD crew, for saving me a spot.*

- *To Gracia and Angelica, for being the culprits of this whole idea.*

- *To my friends, for bearing with me all this time.*

I would not be here without you.

Dedication

To the family I was born into, and the one I have been lucky enough to find over time.

A la familia en la que nací y a la que he sido lo suficientemente afortunada de encontrar en el tiempo.

Abstract

Although quality of life (QoL) has been a highly investigated issue over the last decades, there is still little agreement on its definition, and even less information about the validity of its measurements in specific settings. Additionally, in complex institutions like a university, functional units such as academic department usually are more valid levels of analysis than institutional ones, and their cultures can have a distinctive effect in its members' perception of QoL. In this study, faculty members of three academic units were analyzed using quantitative and qualitative methods in order to establish possible connections between their fit and their idea of quality of life. Results show different connotations and different relevant dimensions included in the concept of QoL, according to departmental culture and person-culture fit perception.

Table of Contents

List of Tables

List of Figures

The idea of quality of life is a common concept in today's language. People are increasingly concerned about their comfort, satisfaction and their general well-being, based on the conditions of their life. In a scenario as dependent of the society dynamics as higher education, faculty members become a relevant group to assess in their perception of quality of life, since they are the ones in contact with students and external organizations, and they impact greatly in the organizational effectiveness and quality. As a group, faculty members within an academic department become an active system that creates culture, values and norms that would likely have an impact on their own perceptions of quality of life at work and, by extension, to their performance. Therefore, a cultural approach to quality of life can help understand how faculty members prioritize and organize their evaluations and perceived needs of quality of life, based on their perceived fit to their departmental culture.

Quality of life as a construct

Researchers have been interested on defining quality of life (QoL) since the beginning of the industrial revolution (Rapley, 2003). QoL is described as a desirable consequence of technological and political changes affecting aspects of everyday life (Gaona, 2003; Haas, 1999). Nevertheless, critical studies can argue that an important proportion of the studies devoted to this issue do not define, nor argue their vision of quality of life nor its operationalizations (Gill & Feinstein, 1994).

Conceptually, the idea of QoL has two main sources of evolution: history and

discipline. Considering the first variation, the literature shows that the definition of QoL has changed according to specific historical and social events, and it does not imply currently a consensus among researchers and fields of study. In its early years, shortly after the industrial revolution, QoL was related to a material level of living, assuming that a higher national product or income, for instance, would involve better perceptions of well-being and perceptions of quality of life. Later, and after policy makers discovered that economic changes did not affect the perception of QoL in the population, society started to consider more subjective elements, and the research based on this concept started to use gap approaches that compared the actual way of living with the desired way of living to determine the QoL (Haas, 1999). Latest definitions of this QoL construct involve an emphasis on each person's perception of objective factors in their life based on their values and priorities. The second variation derives from the varied disciplines that are interested in the concept. Economy, psychology, sociology and health sciences are particularly interested in QoL and therefore, they approach it using the method that is dominant within each field of study (Phillips, 2006; Rapley, 2003). For instance, psychologists are usually interested on subjective aspects of quality of life, and they represent it by using ideas such as happiness, subjective well-being, and life satisfaction (Sirgy, 2002), basically equating self-perceived quality of life with subjective well-being (Phillips, 2006). Similarly, social scientists focus more on constructs that depend on subjective measurement. On the other hand, economists' training does not involve attention to subjective measures, so they dismiss that kind of information to validate elements related to access to services and infrastructure (Cummins, 2000) like internet

access or credit opportunities, for instance. This difference in conceptual and methodological approaches explains why, when trying to measure QoL, researchers use indicators ranging from individuals' subjective estimations to macroeconomic indexes, and may also consider other complex constructs, such as social capital. It has been suggested that there are almost as many definitions of "quality of life" as people who want to use the term (Meeberg, 1993). Consequently, operationalization of these idiosyncratic constructions of quality of life can also involve factors as diverse as "the presence of a parking lot nearby" or "percent of females in the labor force" (Rapley, 2003). This variety of approaches and measurements of the idea of QoL is not just an issue at a theoretical level, since it has been described that some indicators do not always find a practical significance among most people when they are faced with the task of evaluating their own QoL based on someone else's construction (Hardwick, 2009). Actually, when people are asked to list the important areas that define their personal sense of QoL, they usually refer to relationships with significant people, personal health, their significant other's health, and economic well-being and standards of living (Phillips, 2006).

In order to intervene this lack of interdisciplinary agreement about the definition of QoL, a commission of researchers formed in 1991 (The World Health Organization Quality of Life group - WHOQoL) tried to unify and propose a transcultural and transdisciplinary definition of QoL as:

the individual's perception of his or her position in life, within the cultural context and value system he or she lives in, and in relation to his or her goals,

expectations, parameters and social relations. It is a broad ranging concept

affected in a complex way by the person's a physical health, psychological

state, level of independence, social relationships and their relationship to

salient features of their improvement. (The WHOQoL Group, 1994, p. 43).

This definition of quality of life emphasizes the perceptual component of it, and it

presents it as a relative idea based on the relevant context for each individual. Stated in

this fashion, this definition has been the conceptual basis for the development of a widely

accepted and applied instrument for the evaluation of generic perception of quality of

life: The WHOQoL assessment. This instrument is a subjective evaluation, and primarily

geared to the psychological area of well-being, that asks how satisfied or dissatisfied

people are by important aspects of their life. The questionnaire is interested on

evaluations of physical health, psychological state, social relationships, and

environmental factors, and it has demonstrated a satisfactory cross-cultural validity

(Skevington, Lotfy, & O'Connell, 2004). Although this is a good screening instrument in

terms of psychometric properties, it has been argued that it does not relate as closely as it

could be expected with the very complex construct that aims to represent, since its items

often are geared to life satisfaction and not quite QoL. Despite the emergence of this

definition and instrument, several researchers keep presenting new definitions and

models to assess QoL, based on conceptual issues (Martel & Dupuis, 2006).

Several concepts are associated with the idea of quality of life, such as well-being,

happiness, conditions of life, and life satisfaction (Meeberg, 1993) that need to be

clarified. Subjective well-being as a field of study is defined as:

the scientific analysis of how people evaluate their lives—both at the moment and for longer periods such as for the past year. These evaluations include people's emotional reactions to events, their moods, and judgments they form about their life satisfaction, fulfillment, and satisfaction with domains such as marriage and work (Diener, Oishi, & Lucas, 2003a, p. 404).

Complementarily, life satisfaction is defined in terms of a comparison between accomplishments and goals (Meeberg, 1993; Rapkin & Schwartz, 2004). In this way, it seems that well-being would include the emotional reaction to the judgment made as life satisfaction, and this well-being would be the scientific term that represents the lay person's idea of happiness (Diener, Oishi, & Lucas, 2003a). Overall, these concepts rely primarily on individual perceptions and evaluations, which make them more subjective and narrow than the standard definition of quality of life as presented by the World Health Organization of Quality of Life.

Generally speaking, quality of life can be measured using two methods: structured and non-structured instruments. When using a structured instrument, like a scale, it is the researcher's concept of quality of life that is measured by the scale, and thus, it could be invalid, or misunderstood by the subject (Xavier, Ferraz, Marc, Escosteguy, & Moriguchi, 2003). These questionnaires might differ in length ranging from a single item to several hundred, sometimes with similar validity indexes (de Boer et al., 2004). The methodology used in non-structured interviews allows subjects to freely identify the factors which contribute to their positive or negative attributions regarding quality of life, therefore, providing a personal meaning to the ideas expressed (Xavier et als. , 2003).

Most researchers choose to use a structured, written self-report instrument geared to evaluate either a generic QoL, the expected QoL after an intervention or in a particular life experience, or a specific area within QoL -social, work, living conditions- (Guyatt, Feeny, & Patrick, 1993). Within this approach, the first task involves deciding what type of indicators would best represent the concept of QoL in measurement; some researchers propose that objective measures would report better data, and others claim that subjective factors would return better information. Subjective and objective measures of QoL are necessary conditions, but neither of them is sufficient to represent an adequate experience of quality of life. Objective measures dismiss life experience and subjective measures trust that each person's communication about their QoL is valid (Hagerty et al., 2001). Some argue that even the measures that claim to be as objective as possible in measuring quality of life are the product of value judgments (Rapley, 2003). Since there is no measure of reality beyond our capacity to experience the world, the "objective" measures are also a product of a person's perception and, as a consequence, a subjective indicator (Cummins, 2000).

As an alternative to the subjective-objective conflict for measuring quality of life, authors like Withey (1976, as cited in Cummins, 2000) have proposed comprehensive measures that involve a function between the level of affective evaluation of an aspect of life and an objective measure of it, but the selection of the elements and the ratio is not always easy to specify and interpret. With the same purpose, an interesting approach that accounts for the need to comprehensively measure QoL and the issue of integrating the objective and subjective measures in it is the culture-oriented approach to QoL. The

cultural perspective on the definition of QoL stresses that QoL can only be understood from the knowledge of the culture that facilitates certain shared values and priorities for specific human groups and contexts (Sirgy, 2001).

A culture-oriented approach to QoL, despite its significance for the understanding of the idea of quality of life, presents its own challenges related to its validity. First, since it is particular to a group, it implies that a culture-specific definition of concepts needs to be established if researchers want to validly represent their understanding of QoL. If an idiosyncratic definition is not delimited, researchers have no certainty to assume that each subject associates the same denotation and connotations to the given concept, or to assume that the concept is applicable at all. This need is especially relevant if single-item measures will be used, since there will be no other reference than the subject's understanding of the stimulus (Ratzlaff, Matsumoto, Kouznetsova, Raroque, & Ray, 2003). Second, people who perform different roles in their life and who function in different cultures can have complex interrelations among each life domain to determine their overall perception of QoL, reflecting not only one culture, but several of them in their answers. Summarizing, researchers interested in a cultural approach to QoL need to obtain a valid definition of the concept for the culture they are investigating, and they also need to understand the value that members attribute to that culture in their overall lives.

The study of quality of work life in universities

Anyone with job experience is aware of the role that work plays in one's life. It can

determine access to resources, decisions for the future, the decision to start a family. etc., besides affecting the current life satisfaction, schedule, or even social identity (Martel & Dupuis, 2006).

In organizational settings, the specific component of quality of life, often referred to as quality of work life (QoWL) has become an important idea to evaluate to inform other attitudinal elements and performance at work. It has been defined as "the workplace strategies, operations and environment that promote and maintain employee satisfaction with an aim to improving working conditions for employees and organizational effectiveness for employers" (Lau & Bruce, 1998, p. 213) although some people prefer to call it "quality of place" (Hardwick, 2009). Just like the general evaluation of QoL, the QoWL depends on priorities and values that influence employees' perceptions. For example, in a nation-wide research, Australian employees felt that the most important factors that affected their judgment of quality of life were interpersonal relationships with co-workers and having an interesting and satisfying job (Considine & Callus, 2002). After over 30 years of research in the concept, quality of work life has been found to be based both on organizational characteristics (such as institutional type, resources, unit size) and on individual characteristics (such as gender, academic rank, personal history) and it is considered as a predictor for other attitudinal outcomes, such as commitment, institutional fit, or other indicators. Its value resides on its ability to relate to relevant behavioral outcomes, such as productivity (Johnsrud, 2002).

According to current studies, the perception of QoWL depends of the kind of institution that inspires it. In this context, QoWL in educational organizations is

functionally, structurally and qualitatively different from regular organizations, especially in their interpersonal dynamics. The main differences can be summarized into four areas. First, universities have distinctive two-way learning processes between students and faculty, which is hard to find in any other kind of organizations. Second, universities deal with a great diversity of clients at the same time, generating products and output for government, students, other organizations, and the society as a whole. Associated with the second area, the third difference involves universities' need to fulfill different demands, according to their diverse clients, using distinctive processes and generating a diverse assortment of products. Finally, the fourth idea has to do with the unclear differentiation between the service offered by a higher education institution and the product of its service, which makes the evaluation of its performance a complex issue (Rodriguez & Apodaca, 2004). These ideas support the premise that the QoWL of faculty members in higher education institutions might be based on different factors than most other organizations.

Although in some basic elements such as location, payroll and administrative tasks, academic work could be analyzed as any other organization, it also includes other characteristics that make it unique. Academics usually want to understand the environment, and not necessarily are driven to accomplish organizational goals (Lane, 1985). The goals of specific faculty, their disciplinary departments, and the bigger institution might differ (Cannon, 1983). Since probably there is not an extensive amount of common orientation among faculty members, it is hard to conceive academia as a delimited activity or a unified cultural phenomenon, (Lane, 1985). Universities have

unique characteristics that need to be understood to study them. First, their goals and standards are ambivalent, they usually have different standards for teaching, research and community service, and these are usually socialized in different ways across academic units. Second, being a people-oriented institution, universities must consider the needs and expectations of different groups to achieve their goals, creating parallel agendas. Third, the nature of their work makes hard to evaluate effectiveness, unlike any other productive organization. Fourth, the marked tendency of professors to work individually and to consider themselves as experts makes difficult to establish decision-making processes, goals and common strategies. Fifth, universities are highly vulnerable to their political, social, technological and demographic contexts. Summarizing, the characteristics of universities make their culture classification a hard job, making some people express the uniqueness of universities calling them "expertocracies" (Mintzberg, 1982, as cited in Sporn, 1996, p.43) and emphasizing their quality of loosely coupled systems.

Being a service-oriented organization, the effectiveness of a university depends importantly on the attitudes and dedication of their members. Interestingly, most universities do not promote strong policies or support systems to take care of the well-being of their faculty members (Johnsrud, 2002). This apparent lack of effort to satisfy staff members could have an impact on faculty members' attitudes towards their work environment. In addition to what happens in a regular organization, where a member's work affects his/her work team and the overall organizational productivity, every faculty member also influences a cohort of students and their satisfaction level might even affect

other people. For example, it has been found that if the morale of the profession suffers a serious decline, then this will almost certainly have the effect of undermining the quality of teaching and research (Powell, Barnett, & Shanker, 1983). Even though the concept of QoWL is not equivalent to morale or job satisfaction, these ideas are included in a global perception of quality of life, suggesting an association between organizational characteristics and the quality of the education offered to students.

In order to understand better the interpersonal dynamics in the academic work life, it is necessary to know faculty member's motivations and their perceived place within their institutions. Studies that attempted to explore faculty members' job motivation have found that the main attraction that academic work offers is the opportunity for research and reflective work, that is, intellectual freedom. In addition to this general motivation, for most academics, teaching is an important and rewarding part of their job. However, if one finds it unrewarding, teaching triggers a great deal of frustration since it is such a regular activity. At this point, it is important to highlight that most of the motivation towards academic work could be classified as individualistic efforts, which will probably affect how the academics relate to their peers within their institutions (Lane, 1985). Nevertheless, it seems that for most academic work environments, there is a potential of affecting academic productivity by the interaction between organizational aspects and personal characteristics, regardless of the reason that brought these faculty members to work in academia.

Research on QoWL on faculty members.

From a sociological point of view, it is expected that well-educated people, such as academics, would have access to jobs that preserve their sense of personal control, becoming less alienating, and giving them possibilities to use and learn new skills. It is also expected that well-educated people had stable social relationships and good social support networks (Brint, 1998). Based on those elements, it would be fair to anticipate that these people would have comparatively better psychological well-being, because they have better skills developed by schooling. However, several studies support the conclusions that well-educated people are not generally more satisfied in their life or their jobs than the poorly educated ones (Ross & Van Willigen, 1992).

Studies on the QoWL among faculty members have shown faculty as devalued and dispirited in organizational contexts, finding that even though most of them love what they do, they are rarely satisfied with their working conditions (Johnsrud, 2002). When relating QoWL with other environmental factors, researchers have found that work overload and stress play an important role in faculty member's perception of QoWL. However, other studies (Blackburn and Bentley, 2001, as cited in Johnsrud, 2002) have proposed that environmental and human variables do not moderate the relationship between stress and productivity, leaving the mediating role to more personal variables, such as self-competence. On another hand, using qualitative structured interviews with full-time tenure track faculty members, at Appalachian State University (Hubbard Center for Faculty and Staff Support, 1998), determined that the most important factor in the quality of life as reported by their faculty members was the quality of their interpersonal

relationships with people inside and outside their institution, although they did not have time to nurture them as profoundly as they wished.

Studies have found that most faculty members evaluate their quality of life based on many factors, such as: individual preferences, characteristics and interaction with colleagues, administrative size and style, and faculty participation in the decision-making process (Powell, Barnett, & Shanker, 1983) . Also, there is evidence of a dialectical relationship between the satisfaction with academic life and the personal sacrifice that faculty perceive in their lives, and also between the commitment to student learning and the incongruity between rhetoric and action. This is, if the quality of relationships between the faculty member and his/her colleagues is satisfactory, they are more willing to make personal sacrifices and to work through incongruences between organizational discourse and practice (Hubbard Center for Faculty and Staff Support, 1998).

Additionally, the issue of assessing QoWL does not refer just to the professional life, since it is known that perceptions and evaluations related to one area of life can have an effect on the person's whole evaluation of quality of life. Specifically, the literature describes bottom-up, top-down and horizontal spillovers, according to the level on which one domain affects the others that can have lower, higher or similar levels of importance and specificity in their life, respectively. The affect contained in each life domain travels upward, downward and horizontally to influence or compensate the others, causing some people to decrease the importance of life domains that make them feel bad and to increase the ones that give them better feedback. Therefore, a life domain that does not generate positive evaluations might be left out or ignored, implying less commitment,

effort, or interest to achieve results (Sirgy, 2002). Applying this idea to higher educational settings, a negative spill-over effect could possibly have a significant effect on the organizational performance if a faculty member does not consider his professional life as rewarding as the rest of his or her performance.

The literature on quality of work life in academic settings associates a better sense of QoWL with better commitment, satisfaction with work life and less absenteeism among teachers, generally pointing to a stronger sense of "investment" in the workplace, which would improve their students' achievement. When studied at secondary school level, quality of work life in teachers is related to seven significant criteria: respect from relevant actors, participation in decision making, frequent and stimulating interaction among peers, opportunities to receive accurate feedback about their performance, opportunities to use skills and knowledge, availability of resources to carry out functions, and congruence between personal and institutional goals (Louis, 1998). Although the same specific work has not been developed in higher educational settings, the factors described above seem relevant to the academic life in higher education since they involve the freedom and promotive social interaction that faculty have reported to care about at their jobs.

Cultural framework for the understanding of higher education institutions

Based on the characteristics described above, such as the organizational and interpersonal singularities of academic work, or the potential of affecting students based on the academic feelings of fit and satisfaction at work, a cultural approach is useful to explore

QoWL in faculty members. The elements of the organizational life considered by faculty members when asked about their quality of life can be summarized into the idea of organizational culture, which includes the consideration to leadership, human relationships and fit to organizational goals, among others. This complexity, differentiation, specialization, multiplicity of standards, autonomy of professors and conflicts of philosophies and mechanisms can promote or complicate the institution's ability to satisfy internal and external needs, depending on how they are managed culturally (Bartell, 2003).

Culture is a key element to understanding the complex aspects within the life of organizations that are bypassed by more superficial definitions. The concept of culture derives its value from the human need for stability and meaning, that is, from the need for finding patterns and integration. A group shares a culture when it has enough common history to form a common set of meanings and assumptions (Schein, 2005). Studies have shown that organizations that engage in the same kind of activities and have similar contexts present similarities in terms of their organizational culture. These similarities could be explained in terms of similar professional profiles, stakeholders' characteristics, activity-related interaction with the environment and the rhythm needed to accomplish each organization goals (Cannon, 1983). When studied in other professional settings, such as nursing, findings support the idea that culture is related to the perception of QoWL and specifically, that a culture oriented to human relationships is significantly correlated with more positive QoWL measures, commitment, involvement, empowerment and job satisfaction (Gifford, Zammuto, & Goodman, 2002).

Even though culture researchers might not agree completely on the range of elements that are considered to research organizational culture (Martin, 2005), it is possible to find some similarities acceptable to most theorists. First, organizational culture is a holistic idea, referring to an attention to wholes rather than components (Rodriguez & Apodaca, 2004), which means that it attention is paid to organizational myths, traditions, norms and beliefs in an organized and stable gestalt, instead of looking at it from a factorial perspective (Dimmitt, 2004a). Culture is also a historically determined concept, this is, a product of each organization's history. It is also related with anthropological products, such as symbols, rituals and stories. Finally, the last shared element it is that culture is socially and dynamically constructed (Rodriguez & Apodaca, 2004). In order to be considered part of the culture, each specific element needs to have certain level of structural stability. The other requisite is to be meaningful, either by itself or blended together with others in a coherent whole (Schein, 2005). In this way culture could be defined as

> A pattern of shared basic assumptions that one 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, 2005, pp.364-5).

In this context, culture is not understood as a concept associated with a particular physical setting, like a nation's land, nor associated with an ethnic background. It is just what a group perceives, *the way we do things around here* (Dimmitt, 2004a). Using this

definition, it can be assumed that most groups that exist long enough and have a certain level of interaction might be able to develop a specific culture that would summarize an important part of their values, interaction styles, and norms (Ratzlaff et als, 2003). Organizations are social constructions that are built and communicated through social interaction (Topa, Lisbona, Palaci, & Alonso, 2004), so the culture becomes a group answer to their need of structure and meaning. In this way, culture can be understood as an environment of concentric circles, going from the most concrete evidence to the most abstract essence of a human group (Gaona, 2003)..

Cultures do not persist automatically. They must be reaffirmed and taught to the new generations, since the newcomers are ignorant of what others already know, and also could be a threat for the notion of reality that the group has already agreed to believe (Metz, 2003). Culture is passed on to new generations, either by formal and conscious processes or more informal ones, such as self-socialization or deciphering. This becomes a mechanism of social control, by means of leading the members to specific ways to perceive, think and feel (Schein, 2005).

In Schein's model, there are some elements considered as indicative of culture: observed behavioral regularities, group norms, espoused values, formal philosophy, rules of the game, climate, embedded skills, habits and mental models, shared meanings, and integrating symbols. According to the dimension of organizational idiosyncrasy they reflect, these element can be considered in one of three levels of reference to an organizational culture: artifacts; values, beliefs and attitudes; and finally, basic assumptions. Artifacts would involve any concrete or verbal production of the group,

ranging from architecture to jokes. In a more abstract level, values, beliefs, and attitudes would be the reasons why people behave the way they do, and the tendencies to evaluate specific objects. Finally, basic assumptions correspond to the deepest level of organizational culture, involving successful solutions to previous problems that evolve to become socially validated as an automatic thought (Rodriguez & Apodaca, 2004). Schein does not think that recognizing these indicators should represent a problem for researchers; however, he believes that the problems with trying to assess culture are mainly related with the non-systematic way that newcomers are socialized to the culture, the uncertainty of the behavioral manifestation of culture, and the doubt of a unitarian set of shared values in a single organization. In an attempt to measure culture, we could be missing elements that are not taught to external people, we could be looking at some manifestation that is not necessarily based on the organizational culture, or maybe we could be looking at behavioral referents from different subsets of culture and attempting to get a big picture from them (Schein, 2005).

Because of its distinctive nature, cultures among organizations are bound to differ. First, what works for one group might not work for the next one, so their assumptions will probably differ. Second, since culture depends on so many factors, each single combination of particular settings, members, and history is going to create different ways of solving problems. Therefore, as cultures differ, it is possible to attempt a characterization of them and study them differentially according to their particular dynamics and outcomes (Shafritz, Ott, & Jang, 2005). This idea also implies that there are different kinds of cultures, and some might be better than others in terms of

effectiveness (Schein, 2005).

One interesting point of view is the one proposed by Bolman and Deal (2003) who identify four different frames to understand organizations: structural, human resources, political, and symbolic, depending on the emphasis and interest that each organization puts in its procedures, relationships, decisions, or meanings, respectively. As a brief characterization, organizations following structural frameworks are devoted to maintaining formal relationships and organizational stability, organizations focused on human resources are interested in fulfilling relational needs of their members, organizations structured around political elements are concerned about power and status relationships, and, finally, organizations oriented to symbolic frameworks are interested in the creation of common elements and meanings (Bolman & Deal, 2003). In a broad sense, studies examining the results of these types in 2-year and 4-year colleges have found that institutions with an emphasis on structure score lower in most of the criteria for effectiveness on students (Cameron & Ettington, 1988).

Another typological framework analyzes organization based solely on the values they promote, the Competing Values Framework (CVF) (Quinn and Rorbaugh, 1983, as cited in Gifford, Zammutto & Goodman, 2002). This approach classifies organizations based on two axes: the first continuum is the organization's attention to inward or outward dynamics and the second one reflects preferences for flexibility versus control in the organizational structure. The dimension of flexibility/control is particularly useful to understand the culture relationship with quality of life since it relates to the way the institution organizes itself. Using the competing values framework on regular

organizations, it has been established that the content of a culture is related to individual quality of life, understood as work satisfaction, satisfaction with promotion opportunities and physical wellness (Quinn and Spreitzer, 1991, as cited in Vandenberghe & Peiro, 1999). Using values as an indicator of culture, studies have determined that cultures oriented to interpersonal relationships promote higher personal and organizational satisfaction and intent to stay than other cultures (Vandenberghe & Peiro, 1999).

One last organizational typology includes the so called clans, adhocracy, bureaucracy, and market organizations (Cameron & Ettington, 1988). This typology is based on the CVF and uses two intersected dimensions: dynamism vs. stability as the emphasis of the institution, and internal vs. external orientation as the strategies used (Fjortoft & Smart, 1994). In addition to the values, this framework considers leadership, goals and strategies to characterize an organization culture. As a way to give a quick description, it is possible to describe clan cultures as cohesive and flexible environments with a mentor as a leader; bureaucracies as organizations with an emphasis on stability, predictability and control; adhocracies as institutions characterized by an emphasis on achievement oriented activities and innovations, and finally, market organizations as institutions usually based on competition and production bonding. Different cultures have distinctive results that are consistent with their main interest, being the clan culture more effective on promoting a better internal morale, for example (Fjortoft & Smart, 1994). When studying the culture of public and private higher education institutions in Portugal, for example, it has been shown that private universities have stronger culture values usually tending to a market or a bureaucratic culture, and public institutions would lean towards a clan culture (Ferreira

& Magalhaes, 2007). Additionally, there is some evidence to suggest that adhocracy and market culture types are the most effective in terms of promoting student careers (Smart & St. John, 1996).

From the analysis of productive organizations, that different groups might have a stronger or weaker culture, which interacting with the need of this group to secure the transmission of it, might generate a different effect on their members (Topa, Lisbona, Palaci, & Alonso, 2004). Supportive and people-oriented cultures have been associated with better job satisfaction, organizational commitment and involvement with the organization, by means of a sense of congruence between the individual and the organization (Harris & Mossholder, 1996; Topa, Lisbona, Palaci, & Alonso, 2004). On the other hand, bureaucratic cultures do not promote commitment, job satisfaction and cohesion. Also, other studies have suggested that strong cultures tend to have greater commitment and job satisfaction among its members than the weaker ones (Lund, 2003). There has been an important amount of research regarding organizational culture, but there is less knowledge about the relationship of individual aspects from each employee and the culture of the organization (Harris & Mossholder, 1996). Also, as the literature also points out, academic institutions cannot always be considered equivalent in terms of dynamics with other productive organizations, so the relationships stated above might not apply.

Individual-organizational fit through organizational culture.

Culture could configure behavioral and affective reactions on organization members through the process of individual-organizational fit, affecting levels of commitment and psychological well-being (Harris & Mossholder, 1996; Topa, Lisbona, Palaci, & Alonso, 2004). Both the strength and the orientation of a culture are relevant when analyzing its impact on its members. The strength serves as a prediction to the amount of effort and time needed to include and influence each individual member. In a strong university culture, most administrators and faculty share a set of values and methods. On the other hand, the orientation informs the specific values and norms that will be promoted by the group and how the person will adjust to it. An orientation towards structure and stability, for example, will be most suitable for a stable environment and will fit better to people whose priorities are related to these ideas (Sporn, 1996).

The concept of person-environment fit is been used in organizational literature since the 1960, suggesting that people were most successful and satisfied when their personal orientations matched the organizations. The construct in generated in the structural contingency theory, which consider that performance and other outcomes are contingent to the fit between individual and organizational characteristics (Lindholm, 2003). Consequently, research has suggested that individuals who modify their values to fit the organizations might have more probability to feel dissatisfied, to have health problems, and feel lack of commitment, among other results. For the organization, a lack of fit results in miscommunication, less proactive members, absenteeism and turnover (Kezar, 2001).

Person-environment fit (PE fit) is defined by Kristof-Brown et. al as "the compatibility between an individual and a work environment that occurs when their characteristics are well matched" (p. 281, as cited in Schmitt, Oswald, Friede, Imus, & Merritt, 2008) and it is considered conceptually and empirically different than job satisfaction. For faculty, the perception of their personal values, needs and characteristics within the institutional scenario would interact with their individual motivation and help them to create perceptions of role meaning for their work (Lindholm:2003rw). Consequently, in academic settings, PE fit has been positively and strongly associated with organizational commitment, job satisfaction, and negatively associated with intent to quit. Weaker associations, but still significative, have been found between PE fit and tenure, turnover and withdrawal (Schmitt et als, 2008).

There are four levels of described fit between a person and their environment: person-vocation, person-job, person-organization, and person-work group. At the top level, person-vocation fit is the congruence between a person's election of occupation and their self-concept. The second broadest dimension is person-job fit, which is the compatibility between the person' skills and the demands of his or her job. At a third level, the person-organization fit includes the congruency between values, needs and abilities of an individual and the corresponding characteristics of the organization he or she works in. Finally, and the most specific level, the person-work group fit is determined by the compatibility between an individual's characteristics and priorities and those of the small group he or she interacts most closely. Within universities, the construct of PE fit can be invoked not only at an institutional level, but at sub-institutional units, where faculty

members tend to link primarily (Lindholm, 2003).

Academic departments as functional units of analysis

Although most authors agree on the relevance of studying organizational human indicators, when applying this approach to universities, some issues arise. It is extremely important to decide what level of analysis is going to be used: it could be the faculty members, the department, the discipline or the whole organization (Sporn, 1996). Complex organizations like these typically include more than one social unit, or a group that is stable, defined, and with shared history and experiences. Therefore, culture researchers need to expect a number of distinctive subcultures in an organization in addition to the dominant one (Rodriguez & Apodaca, 2004; Schein, 2005). As a result of the culture or subcultures, discourses of knowledge, communication styles, and practices in higher education may vary significantly among settings, institutions, or even disciplines. These differences both influence and are influenced by the way the students and professors think, speak and enact the academy (Read, Archer, & Leathwood, 2003), therefore, having an impact on their results.

Faculty members, besides belonging to their own organizations, also owe allegiance to other disciplinary colleagues, often feeling the later loyalty stronger than the institutional one (Cannon, 1983). Therefore, besides the evidence that might point towards a common perception of culture, faculty members also respond to two main sources of variation: professional and department culture. The presence of a specific profession within an organization is likely to become a subculture, mainly due to two

elements: work interaction and professional acculturation. First, a group that works together on a regular basis, share procedures, skills, and ways to relate to other groups, is bound to develop certain common elements. Second, the professional education that members of this group share as a common experience has influenced them with specific values, norms, and beliefs that may or may not coincide with the overall organizational culture (Dimmitt, 2004a). In a common academic structure, academic departments usually combine both these requirements: they are commonly formed by professionals with similar formal training, and they interact in a regular basis.

Usually, academic departments constitute a universe of individuals that are self-sufficient (Lane, 1985) and differentiate naturally since they face different environments and tasks. Based on its member's interaction and decision-making, an academic department becomes an internally differentiated organization that faces the external environment among a web of differentiated and interdependent organizations that form an institution of higher education (Cannon, 1983). Organizationally, departments are the functional unit within a university, their members are relatively homogeneous due to similarities on disciplinary practices, and they usually make some policies among themselves. Based on these elements, it is likely that they will develop some sort of shared norms, beliefs and values that are somewhat specific to the unit (Mills, Beltis, Miller, & Nolan, 2005) that will develop into a subculture. Consequently, when asked to describe the character or culture of the institution, faculty members have had problems to generate a clear analysis, but they can easily refer to distinctive aspects of departmental cultures and climates (Lindholm, 2003).

A university with very strong subcultures can move into a more unified institution, but only after assessing the nature of these cultural units (Sporn, 1996) and generating a strategy that uses these unit's strengths and motivations to achieve institutional goals. Organizational culture among different social units within an organization can be seen as a Venn diagram where the social units may share a different portion of their culture with other social unit or the whole organization. Focusing on the shared component among all social units would then render just a small portion of the working cultural components of such organization and might not present enough information to comprehend the idiosyncrasies involved (Fernandez, 2002).

Summarizing, the existence of an academic department within a larger university is likely to become a subculture inserted in a greater organizational one. As a culture, a department is going to emphasize its own heroes, norms, values and rituals that most probably would affect the perception of each faculty member of his or her quality of life, depending on how valued the work life is for each specific person. Since both the concepts of quality of life and culture are multi-dimensional and multi-factorial concepts that do not have a unique definition or method of study, and since both ideas are based on a hierarchy of values, it would be interesting to assess the level of impact that the perception of department culture might have on faculty member's concept of quality of life and its consequent quality of life needs.

Problem

Higher education, like any educational level, is reactive to financial resources, changing student populations and newly defined societal expectations about its nature and purpose. The resulting call for change at this level cannot happen without an institutionally engaged and aligned faculty. In order to transform colleges and universities into more socially responsive organizations, we first need to understand how faculty members perceive their places within their organizations and how they define their associations with it (Lindholm, 2003).

The value of assessing ideas associated to quality of life based on departmental culture can have different sources. First, a work place that attracts talented people and provides them with the resources they need to be the best, it will keep their valued members engaged, motivated, and satisfied throughout their careers (Ballou & Godwin, 2007). If the intellectual capital of a regular organization is important, on a formal organization where the product is directly related to this resource, it should take even more institutional effort to maintain. Knowing what matters most to their members, organizations can focus on promoting these elements to provide them the healthiest work environment possible. For productive organizations, for example, appearing on lists of "best places to work" creates big competitive advantages in terms of reputation and the consequent attraction of talented people. Consequently, international accreditation organisms for higher education institutions, when evaluating an institution, usually take support systems and quality of life as relevant indicators of the capacity of the

organization to take care of their members. But, when a group uses the term "quality of life" in its presentation to others, it might not be sending a consensual message: Whose idea of quality of life? What does it mean? (Hardwick, 2009). For a specific group, a good indicator of QoWL might be the freedom of speech, while for others might be the chance to work on their own projects.

Second, the study of culture has been proven to be an effective and holistic way to understand organizations and to predict their reactions when changes are needed. In other contexts, research has found a relationship between work-group culture and perceptions of quality of life. However, in higher educational settings, culture has been mostly related to effectiveness, measured as the results that each institution generates on their students, bypassing a more direct relationship with academics' perceptions. Additionally, most culture studies have been performed at institutional level (Dimmitt, 2004b), rendering results that inform of a culture that might not reflect the particular environment that is most determinant to faculty life.

Third, regarding the level of analysis, literature shows that faculty member's sense of affiliation tend to correspond with their departmental associations, which constitute their primary focus of academic achievement and institutional purpose. Therefore, organization-wide measures, such as culture, climate, or others, tend to be less conclusive within academic institutions than other kind of work environments, because of their richness of institutional subcultures (Lindholm, 2003).

Fourth, and regarding the specific context of the University of Talca, there have been a few attempts to research and work the idea of culture and satisfaction, which validate

the pragmatic significance of researching it. A study (Gaona, 2003) specifically devoted to the perception of the conditions for academic life by faculty members, reported - among other results- that professors consider that academic life is a lifestyle on their own, not similar to any other job. On the issue of culture, and through the analysis of formal documents, eight values have been identified as actively promoted at institutional level: honesty, accountability, respect, solidarity, tolerance, non-discrimination, environmental awareness and aesthetic sensibility. Despite these common values, when checking the perception of faculty members, almost half the academics consider the university as depersonalized organization, neither flexible nor democratic enough for their expectations (Caceres, 2004). Hence, although the interest for assessing work environment indicators exist, little work that has been done around the issue, which has addressed an institutional perception that might not reflect a valid and useful indicators to make decisions and policies to improve work conditions.

Since the literature reports several unique characteristics of universities as organizations, a research that addresses the uniqueness of a university environment through a possible relationship between departmental culture and quality of life would be a positive addition to the understanding of academic life and the ways to improve it. In an exploratory level the following questions arise: How are the perceptions of professional culture and academic department fit in faculty members of the University of Talca? To what extent this perception of fit to the departmental culture impacts in the idea of quality of life the faculty member has? Results should be able to inform if the fit to a specific work-group culture are relevant in each faculty member's sense of quality of life, and, at

the same time, show what factors are relevant in their perception of quality of life.

Objectives

General objective.

Assess the impact of the perceptions of culture and culture fit on the definitions of quality of life on faculty members from different academic departments of the University of Talca

Specific objectives.

- To examine the uniqueness of each academic department through the description of their specific culture.

- To explore the idiosyncratic meaning of the idea of quality of life for faculty members belonging to different academic departments from the same university.

- To identify possible variation arquitectures of the idea of quality of life based on academics' fit to their academic department's culture.

Methods

Methodological framework

The present work is a mixed-model research, combining a more quantitative instrument to assess individual-institutional fit through semantic differential, and a qualitative analysis of phenomenographic interviews to establish the architecture of variation of the concept of quality of life, according to the culture and fit described. Time wise, this research is a transversal, one-time assessment with exploratory and descriptive level of analysis. Data analysis was performed in separate qualitative and quantitative tracks, and then data in the quantitative track was transformed into categories that reflect a measure of cultural fit, and then crossed over to the qualitative track for further analysis (Somekh & Lewin, 2005).

On one hand, semantic differential is a specific technique proposed early in the 1970s by Charles Osgood to evaluate the interaction between a single object of study and iterative semantic judgments, in order to capture the connotative meaning of the signs, in a process of representational mediation (Osgood, 1976, as cited in Saleme & Rosig, 2000). Later in the 1990s, Osgood suggested a way to construct semantic differentials as emerging process asking groups to provide adjectives for a specific stimulus, rank them in terms of frequency and seek for their opposites. Semantic differentials constructed this way would represent a subjective culture of the examined group (1991, as cited in Saleme & Rosig, 2000). Semantic differentials, at least in English language, are expected to configure three fundamental factors over their objects: Evaluation, potency and activity

(the EPA structure). These factors are distributed in a tridimensional space, the semantic space, formed by an origin of "lack of meaning" and along vectors of meaning towards establishing the semantic quality of the word evaluated.

On the other hand, phenomenography is a relatively new approach on qualitative research that emerged from an empirical basis more than an epistemological or ontological one. Its object of study is the variation in human meaning, understanding, conceptions or awareness of a particular phenomenon. The set of categories that result from the analysis emerge from the data, in relationship with the researcher. The results are presented as the number of qualitatively different meanings associated with the phenomenon, called categories of description, but also including the possible relationships linking these ways of understanding. Therefore, the researcher aims to represent, not just a set of meanings, but a logically inclusive structure of meanings and its possible variations regarding the issue (Akerlind, 2005). In terms of rigor, qualitative researchers are still concerned about the issues of validity and reliability of their research, although these requests are more congruent with a positivist approach rather than an intersubjective one. In phenomenographic research specifically, validity assurance usually takes two forms: communicative and pragmatic validity. Communicative validity has to do with the ability of the researcher to produce a plausible interpretation, focusing in the sequence of analysis and logical argument of the results. Complementarily, pragmatic validity involves the extent to which the research outcome is considered useful and meaningful to the intended audience, which could be somewhat similar to the idea of practical significance in a more quantitative framework. On the other hand, and still

talking specifically about phenomenographic research, reliability or consistency in data interpretations also takes two formats: coder reliability check and dialogic reliability check. Coder reliability check is the congruence between two independent researchers to all or a sample of transcripts. Dialogic reliability check, on the other side, is an agreement reached through discussion and critique of the data and the researcher's interpretive hypotheses (Akerlind, 2005). Overall, the same basic standards of quality expected from quantitative research are possible to present in qualitative research by changing its format according to the nature of the information managed and their epistemological implications.

Although proposing a mixed-methods design might pose some epistemological issues, the specific techniques chosen are devoted to a single type of problem: the meaning, which facilitates the consequent triangulation (Somekh & Lewin, 2005).

Population

The University of Talca is a state university with 461 hired academics in a rate of one professor per 23 students. Academically, it is divided into seven colleges (original word: *Facultad*) and 5 institutes to provide courses to 21 undergraduate majors. Each college can be in charge of one or more undergraduate majors or schools, and the disciplinary knowledge that is related to those majors, usually divided into academic departments. For more detailed specifications on Chilean structure of higher education institutions, please see Appendix 5.

Participants

The sample was selected intentionally from distinctive academic within the University of Talca, taking in account different professional traditions and different existence as an academic team as major sources of variability. As the unit of analysis is the academic unit, the sample was selected from the set of 19 academic departments, 21 schools, and one academic program as the reference population, depending on the nomenclature existing in each college. The psychology college, as a whole, was excluded due to its research program in the area of quality of life, which would probably influence their results. Academic teams that are exclusively devoted to specific areas of knowledge such as research, development, consulting, or administrative affairs were not considered for this research due to their limited scope of performance, which could affect their in-group dynamics beyond the reach of this work.

Table 1 Summary of participating academic units

| Academic unit | Faculty members | | Roles represented |
	Total	Participating	
Department (Group 1)	17	5	Formal and informal leaders, members
Program (Group 2)	25	5	Formal leader, former leaders, members.
School (Group 3)	17	5	Formal and informal leaders, members, new member.

As a result, this research describes the study of three academic units: one department, one school and one academic program (For a description of each type of academic unit, please see Appendix 7). Within each academic unit, interviewees were selected using

purposeful sampling starting at a key participant such a department chair or a school director. Following this strategy, the researcher kept interviewing participants until the idea of culture is empirically saturated within each unit.

Even though the quantity of participants cannot be determined beforehand, the literature on phenomenographic research states that sample sizes usually are between ten and 15 subjects for a single phenomenon (Richardson, 1999), which for this research can be limited by the academic unit size. Any permanence in the academic unit or academic load (partial time or full-time appointments) was accepted, since different acculturation times could enrich the comprehension of the departmental culture.

Instruments

Two different instruments were used in this research. One of them is semantic differential that addresses the perception of culture fit for each faculty member. The other instrument is a phenomenographic semi-structured interview designed specifically for this research which will address both the idea of quality of life and other specific areas of departmental culture for each faculty member.

Assessment of departmental culture fit.

In order to estimate the perceived fit of each faculty member to their departmental culture, a semantic differential was applied. This instrument has been previously used in the study of the University of Talca culture at master level projects, both in a general

view (Caceres, 2004) and from faculty members' perspective (Gaona, 2003). In its original form, the semantic differential was part of a greater instrument, where one of its components involved these set of opposite adjectives that every faculty member would choose to describe the organizational culture in the university. Unfortunately, no psychometric properties were informed on either of the publications.

In this work, 15 pairs of adjectives were selected for the pilot application and three of them were removed from the final form due to the problems the respondents had to use them meaningfully to evaluate both individual and group characteristics (See Appendix 2 for details). Hence, the final form of the semantic differential implied 12 pairs of adjectives with 6 slots in their semantic space each. Each participant was asked to describe both their evaluations of their departmental/unit culture and their own orientation to work based on the polar adjectives provided, in order to establish their perceived fit by analyzing the possible gap between the evaluations on each pair of adjectives.

Phenomenographic interview.

Phenomenographic research aims to identify and to describe the qualitative variations on the personal experience of a phenomenon, its conceptualization, perception and understanding by the subject (Alvarez-Gayou, 2003). Most of the research done under this tradition has been devoted to show different forms on which apprentices incorporate their learning, and to describe subjective structures of meaning and their relationship with activities and learning results (Dortins, 2002). The result of a work based on this tradition

will represent both a superficial level of discourse (sequence of signs) and its deep level of meaning in order to configure a phenomenographic outcome space. This space will represent an analysis devoted to a prereflective level of consciousness and seeks to include the conceptual and the experiential elements of a phenomenon. This outcome space is a categorization of the subject-based descriptions drawn from the explicit report or inference, which makes it a realist and constructivist effort (Richardson, 1999)

Procedures

The initial contact was generated with the chair persons, directors or equivalent authority of each selected department. The research was then presented and the informed consent and participation of the department head was be ensured.

Participation in the study was strictly voluntary, and the initial contact to invite each faculty member was based on a combination of purposive sampling and the use of key informants. Unless someone is directly suggested by a previous participant, no person was referred nor identified as a research participant, neither among their peers nor to a direct supervisor. The contact was arranged privately, either at their usual offices or in the place they preferred.

Time wise, interviews were scheduled in two rounds based solely on participant's disposition, one at the end of Chilean academic year, on January, and one at the beginning of the next term in March, both during calendar year of 2010. During each interview session, the audio of the conversation was recorded after the informed consent was discussed and until the point the participant agreed to the devolution made by the

interviewer. Most of the interviews were in Spanish, with the exception of one person who felt that English was most suitable language to engage in better conversation.

At the end of each interview, the interviewer gave back an oral summary of the contents and answers of the participant, in order to ensure communicative validity. After the interview was over, and in the same session, the semantic differential was applied and answered by the participant and given back to the interviewer.

Results

Semantic differential analysis

After entering the information into a data set on statistical package SPSS 17, an exploratory factor analysis was run to check the fit of the EPA assumption for semantic differentials and, after checking the non normal distribution of the data, non-parametric tests were applied to the information in order to determine the significance of the possible differences between the perceptions of culture for each work-group and the gap between the perception of work-group culture and the individual way to do things as a worker.

EPA assumption.

Semantic differentials in English are expected to address three main evaluative components of a given object: evaluation, power and activity (Al-Hindawe, 1996). Psychometrically this assumption can be assessed by extracting the factors underlying the

answers to the instrument.

Table 2 Principal components extracted from both versions of semantic differentials.

Axes	Groups				Individuals				
	1	2	3	4	1	2	3	4	5
Kind-unkind	**.916**				**.684**	.484		-.407	-.101
Diverse-monotonous	.409	-.101	.148	**.619**	**.611**		-.565	.190	.386
Welcoming-cold	**.851**			.128	**.777**	.252	.262		-.142
Cordial-hostile	**.860**	-.220	.107	.154	**.527**	.560	.292		.271
Innovative-traditional	**.508**	-.327	.261	.126	**.690**	-.542			-.286
Authoritarian-egalitarian	.251	.515	**-.715**		-.561	**.640**		.443	
Boring-interesting	**.692**	.308	-.335	.393	**.660**	.223			-.678
Open-closed	**.811**	.206	-.204	-.356	.379	.138	.552	**.596**	
Unorganized-organized	**.710**	-.495	-.128			.473	.396	**-.529**	.339
Idealist-realist	.310	**.784**	.393	.226	**.768**	-.118	-.349	-.178	.394
Competitive-cooperative	**.697**	-.170		-.442	.116	.497	**-.686**	.361	
Engaged-indifferent	.491	.420	**.616**	-.400	**.522**	-.436	.310	.435	.345

In this case, since there was no assumption for a specific distribution and factors were not

expected to be orthogonal to each other, the exploratory factor analysis was performed

looking for principal components with a direct oblimin rotation. The results for both sets of adjectives are presented in Table 2 for illustrative purposes, although the low number of cases does not support assumptions of reliability of these tendencies. Results of factor analysis show that items for this instrument did not render a clear 3-factor structure as expected; neither have a stable factor structure across both sets of items. Although not every item reaches a conventional loading factor of .7, they do reach values considered acceptable for exploratory purposes (Garson, 2010).

Differences among groups in the perception of work environments

As Table 3 shows, there were no significant differences found among groups in the axes related with diversity, welcoming quality, cordiality, innovation, egalitarianism, interestingness, openness, idealism, and engagement when using Kruskal-Wallis test for non-parametrical samples.

Table 3 Comparison among groups regarding each axis of culture evaluation

Axes	Kruskal Wallis Test Value	p-value
Kind-unkind	6.305*	.043
Diverse-monotonous	2.043	.360
Welcoming-cold	5.869	.053
Cordial-hostile	5.372	.068
Innovative-traditional	.680	.712
Authoritarian-egalitarian	1.715	.424
Boring-interesting	4.975	.083
Open-closed	5.817	.055
Unorganized-organized	7.802*	.020
Idealist-realist	4.014	.134
Competitive-cooperative	6.725*	.035
Engaged-indifferent	2.949	.229

However, significant differences were found in the axes related with kindness, (p

40

=.043), organization (p =.020), and cooperation (p = .035) among these three groups. Table 4 shows Mann-Whitney tests performed to these significant differences, revealing most them concentrated on the comparison of group 2 and 3.

Table 4 Specific differences among academic units in culture evaluation

	Group 2		Group 3	
Group 1	Kindness	Z= -1.643	Kindness	Z= -0.149
	Organization	Z= -1.862	Organization	Z= -1.315
	Cooperation	Z=-2.256*	Cooperation	Z= -0.337
Group 2			Kindness	Z= -2.460*
			Organization	Z= -2.545*
			Cooperation	Z= -2.155*

* p < .05

Based on these values, it can be said that the differences among groups in terms of their evaluation of the unit characteristic dynamics only differs in the degree of cooperation reported between Group 1 and Group 2, in the degree of kindness reported between Group 2 and 3, in the level of organization perceived between Group 2 and Group 3, and finally, in the degree of cooperation between Group 2 and Group 3, for this sample.

With the purpose of achieving a better representation, Figure 1 shows the distribution of the answers given with each academic unit as an evaluation object. From this figure, it is interesting to observe that frequently, outliers generate either from a formal member or from a new member of each academic unit. In addition, answers collected from Group 3 seem to have less variability than the ones collected from the other groups.
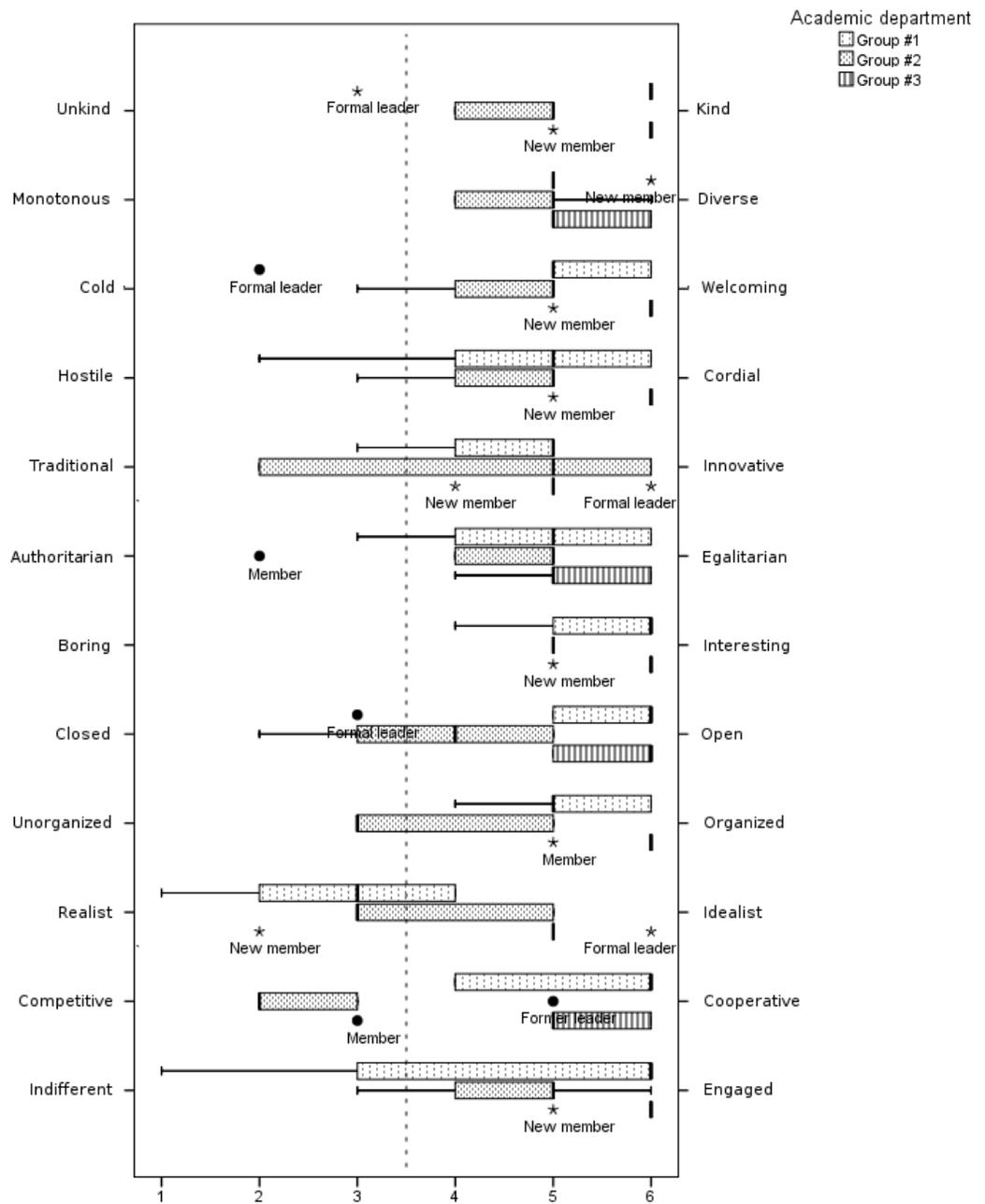
Figure 1 General distribution of evaluations of culture per academic unit. Outliers labeled by role in their groups.

Differences in self-reported work style.

In order to complete the analysis, possible differences were assessed on the academics'
self-report of their personal way of functioning. As Table 5 Hypothesis testing for
differences of self-report of work style based on group roleTable 5 shows, academic's
self-reported work style does not differ significantly based solely in their role within their
academic units, neither based solely on their adscription to an academic unit.

*Table 5 Hypothesis testing for differences of self-report of work style based on group role
and reference group.*

Axes	Differences among group roles*		Differences among reference group	
	Kruskal Wallis Test Value	p-value	Kruskal Wallis Test Value	p-value
Kind-unkind	3.750	.441	3.925	.141
Diverse-monotonous	6.434	.169	3.698	.157
Welcoming-cold	3.567	.468	2.587	.274
Cordial-hostile	4.625	.328	3.500	.174
Innovative-traditional	5.234	.264	3.777	.151
Authoritarian-egalitarian	2.153	.708	4.933	.085
Boring-interesting	2.333	.675	3.243	.198
Open-closed	3.963	.411	1.260	.533
Unorganized-organized	3.121	.538	3.371	.185
Idealist-realist	7.705	.103	4.456	.108
Competitive-cooperative	3.375	.497	5.106	.078
Engaged-indifferent	5.833	.212	1.556	.459

** The roles tested were: regular member (N=5), formal leader (N=5), informal leader (N=1),
former leader (N=2), and new member (N=2).*

Academic culture fit

Based on the answers provided by the participants, each evaluation axis regarding to the group way of functioning was contrasted with the personal reported way of functioning, obtaining a measure of fit that mathematically could range from 0 (perfect fit between group and personal styles) and 60 (sum of the absolute values of all maximum differences on 12 axes). In this sample, the sum of all differences ranged from 1 to 20 (Md=9, IQR=8) with a distribution by academic unit presented in Figure 2.

As the Figure 2 shows, the distribution of fit between personal and unit style is significantly different among all groups ($\chi^2_{(2)}$= 8.556, p= .014), mostly based on significant differences between Group 1 and 3 (Z=-2.312, p=0,16) and between Group 2 and 3 (Z=-2.627, p=.008).
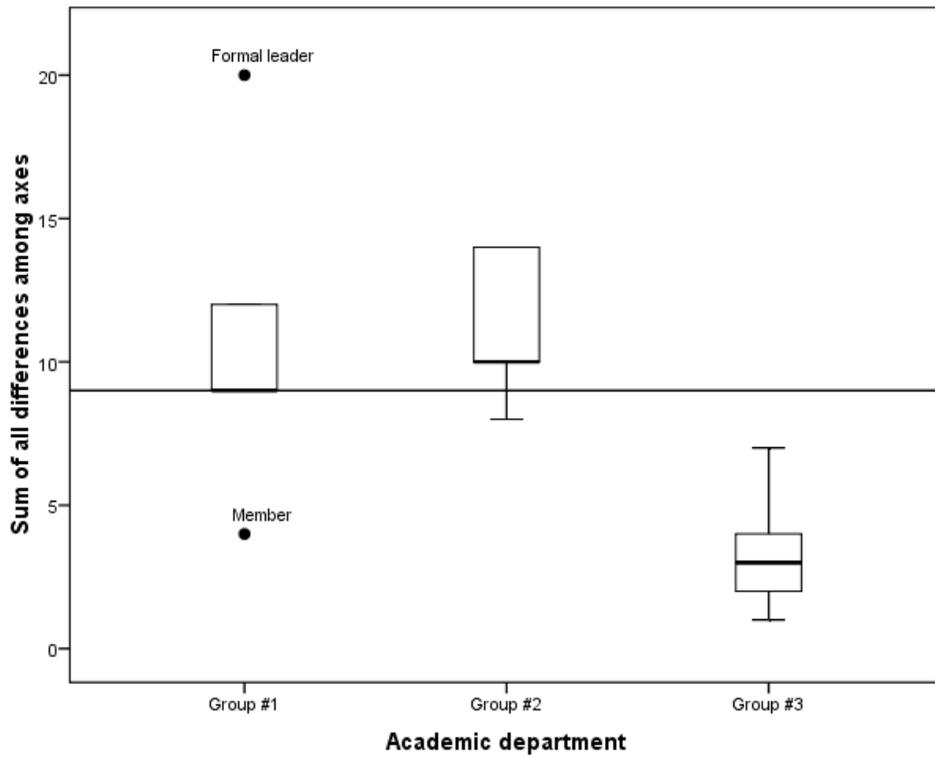
*Figure 2 Distribution of differences between group and personal style by academic unit.*

Additionally, in order to generate information that could triangulate with the information provided by the same participants in their interviews, each participant was categorized as belonging to a broad category of "fit" or "misfit" based on the median of the sum of all gaps for all participants (See Table 6).

Table 6 Categorization of fit and misfit to unit culture based on semantic differential answers

	Academic department		
	Group #1	Group #2	Group #3
> Median "misfit"	2	4	0
<= Median "fit"	3	1	5

Then, this table, now aggregated across groups, was compared to the information obtained from qualitative analysis of the interviews, generating a crosstab table presented below in Table 7. From qualitative analysis, and in an attempt to replicate a similar logic than the one used for categorization based on semantic differential, any participant who reported a seamless fit to their workgroup culture was categorized in the fit cell, while participants who reported to feel in misfit with their workplace culture or having needed to adjust themselves at some point was considered in the misfit category.

Table 7 Correspondence of assessments of fit according to qualitative and quantitative information

		Information from qualitative analysis	
		Fit	Misfit
Information from quantitative analysis	Fit	7	2
	Misfit	1	5

The association between these forms of analysis showed to be significant ($\chi^2_{(1)}=$ 5.528, p= .018), indicating there is a correspondence between their categorizations of fit from different sources.

Interview Analysis

After verbatim transcription, the analysis was initiated with the search of meanings and its variations across transcripts, supplemented by a search of structural relationships among meanings. The first readings were open, moving iteratively towards particular criteria of structure and difference (Akerlind, 2005). The process of coding, modeling and analyzing was performed with the help of the software NVivo 8.

Culture description.

With the objective of structuring a description of each academic unit's cultural uniqueness, the corresponding section of the interviews was first coded to retrieve any qualifier the members self-assigned their respective units of reference, generating them as nodes. On a second codification process, some nodes were modified, merged or broken down into more specific categories, in order to establish better grounds to accurately describe and differentiate each culture from the other.

The models presented here are generated from the answers of each participant regarding their academic unit. In order to be included in the model, at least one participant had to have mentioned it. This means these models do not represent the speech structure of the majority, but all the variations for all the members combined, which in some points might represent contradictions within the unit. In order to facilitate reading, attributes for the academic team have been grouped into general self-assigned characteristics, functional characteristics, social/interpersonal characteristics, and finally,

characteristics associated with leadership and decision making. Specific clusters have been included to describe values of the group, both in the positive and negative desirability.

When possible, each characteristic has been placed in the same area of the model when they different groups share certain descriptions, so the visual comparison of each culture would be easier.

Description of culture for Group 1.

Group 1 is an academic unit with more than 11 years of life, configured initially by an expert leader who selected and invited members to become part of it. This expert leader later left the group, and other members have been included based on the need to cover scheduled classes. It is a unit with the main task to teach undergraduate students, and some members do research, although this is not a requirement to become or stay as a member, and it is not associated with any institutional reward. Most of their members are adults between 30 and 40 year old.

As Figure 3 shows, this academic unit involves two separate groups of reference that were mentioned consistently in the interviews. These groups were not formally structured in the beginning of the academic unit, but they have become a functional separation that is supported by separate leaders, classes, and dynamics. The first subgroup is devoted to younger students, involves more faculty members in their functions and reports some leadership and communication problems. The second group deals with older students, has fewer faculty members, more fluid communication, and

clearer hierarchy. There are some participants of this group who have transited between these subgroups, and although they might have referred to "the other group" for comparison purposes, for this analysis they were just considered in their answers toward their current subgroup reference. In the model, characteristics of the academic unit that are agreed by both functional subgroups are colored in lavender, characteristics colored in red are particular to the first subgroup (which they denominate as the "4th year group", based on the students they teach), and characteristics colored in light blue are unique to the second subgroup (5th year).

Group 1 was described by its members as "a train", "a little state", and "a machine", making reference to the imperative to get things done in the limited time they have, and also implying the value assigned to structure and hierarchy. This emphasis and other elements later described suggest this group could be a mix of bureaucracy and adhocracy, according to Cameron and Ettington (1988).

This group values the stability of their procedures to deal with internal demands, and they define themselves as mature and respectful, mainly based on the ability they have to act as unit in front of their students and the consideration they have for other's way to do their job. Functionally, they centralize fast decisions in their formal leaders, who receive information and requirements from external sources and give the answers back, at the same time they inform their members of the relevant aspects of their decisions. For decision that involve directly the way members develop their day-to-day routine, options are informed to members in ad-hoc meetings and decisions are taken with the participation of everybody. For the smaller group, this need for decisions is

usually solved by an informal meeting during a coffee break, complementary to the

formal leaders' discretion on fast-response requirements.
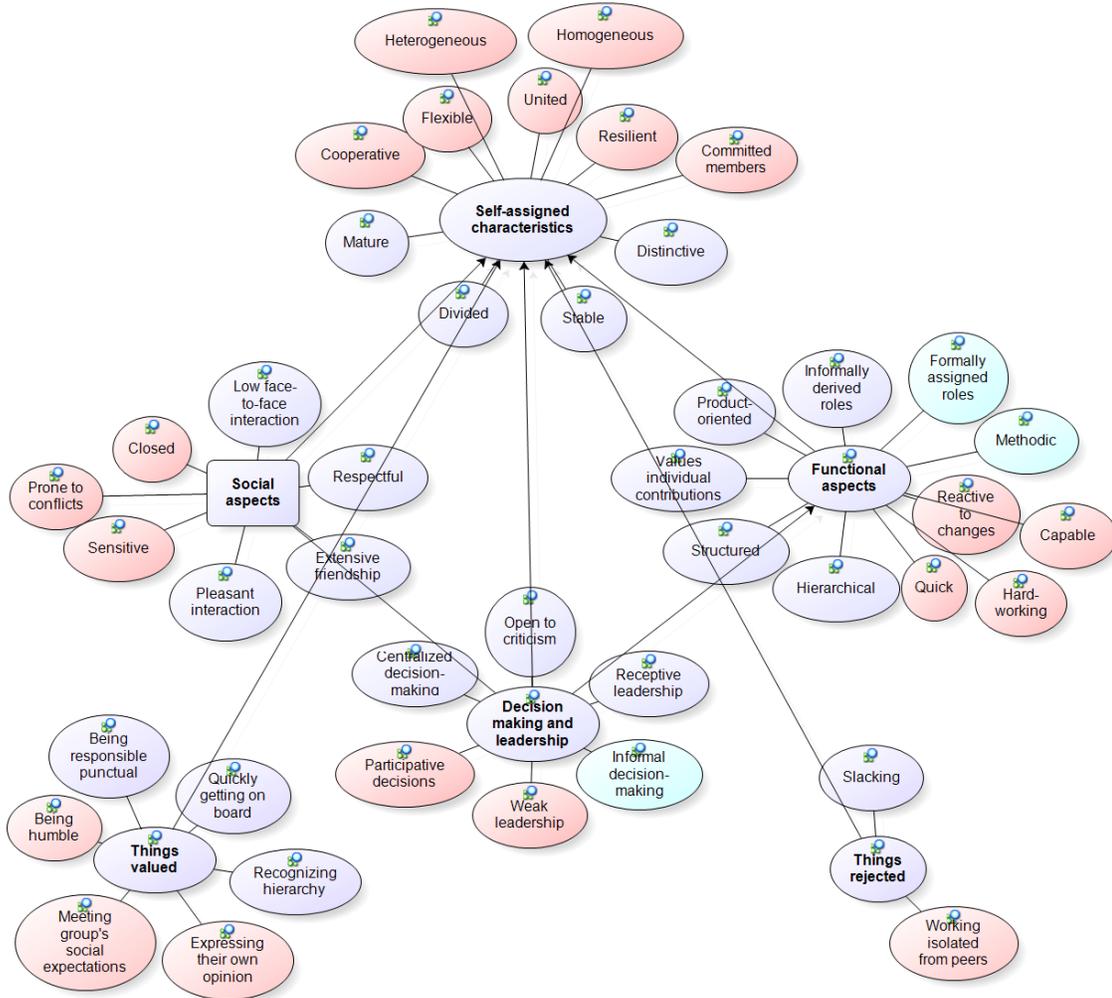

Figure 3 Departmental culture for Group 1.

Socially, they describe their interaction as scarce but desirable, based on the little

disposition of free time they have in common; they even have designated members to

remember and celebrate each other's birthdays and special occasions. Some of them have established strong friendships outside the job place that sometimes affect alliances about how decisions are made in the team, which is reported to be more specific to the 4th year subgroup.

Internally, they value the efficient use of time, which implies they thank if their members are able to understand and adopt their priorities and ways to work without explicit indication, and also value each one's ability to make their contribution to some team projects that require a chain of products. Because of that, the only thing commonly rejected is the inability to satisfy acquired compromises of production or representing an extra workload to other members.

In their relationship with external sources, either other professionals from the field or other academic units, they perceive being a unique and recognizable unit. They have their own dressing code, they have a distinctive presence in their college, and they have a distinctive orientation towards their students and their expected results. They report having a better capacity of working in teams than other professionals of their major or other work environments where they have worked before.

Description of culture for Group 2.

This group is a unit dedicated to provide teaching services that are not exclusively associated with any major or school. Based on that, and on the fact they do not usually do any research, their unit does not belong to any college, school or institute. This gives an institutional signal that connects to their sensation that they are disconnected from the rest of the university. They have a wide range of ages for their members, going from members just finishing their undergraduate formation to members that should be retiring in a close future. Based on their priorities and preferred way to achieve goals, this group culture might be characterized as a blend between market and bureaucracy cultures (Cameron & Ettington, 1988).

Structurally, Group 2 has one formal leader and two people who perform other administrative tasks. They form relatively stable ad-hoc workgroups based both on the levels they teach, and the campus they work in. This creates a combination of formally assigned roles with informally derived ones.
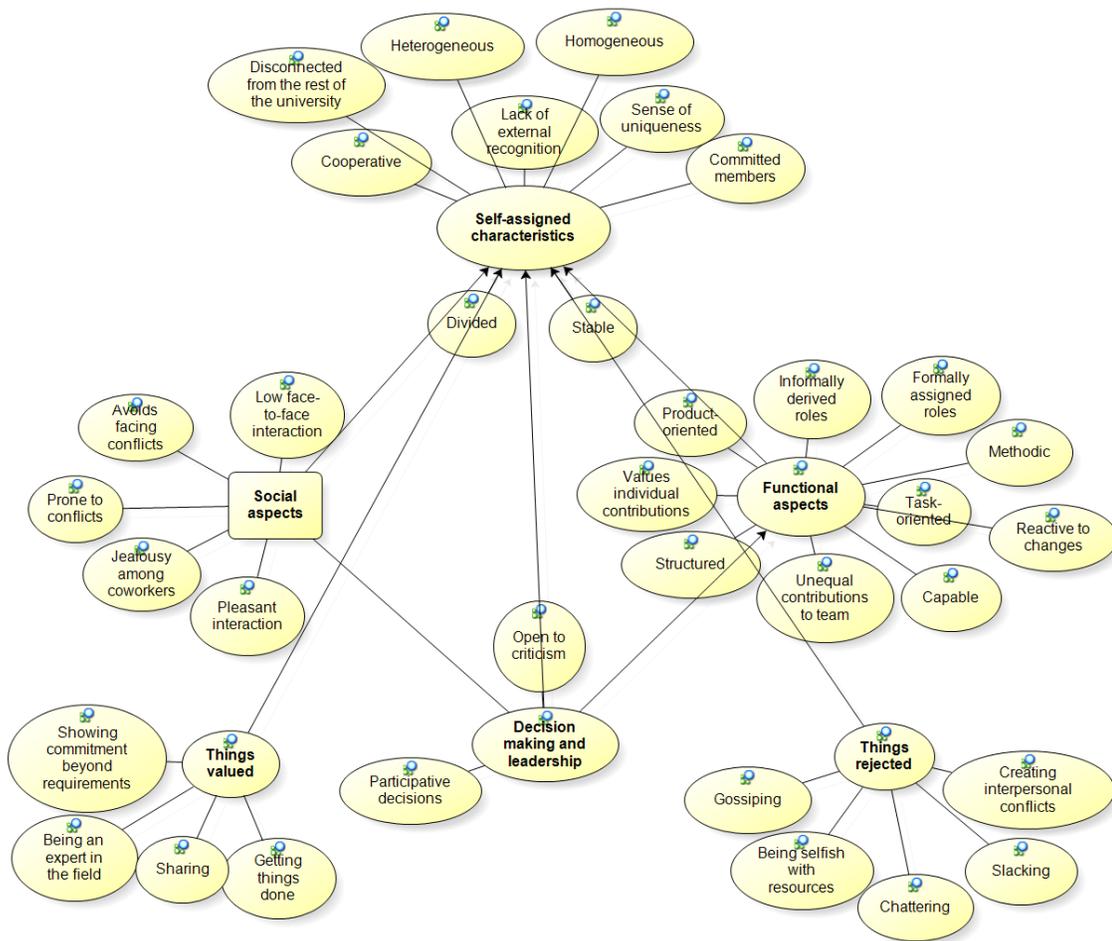
Figure 4 Departmental culture for Group 2

The representation in Figure 4 shows, as a first distinctive trait, the unit sensation of disconnection from the rest of the university and the consequent lack of recognition of their job as part of the institution. Some of its members, when thinking about ways to face their job responsibilities said their group was a heterogeneous one, and then some others were thinking about their professional qualifications, and referred to the group as homogeneous. According to some participants, there is certain tendency to value more the quantity of products achieved by each member and not necessarily to care for the

quality of these produced documents or activities.

Most of the participants described a strong social division among faculty members, based in a combination of office location and contractual relationship with the university, which fosters certain amount of jealousy among coworkers. This division is very interesting to observe because, although one subgroup has even developed an idiosyncratic language to consolidate their membership, none of the participants made reference solely on a subgroup when answering the interviewer's questions. In other words, although this social division is highly perceivable by every member, it does not imply greater sense of reference than the formal unit, and neither this implies different values or ways to think of their work. The discomfort of their members in situations of social awkwardness seems perpetuated by a generalized tendency to avoid facing conflicts and to rely on formalisms when trying to voice their opinion.

In terms of values, and probably based on this sensation of lack of recognition, they value characteristics that are useful to present themselves and capable, executive and proactive academic unit, like being an expert in the field, getting things done and sharing good experiences to the rest of the group members. Consequently, they reject any behavior that decreases the quality of their results and/or creates conflicts that will make difficult to work together.

Description of culture for Group 3.
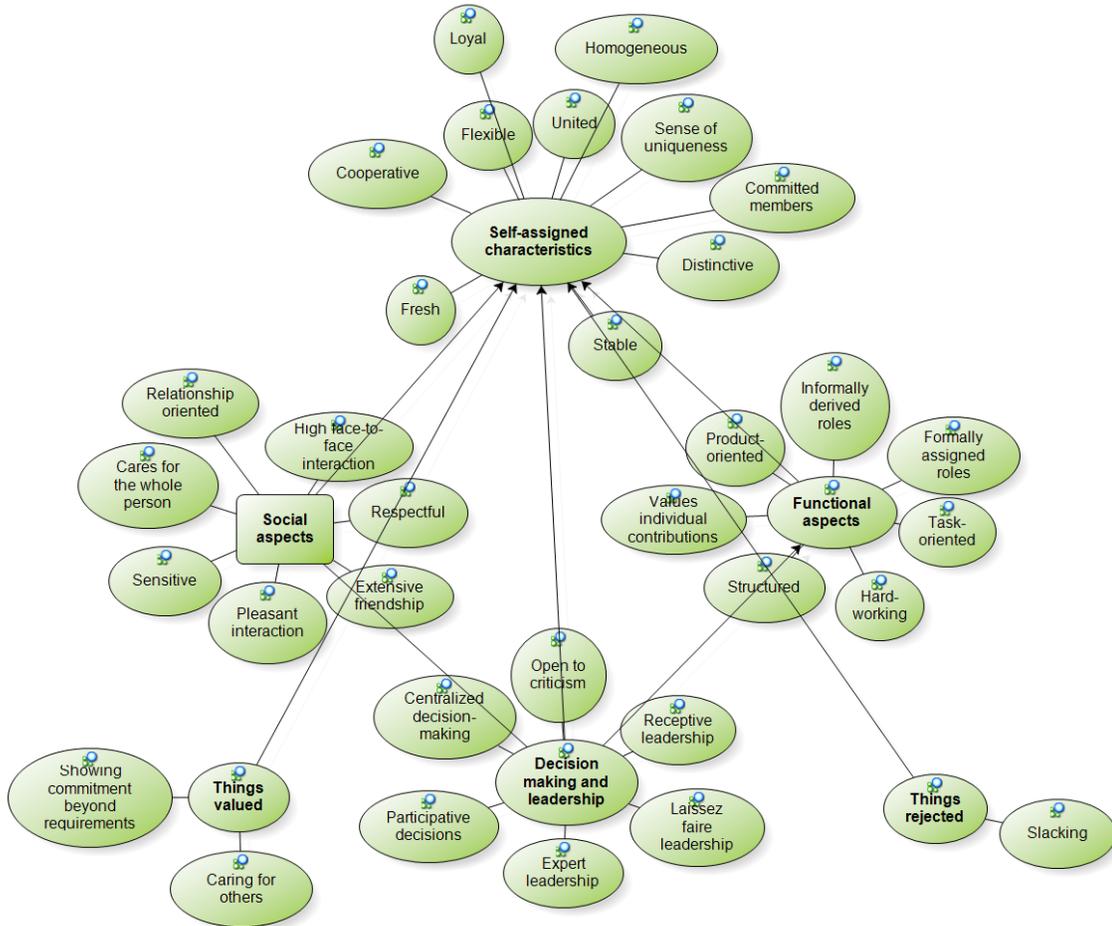
Figure 5 Departmental culture for group 3

Group 3 is an academic unit that is in charge of a major within the university, which makes it both a department and also a school. Therefore, it is expected to produce teaching, research and technical relationships with the community. This unit has less than 10 years of existence, and it is formed mainly by young professionals between 25 and 35 years who refer constantly to their unit as "a project". Their dynamics and the style they

have adopted to face their internal and external requirements places them in a distinctive clan culture typology (Cameron & Ettington, 1988).

As Figure 5 shows, this group describes itself as a cooperative team, with committed and loyal members to a common goal. Their members recognize their age as a source for dynamism and horizontality in their style to solve problems and relate to students. Perhaps the most distinctive trait of this group is the constant strategy of getting to know the other beyond their professional role, caring for their well-being as an individual, and expecting a degree of commitment beyond their formal requirements. On purpose, they have decided to have a common work space with no office divisions that facilitates their constant interaction with each other. In interviews, the group proves to be highly homogeneous in terms of speech, usually using very similar or identical phrases. For example, most of them used the term of "being proactive" with the connotation of taking more responsibility and relieving other member's workload when possible, instead of the idea of just acting in advance to deal with an event.

Functionally, they solve internal issues by discussing them in weekly meetings when everyone attends. For predictable decisions, they usually form a commission who is in charge of documenting the problem and possible solutions to the extended audience, and then follow-up on the decisions made. This style suits comfortably with the laissez-faire style of their leader, who is seen as an expert in the field but whishes not to exert any formal authority over others. Consequently, they value caring for others and giving their best at their job.

Culture fit among groups

The model presented in Figure 6 was generated automatically by Nvivo 8 software when crossing the nodes that represent each alternative of fit and relationship person-group with the person who described it. The colors of the academic unit were added to facilitate the identification of each member with his/her unit of reference. In the same way than culture models, red color was used to identify subgroup 4th level of Group 1, Blue indicates Subgroup 5th level of Group 1, Yellow for Group 2, and Green for Group 3.

There are several groups of relationship of fit between person and group in this map. People in the *seamless fit* situation mostly report an adjustment that did not imply significant work on their part, usually associated with satisfaction at a professional and or interpersonal levels, and a positive evaluation of their probability of developing a career in that group. All members of Group 3 fall in this category, with one person of subgroup 4th level of Group 1, and another person of Group 2.

An intermediate situation is the *fit due to personal flexibility*, meaning people in this category feel they fit in their workplace after having adjusted themselves in some way, which could have occurred time ago. Some members of Group 1 and 2 represent this perception.

In the misfit situation, the main reason for this perception is the perceived incompatibility of each member work style with their groups' way to work. Contrary to *the fit due to personal flexibility* situation, these members do not consider appropriate or worthy to change their work ethics to conform to their groups. They additionally might

disagree with their group's professional priorities or the requirements made to them from their peers or superiors.

Finally, a special case is the *disconnection person-workgroup situation*, when a person, despite perceiving congruency between personal and group style, has actively chosen to detach himself from the group in preparation for a future relocation.
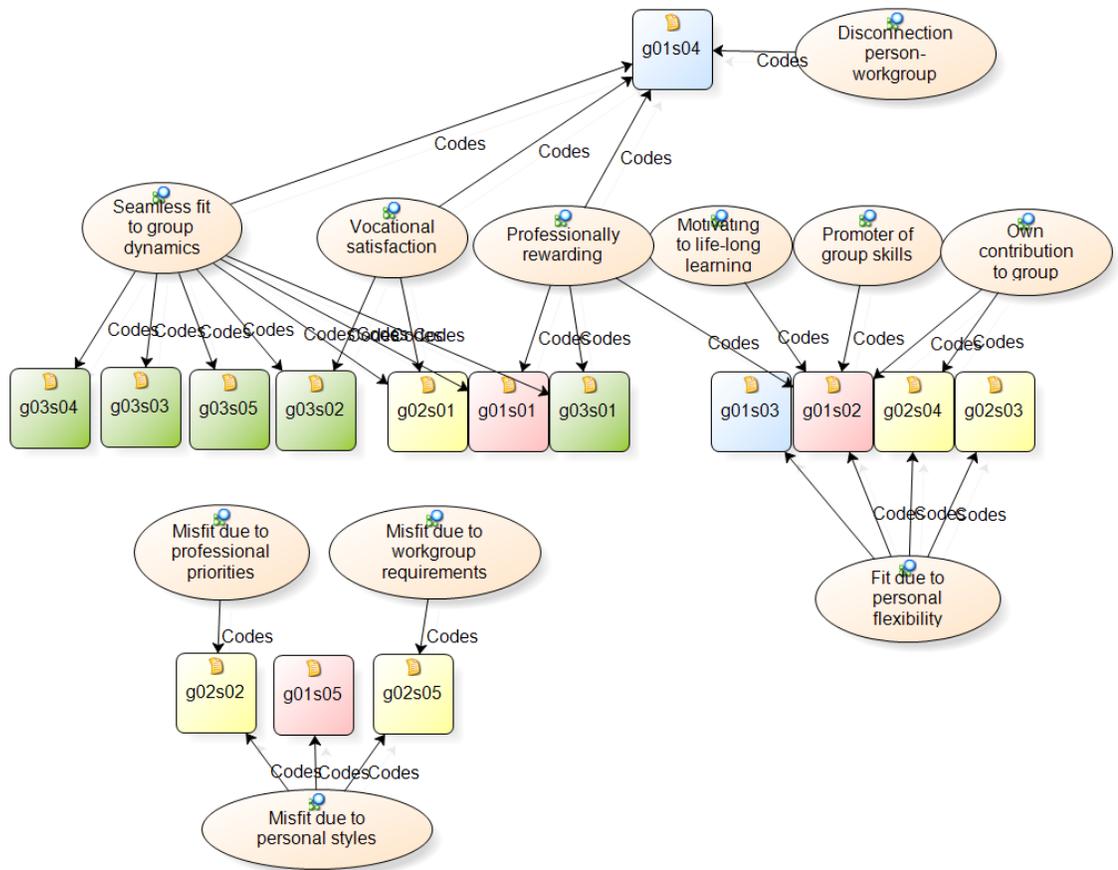

Figure 6 Elements of department culture fit across all groups

Quality of Life according to participants.

One of the main goals of this research was to establish a valid concept of QoL that would apply to faculty members for assessment and improvement purposes. During interviews, faculty members were asked to answer using a reference to the idea of quality of life and later they were inquired about what idea they had used to construe their answer. Based in this procedure, academics developed explanations of what they understood as quality of life. Coding for these explanations identified the connotations presented in Figure 7.
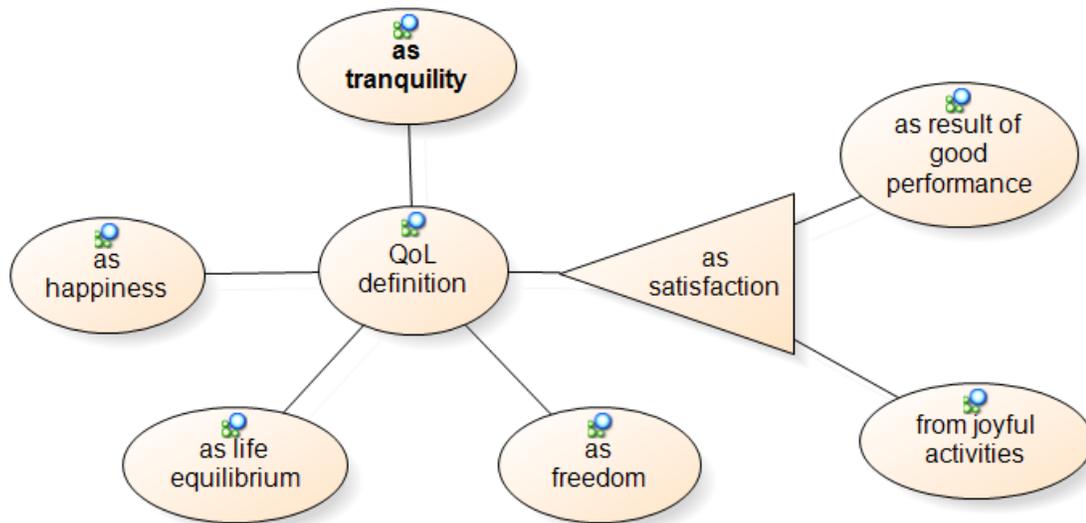
Figure 7 Connotations of the idea of QoL among faculty members

QoL as tranquility dimension implied answers like "*tranquility, tranquility of living, not stressed out, not living overwhelmed with worries [...] feeling comfortable*" (Group 3), or "*feeling calm enough to enjoy the things you do*" (Group 2). Usually this tranquility dimension implied some reference to financial stability, but most of them made sure to specify the money dimension was an enabler instead of a motivator for them

("*money is important because it lets you do things*" or "*having enough money to take care of my obligation*s"). This was the dimension that emerged more consistently among faculty members, independent of their group affiliations, age, sex, or position in their academic unit.

QoL as freedom it was usually associated to the idea of "having all bases covered" and then being able to do the things each faculty members enjoyed the most. Its prime example is the expression of a professor: "*Quality of life means being able to do the things that I want to do*". This dimension usually implied references to have time to devote to these free activities, with expressions like "*it's important to me to be able to explore certain things*" or "*time to dedicate to other things*". This connotation was present in faculty members from Group 1 and 2 only.

QoL as life equilibrium meant leading a healthy life, feeling well at physical, emotional and spiritual levels: "*healthy life, feeling well, like in equilibrium, feeling there's a balance in your life*". This dimension did not involve references to money or time constraints, and it was present in one person in Group 2.

QoL as happiness was based in an association that some faculty members made as a symptom of quality of life ("*QoL means I am happy in my life, if I'm happy it means my QoL is total, if I'm not happy in my life it means my QoL is deteriorated*") or simply by thinking of the terms as synonyms ("*QoL means being happy*"). These connotations usually were linked to quality of interpersonal relationships, feeling supported, spending time with family, etc. and sometimes it was associated with the idea of QoL as freedom. This dimension appeared only in the members of Group 3.

Finally, QoL as satisfaction had two branches: the satisfaction that comes from a job well done ("*being able to do things well*" or "*proud of what I'm achieving*") or the comfort that faculty members obtained from engaging in joyful activities such as plastic arts, music, or family time. This dimension was frequently associated with other dimensions, such as tranquility and freedom, and it was also present in all groups.

Summarizing, the best way to define the relationships among the connotations of QoL expressed by faculty members, it would be:

> *"Quality of life is a sensation of tranquility based on having basic conditions of life covered, which gives the person the freedom to engage in activities that generate happiness and comfort"*

Variations of QoL among groups

In order to explore possible variations of sources and permeability of the perception of QoL, faculty members were asked to list the main areas that mattered to them when making a judgment of QoL, by their own understanding. Figure 8 displays both a) main sources of QoL for faculty members, and b) the perception of these areas as connected or disconnected from what happens at their workplace.

As the figure shows, there were some common elements among all groups described: all of them described an attempt to compartmentalize the events occurred in their workplace as a sign of mental health, but people in all groups reported circumstances when they had carried over issues from work to their family life, affecting

people who were not involved directly in it. Also common to people of all groups is the importance of the quality of interpersonal relationships both at work and in their general lives, and the importance of financial stability to secure their perception of QoL.
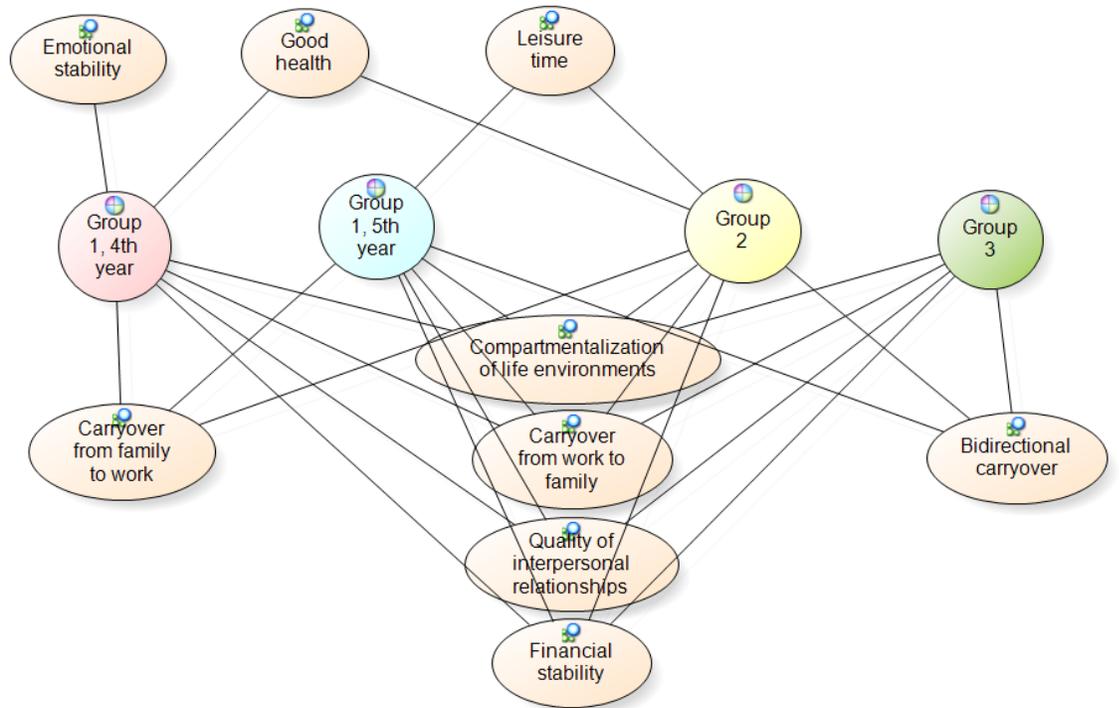
Figure 8 Main aspects of Quality of life, according to academic unit

On other areas, there were some differences described. For example, most of the groups, except Group 3, reported a spillover from family issues into their work performance. This could be understood by remembering that Group 3 has a tradition of caring for those issues, which could lead members to not consider it something to be reported as problematic. Also common for most groups was to report a bidirectional influence from work and family in their lives, excepting the subgroup of 4th year in

Group 1, which had reported a much tighter work agenda.

Other elements like emotional stability, good health, and leisure time were present are just some of the participants in few groups. Besides listing what is included in their arguments, it is also interesting to note that their job is not included per se, but tangentially implied by the areas of financial stability and good interpersonal relationships.

Variations on the idea of Quality of Life according to culture fit.

As the final model of this research, and satisfying the main objective of this work, Figure 9 presents architecture variations for the idea of Quality of Life, both in their relevant dimensions and connotations.

The condition of *seamless fit to group culture* shares several relevant dimensions for QoL with the other conditions, but in terms of connotation, is the only one that implied QoL as happiness. The fit based on personal adjustment also has some particularities, being the only one that included the idea of emotional stability for QoL, and also the only one to conceive QoL as life equilibrium. Finally, people in the misfit to culture category were the only ones to use the connotation of QoL as freedom.
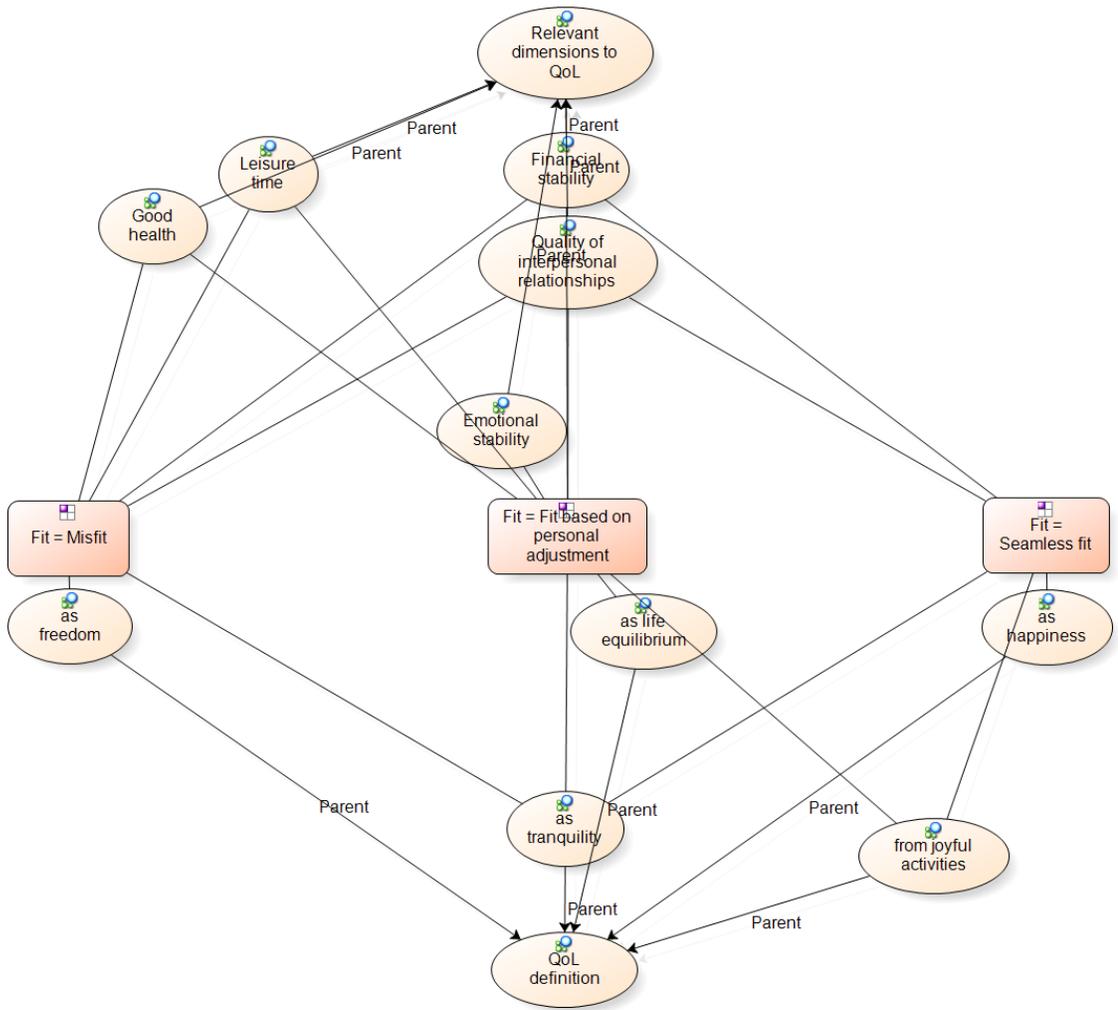
Figure 9 Architecture variations of the concept of QoL based on culture fit

Discussion

The main objective of this work was to assess the importance of the perceptions of culture and culture fit in the notions of quality of life on faculty members from different departments of the University of Talca. The fit that faculty members reported to their distinct departmental cultures was associated with differences in the semantic space of their concept of quality of life, both in the main aspects of life considered and in the connotations this idea had for faculty members. These results contribute and extend not only the idea of departments as a valid unit of analysis of culture in higher education institutions (Alred, 2006; Dimmitt, 2004; Mills, Beltis, Miller, & Nolan, 2005), but also that a specific workplace environment might have a relationship to each person's quality of life beyond the limits of their job settings (Edwards, Van Laar, Easton, & Kinman, 2009).

When using isolated words to describe the way each academic unit functions, faculty members in this research did not differ significantly among departments in evaluating their departments in terms of diversity, welcoming quality, cordiality, innovation, egalitarianism, interestingness, openness, idealism, and engagement, but they did differ when evaluating kindness, organization and cooperation. These similarities of evaluation are congruent with earlier studies in the same university (Caceres, 2004; Gaona, 2003) that had retrieved a high level of agreement in faculty members' appreciation of culture areas of liberalism, authority and power management, flexibility, and relationship with external sources when studying the culture at an institutional level. These common components also contribute with the idea that social units share a portion

65

of their culture with other social units or with the greater organization (Fernandez, 2002) and that culture occurs at many levels, from the closest groups to a state level (Tierney, 1988).

In terms of departmental cultures, units in this research presented characteristics of clans, market and adhocracy of styles to function, and also different culture strengths among all them, which differ from the greater institutional culture that had been described as relying heavily in bureaucracy (Caceres, 2004). This finding is congruent with the idea that bureaucratic cultures do not promote a high cohesive environment (Smart & St. John, 1996) among members. Further research would be necessary to establish if any kind of institutional cultures have the possibility of hosting such a variety of departmental cultures, or if different types or strengths of institutional cultures are associated with more homogeneous subcultures.

Although the results of this study cannot be used to establish any pattern outside the scope of the research, it is interesting to note that when deviations of the evaluation of departmental culture were detected, they were generated mostly either by formal members of the group or by new members of the group. It has been proposed that individuals may be attracted to organizations they perceive as congruent with their own ones (O'Reilly, Chatman, & Caldwell, 1991), which could explain certain levels of initial homogeneity. However, being a newcomer or a person with a distinctive role in the group might imply a distinctive acculturation dynamic that could emphasize how different they are from the general group instead of facilitating their fit (Newton & Jimmieson, 2006). This tendency, if confirmed by other studies, could suggest that a proper acculturation is

not just important for new members (Argyris, 2006), but for members going into administrative or managerial positions as well.

Another finding related to the variability of cultures it was the fact that different departments were associated with different levels of fit among faculty members, consistently across methodologies. A department with a clan culture, highly homogeneous and cohesive had members with a very positive perception of fit to their academic unit. On the other hand, a department socially divided, with mixed cultures and a bureaucratic component had members who had to adjust themselves to fit their academic units, or simply felt misfit. In this research, this perception of fit co-occurred with the commitment members felt for the academic unit as a whole, and with the willingness to work beyond acquired or assigned tasks. These results are coherent with the predictions of structural contingency theory, which considers that performance and other results are contingent to the fit between the characteristics of the individual and his/her organization (Lindholm, 2003). Since this research did not directly address the issue of selection, it is not clear yet if departments with stronger cultures used more defined and clearer selection criteria to ensure a better initial fit, or if departments fostered this cohesion based solely on social dynamics. Also, a limitation of this research is that only person-workgroup fit was evaluated purposefully, leaving references to broader levels of fit such as fit regarding to organization, job or vocation to the criteria of participants to include in their arguments.

In terms of the concept of quality of life, this research obtained emergent definitions of QoL from faculty members from different departments, which presented

common ideas, but also different architectures of meaning based both into group cultures and into individual-group fit. Common to all departmental cultures was the connotation of quality of life as tranquility and satisfaction, with their main sources a financial stability and quality of interpersonal relationships. Additionally, groups with cultures with certain level of interpersonal conflict had members mentioning health and emotional stability as relevant components of their quality of live. Complementarily, when analyzing the connotations of the idea of quality of life based on culture fit, faculty members who reported a seamless fit with their academic departments were the only ones to understand quality of life as happiness, and faculty members who reported misfit to their departmental cultures were the only ones to use the connotation of QoL as freedom. These results support a distinctive line of inquiry, about the validity and feasibility of standard measures of QoL applied either within productive environments or general evaluations.

As the official WHOQoL definition of quality of life is a very broad one, it is hard to find elements that could not apply to the one created in this study. However, some interesting specifications have been developed. The original definition mentions a position of the person in relation to his or her goals and expectations, while in this study there was no specific mention to this area besides of the satisfaction of a job well done, which could apply either to goals set in an autonomous or heteronomous way, and in any given time span. Also, the definition of QoL particular to this study was based on the idea of having basic needs covered, and starting from that, to have the time and chance to engage in rewarding activities, in a similar fashion to Maslow's hierarchy of needs or

even traditional organizational theories such Herzberg's motivation-hygiene theory.

When thinking about how to deal with different life roles, participants tended to think that a clear compartmentalization of life aspects was the healthiest way to preserve their quality of life. However, most of them admitted having work affecting their life outside their job settings, and fewer reported emotional carryovers from family life to work, or a bidirectional carryover. In terms of concept of quality of life, the main spillover observed based on this situation, was that work conditions were not openly named as relevant for quality of life, but only included when they talked about interpersonal relationships in a broader sense, or as a financial enabler.

Since this was an exploratory cross-sectional research, there are several questions that rise from these results and can be used as suggestions for further research, besides the ones enunciated in the above paragraphs. First, based in the transversal design of this study, there is no information on the possibility of having different department cultures affecting the same person and how this could imply possible differences in their conception of QoL. Second, based on the limited scope of the study, the relevance of professional cultures could not be separated from the departmental culture beyond the references of the study participants; therefore, a study that takes in account this source of acculturation could represent a positive addition on the understanding of the relationship between work and quality of life. Third, and based on the relationship between culture and individual fit explored in this study, other related features need to be assessed, such as departmental effectiveness associated with this reported commitment, student attainment associated with the way faculty members relate with their students, and the

teaching orientation present in this departmental cultures and how that is socialized, for example.

Despite the value of this study to the understanding of academic departments as relevant units of analysis and its relationship with their members' sense of quality of life, there are some important limitations to acknowledge. First, the semantic differential used to assess person-department fit in a structured manner, did not achieve the psychometric properties needed to assume its validity. Although the results of this instrument did triangulate with the information obtained from the interviews, the sample size collected in this study was not enough to render results with enough power to check the expected tri-factor structure for semantic differentials. Second, also related with semantic differential, the set of polar adjectives chosen did not demonstrate a high discriminative value, having only a fourth of its axes with significant differences among groups. For further studies, researchers could take in account the elements that each participant proposed as characteristics of their academic units and pilot an instrument that would be more helpful in establishing unique characteristics of academic workplaces. Third, based on the several elements covered in the interviews, this study collected important information but not necessarily rich within each line of thought, for example, there is information on definition of QoL but not on the process of making sense and achieving that particular idea of QoL for each person. For further research, it is recommended to improve the depth level of the information collected, maybe using other qualitative traditions that can take advantage of multiple sources of information.

Summarizing, this study has added information to the understanding universities

as complex social scenarios and to the comprehension of faculty members work conditions. For the institution it was intended, the use of this information can include policy making to improve faculty members work conditions, improving managerial and acculturation processes, guidance for personnel selection and retention, and informing valuable aspects of organizational change. In a broader sense, it suggests that professors' work environment not only is related to how they feel in their workplace, but also how they think their life.

References

Akerlind, G. S. (2005). Variation and commonality in phenomenographic research methods. *Higher Education*, *24*(4), 321-334. doi: 10.1080/07294360500284672.

Al-Hindawe, J. (1996). Considerations when constructing a semantic differential scale. *La Trobe Papers in Linguistics*, *9*. Retrieved from http://www.latrobe.edu.au/ linguistics/LaTrobePapersinLinguistics/Vol 09/03AlHindawe.pdf.

Alred, G. (2006). Bridging Cultures: The Academy and the Workplace. *Journal of Business Communication*, *43*(2), 79. doi: 10.1177/0021943605285659.

Alvarez-Gayou, J. (2003). *Como hacer investigación cualitativa. Fundamentos y metodología [How to do qualitative research. Principles and methods]*. Mexico: Paidos Educador.

Argyris, C. (2006). *Integrating the individual and the organization*. New Brunswick, NJ: Transaction Publishers.

Ballou, B., & Godwin, N. H. (2007). Quality of "Work Life". *Strategic Finance*, *89*(4), 41-45.

Bartell, M. (2003). Internationalization of universities: A university culture-based framework. *Higher Education*, *45*, 43-70.

De Boer, A. , Van Lanschot, JJB, Stalmeier, PFM, Van Sandick, JW, Hulscher, JBF, de Haes, J. & Sprangers, MAG (2004). Is a single-item visual analogue scale as valid, reliable and responsive as multi-item scales in measuring quality of life? *Quality of Life Research*, *13*, 311-320.

Bolman, L. G., & Deal, T. (2003). *Reframing Organizations: Artistry, Choice, and Leadership*. San Francisco, CA: Jossey-Bass Publishers.

Brint, S. (1998). *Schools and societies*. Thousand Oaks, CA: Pine Forge Press.

Brunner, J., & Briones, G. (1996). Higher education in Chile: effects of the 1980 reform. *Higher Education Reform in Chile, Brazil and Venezuela. Towards a Redefinition of the Role of the State. Washington, DC, Human and Social Development Group, Latin America and the Caribbean Region, World Bank*. Retrieved from http://cronopio.flacso.cl/fondo/pub/publicos/1992/DT/000531.pdf.

Caceres, A. M. (2004). *Cultura organizacional Universidad de Talca* (Master's thesis, Universidad de Talca, Talca, Chile). Retrieved from http://piduco.utalca.cl/ipac-cgi/ipac.exe

Cameron, K. S., & Ettington, D. R. (1988). Conceptual foundations of organizational culture. In J. C. Smart, *Higher Education: Handbook of theory and research* (Vol. 4, pp. 356-396). New York: Agathon Press.

Cannon, R. A. (1983). The professional development of Australian university teachers: An act of faith? *Higher Education*, *12*, 19-33.

Central Intelligence Agency. (2010). Country Comparison :: Distribution of family income - Gini index. *The World Factbook*. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/rankorder/2172rank.html?countryName=Chile&countryCode=ci&regionCode=sa&rank=14#ci.

Considine, G., & Callus, R. (2002). *The quality of work life of Australian employees -the development of an index*. Retrieved from http://www.macquarieinstitute.com.au/sci-articlelibrary/WP73.pdf.

Cummins, R. A. (2000). Objective and subjective quality of life: An interactive model. *Social Indicators Research*, *52*, 55-72.

Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: emotional and cognitive evaluations of life. *Annual review of psychology*, *54*, 403-25. doi: 10.1146/annurev.psych.54.101601.145056.

Dimmitt, M. A. (2004). *Organizational culture, faculty culture, and faculty professionalization in an urban community college system* (Doctoral Dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3145959)

Dortins, E. (2002). Reflections on phenomenographic process. In *30th Annual Conference of the Higher Education Research and Development Society of Australasia (HERDSA)* (pp. 207-213). New England: Perth.

Edwards, J.A., Van Laar, D., Easton, S. and Kinman, G. (2009). The work-related quality of life scale for higher education employees. *Quality in Higher Education, 15,* 207-219. doi: 10.1080/13538320903343057.

Fernandez, J. (2002). *Cultura de la organización y centro educativo* [Organizational and educative center cultures] (Doctoral Dissertation, Universidad Complutense de Madrid, Madrid, Spain). Retrieved from http://www.ucm.es/BUCM/tesis/cps/ucm-t25971.pdf

Ferreira, A., & Magalhaes, M. (2007). Diferenças De Cultura Entre Instituiçoes De Ensino Superior Público E Privado - Um Estudo De Caso [Culture differences between public and private higher education institutions -A case study]. *Psicología*, *21*(1), 7-26.

Fjortoft, N., & Smart, J. C. (1994). Enhancing organizational effectiveness: The importance of culture type and mission agreement. *Higher Education*, *27*, 429-447.

Gaona, S. (2003). Dimensiones de la cultura organizacional de los docentes de la Universidad de Talca [Dimensions of organizational culture in faculty members at University of Talca]. (Master's thesis, Universidad de Talca, Talca, Chile). Retrieved from http://piduco.utalca.cl/ipac-cgi/ipac.exe

Garson, D. (2010). *Factor Analysis*. Retrieved from http://faculty.chass.ncsu.edu/garson/PA765/factor.htm.

Gifford, B. D., Zammuto, R. F., & Goodman, E. A. (2002). The relationship between hospital unit culture and nurses' quality of work life. *Journal of healthcare management*, *47*(1), 13-25.

Gill, T. M., & Feinstein, A. R. (1994). A critical appraisal of the quality of Quality-of-life measurements. *JAMA*, *272*, 619-626.

Guyatt, G. H., Feeny, D. H., & Patrick, D. L. (1993). Measuring health-related quality of life. *Annals of internal medicine*, *118*, 622-629.

Haas, B. K. (1999). A Multidisciplinary Concept Analysis of Quality of Life. *Western Journal of Nursing Research*, *21*(6), 728-742. doi: 10.1177/01939459922044153.

Hagerty, M. R., Cummins, R. A., Ferriss, A. L., Land, K., Michalos, A. C., Peterson, M., et al. (2001). Quality of life indexes for national policy: Review and agenda for research. *Social indicators research*, *55*, 1-96.

Hardwick, P. (2009). The quality of life of the quality of place. *Mississippi Business Journal*, *31*(22), 8.

Harris, S. G., & Mossholder, K. W. (1996). The affective implications of perceived congruence with culture dimensions during organizational transformation. *Journal of management*, *22*, 527-547.

Hubbard Center for Faculty and Staff Support. (1998). *Faculty quality of life at Appalachian State University*. Retrieved from http://www.hubbard.appstate.edu/ od/qols.html.

Johnsrud, L. K. (2002). Measuring the quality of faculty and administrative work life. Implications for college and university campuses. *Research in higher education*, *43*, 379-395.

Kezar, A. (2001). Investigating Organizational Fit in a Participatory Leadership Environment. *Journal of Higher Education Policy and Management*, *23*(1), 85-101. doi: 10.1080/13600800020047261.

Lane, J. E. (1985). Academic profession in academic organization. *Higher Education*, *14*, 241-265.

Lau, R. S., & Bruce, E. M. (1998). A win-win paradigm for quality of work life and business performance. *Human Resource Development Quarterly*, *9*, 211-226.

Lindholm, J. (2003). Perceived Organizational Fit. *The Review of Higher Education*, *27*(1), 125–149.

Louis, K. S. (1998). Effects of Teacher Quality of Work Life in Secondary Schools on Commitment and Sense of Efficacy. *School Effectiveness and School Improvement*, *9*(1), 1-27.

Lund, D. B. (2003). Organizational culture and job satisfaction. *Journal of business & industrial marketing*, *18*, 219-236.

Martel, J., & Dupuis, G. (2006). Quality of work life: theoretical and methodological problems, and presentation of a new model and measuring instrument. *Social Indicators Research*, *77*(2), 333–368. doi: 10.1007/sl.

Martin, J. (2005). Organizational culture: Pieces of the puzzle. In J. M. Shafritz, J. S. Ott, & Y. S. Jang, *Classics of organizational theory* (pp. 393-414). Belmont, CA: Thomson Wadsworth.

Meeberg, G. (1993). Quality of life: A concept analysis. *Journal of advanced nursing*, *18*, 32-38.

Metz, M. H. (2003). *Different by design: The context and character of three magnet schools.*. New York: Teachers College Press.

Mills, M., Beltis, P., Miller, J. W., & Nolan, R. (2005). Experiences in academic unit reorganization: Organizational identity and identification in organizational change. *The Review of Higher Education*, *28*, 597-619.

Newton C. J., & Jimmieson, N. L. (2006). Subjective fit with organizational culture: Implications for the buffering role of participative control in the stress-strain relationship. In *Proceedings Australia and New Zealand Academy of Management*, Rockhampton, Queensland, Australia. Retrieved from http://eprints.qut.edu.au/5211/2/5211.pdf

OCDE, & World Bank. (2009). *La Educación Superior en Chile* [Higher education in Chile]. Revisión de Políticas Nacionales de Educación. Ministry of Education, Chile. doi: 10.1787/9789264054189-es.

O'Reilly, C., Chatman, J., & Caldwell, D. F. (1991). People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *The Academy of Management Journal*, *34*(3), 487. doi: 10.2307/256404.

78

Phillips, D. (2006). *Quality of life: Concept, policy and practice*. London: Routledge.

Powell, J. P., Barnett, E., & Shanker, V. (1983). How academics view their work. *Higher Education*, *12*, 297-313.

Rapkin, B., & Schwartz, C. (2004). Toward a theoretical model of quality-of-life appraisal: Implications of findings from studies of response shift. *Health and Quality of Life Outcomes*, *2*, 14-26.

Rapley, M. (2003). *Quality of life research. A critical introduction*. Thousand Oaks, CA: Sage.

Ratzlaff, C., Matsumoto, D., Kouznetsova, N., Raroque, J., & Ray, R. (2003). Individual psychological culture and subjective well-being. In E. Diener & E. M. Suh, *Culture and subjective well-being* (pp. 37-59). London: MIT Press.

Read, B., Archer, L., & Leathwood, C. (2003). Challenging Cultures? Student Conceptions of 'Belonging' and 'Isolation' in a Post-1992 University. *Studies in Higher Education*, *28*, 261-277.

Richardson, J. T. (1999). The concepts and methods of phenomenographic research. *Review of Educational Research*, *69*(1), 53-82.

Rodriguez, M., & Apodaca, P. M. (2004). Cultura organizacional en centros educativos [Organization culture in educative centers]. In D. Páez, I. Fernández, S. Ubillos, & E. Izubieta, *Psicología social, cultura y educación* (pp. 45-53). Madrid: Pearson Educación.

Ross, C. E., & Van Willigen, M. (1992). Education and the subjective quality of life. *Journal of health and social behavior*, *38*, 275-297.

Saleme, H., & Rosig, E. (2000). Representación social de Universidad ajustada a los resultados de una diferencial semántico [Social representation of university adjusted to the results of a semantic differential]. *Revista Iberoamericana de Diagnostico y Evaluacion Psicologica*, *9*(11), 105-114.

Schein, E. H. (2005). Defining organizational culture. In J. M. Shafritz, J. S. Ott, & Y. S. Jang, *Classics of organizational theory* (pp. 360-382). Belmont, CA: Thomson Wadsworth.

Schmitt, N., Oswald, F. L., Friede, A., Imus, A., & Merritt, S. (2008). Perceived fit with an academic environment: Attitudinal and behavioral outcomes. *Journal of Vocational Behavior*, *72*, 317-335. doi: 10.1016/j.jvb.2007.10.007.

Shafritz, J. M., Ott, J. S., & Jang, Y. S. (2005). *Classics of organization theory*. Belmont, CA: Thomson Wadsworth.

Sirgy, M. J. (2001). *Handbook of quality-of-life research: An ethical marketing perspective*. Dordrecht, Netherlands/ Boston: Kluwer Academic Publishers/Springer.

Sirgy, M. J. (2002). *The psychology of quality of life*. Dordrecht, Netherlands/ Boston: Kluwer Academic Publishers/Springer.

Skevington, S., Lotfy, M., & O'Connell, K. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial. A Report from the WHOQOL Group. *Quality of Life Research*, *13*(2), 299-310. doi: 10.1023/B:QURE.0000018486.91360.00.

Smart, J. C., & St. John, E. P. (1996). Organizational Culture and Effectiveness in Higher Education: A test of the "Culture Type" and "Strong Culture" Hypotheses. *Educational Evaluation and Policy Analysis*, *18*, 219-241.

Somekh, B., & Lewin, C. (2005). *Research methods in the social sciences*. London: Sage.

Sporn, B. (1996). Managing university culture: an analysis of the relationship between institutional culture and management approaches. *Higher Education*, *32*, 41-61.

The WHOQoL Group. (1994). The development of the World Health Organization Quality of Life Assessment Instrument (The WHOQoL). In J. Orley & W. Kuyken, *Quality of Life Assessment: International Perspectives*. Heidleberg: Springer-Verlag.

Tierney, W. G. (1988). Organizational Culture in Higher Education: Defining the Essentials. *The Journal of Higher Education*, *59*(1), 2-21. doi: 10.2307/1981868.

Topa, G., Lisbona, A., Palaci, F., & Alonso, E. (2004). La relación de la cultura de los grupos con la satisfacción y el compromiso de sus miembros: Un análisis multigrupo [Relationship between organizational culture, job satisfaction and organizational commitment: A multi-group analysis]. *Psicothema*, *16*, 363-368.

Vandenberghe, C., & Peiro, J. M. (1999). Organizational and individual values: Their main and combined effects on work attitudes and perceptions. *European Journal of Work and Organizational Psychology*, *8*, 569-581.

de Winter, J. C., Dodou, D., & Wieringa, P. A. (2009). Exploratory Factor Analysis With Small Sample Sizes. *Multivariate Behavioral Research*, *44*(2), 147-181. doi: 10.1080/00273170902794206.

Xavier, F., Ferraz, M., Marc, N., Escosteguy, N., & Moriguchi, E. (2003). Elderly people's definition of quality of life. *Revista Brasileira de Psiquiatria*, *25*, 31-39.

Appendixes

1. **Theme sequence for interview**

Quotes in cursive are literal examples of how questions were phrased.

- Open description of the work-team

  o *Just to get us started, how could you describe to me your work environment, your team?*

- Description of the typical way of solving problems or make decisions

  o *How would you describe the team's way to make decisions? Is there a particular sequence or method?*

- Historical stability of described dynamics.

  o *From the time you have been a member, how could you described the group has managed this way of working?*

- Perception of leadership and its association with formal hierarchy.

  o *How would you describe the role of the leader in the team's dynamic? How does the group structure around that figure?*

- Metaphors, stories or examples of how the work-team functions.

  o *How could you notice this style you told me in a daily interaction?*

- Valued and rejected characteristics for a group member

  o *Could you tell there is something, an attitude, behavior, a way to do stuff that is specifically valued in this work-team? Is there something that is rejected by most of the group?*

- Perceived differences with professional acculturation and with other units from the same institution.

  o *Are you under the impression that the way this team works is particular of this group of people, or is more related to the way (this profession) behaves?*

- Things that need to be passed on to new members in order to fit the team dynamics.

  o *If you had the opportunity to have a talk with a prospective member, is there something you would like to tell this person to do in order to facilitate his/her fit to how this group works?*

- Perception of fit to the group

  o *You have somewhat told me, but how do you feel you fit within this work dynamics?*

- Perception of fit with the general idea of quality of life

  o *How would you say this affects your sensation of quality of life?*

- Own definition of quality of life and its relevant factors.

  o *I have not given you a definition on quality of life, but you have already answered me about it. What goes into your quality of life?*

- Possible spillovers or connections between different areas of life.

  o *Do you feel that, at any level, whatever happens here has an impact on the rest of your life, on what you could perceive as your quality of life?*

2. Adjective pairs for semantic differential. (and their original version).

Spanish versions are expressed in feminine since the object of evaluation it was the way of functioning both as a unit and individually, which in Spanish is "la forma de funcionar".

1. *Kind – unkind (agradable – desagradable)*

2. *Diverse – monotonous (diversa – monótona)*

3. *Welcoming – cold (acogedora – fría)*

4. *Cordial – hostile (cordial – hostil)*

5. *Innovative – traditional (innovadora – tradicional)*

6. *Authoritarian – egalitarian (autoritaria – igualitaria)*

7. *Boring – interesting (aburrida – interesante)*

8. *Open – closed (abierta – cerrada)*

9. *Unorganized – organized (desorganizada – organizada)*

10. *Idealist – realist (idealista – realista)*

11. *Competitive – cooperative (competitive – cooperative)*

12. *Engaged – indifferent (comprometida – indiferente)*

The pairs rejected after the pilot application were:

- *Defined – ambiguous (definida – ambigua)*

- *Progressive – conservative (progresista – conservadora)*

- *Agile – clumsy (ágil – entrampada)*

3. Informed consent (Spanish version)

Professional Culture fit and quality of work life in academic departments. A phenomenographic approach.

Usted ha sido invitado/a a participar en un estudio cuyo propósito es conocer su opinión acerca de la dinámica de su equipo de trabajo (departamento o unidad académica) y su posible relación con su propia calidad de vida. Ud. ha sido seleccionado/a ya que forma parte de un equipo académico en una institución de educación superior. Por favor, lea la información siguiente antes de decidir si participará en este estudio.

Este estudio se realiza como una tesis para optar al grado de doctor del Departamento de Psicología Educacional, Facultad de Educación y Desarrollo Humano de la Universidad de Minnesota, Campus Twin Cities, Estados Unidos.

Información básica. El propósito de este estudio es explorar qué tan relevantes podrían ser las percepciones de la cultura de la unidad académica en las nociones de calidad de vida, así como también el ajuste que el docente podría percibir con respecto a ellas. Los resultados de esta investigación tendrían el potencial de relevar aspectos que faciliten la incorporación de cada miembro de un equipo docente a su unidad de referencia, facilitando su evaluación de calidad de vida, y potencialmente su desempeño docente.

Procedimiento: De acceder a participar en este estudio, se le pedirá dar respuesta a preguntas relacionadas a su apreciación de su entorno laboral y algunos elementos básicos de su vida que no involucrarán información crítica personal. Además, la investigadora le pedirá responder una escala muy breve de evaluación sobre su propia forma de funcionar y la de su equipo de trabajo. El tiempo estimado de su participación es entre media hora a una hora, dependiendo de el ritmo de entrevista.

Riesgos y beneficios de su participación en el estudio. No se prevé que esta participación represente un riesgo o incomodidad para los o las participantes, en cuanto ninguna porción de la información recolectada será compartida con ninguna persona externa a la investigación, especialmente superiores o compañeros/as de trabajo

De la misma forma, no se prevé que su participación involucre ningún beneficio directo Compensación:

Su participación en este estudio no involucrará una compensación por su tiempo, en ningún momento de la investigación.

Confidencialidad: La información recolectada mediante estos instrumentos es totalmente confidencial. De ser utilizada alguna porción de información entregada por Ud. de forma directa en los resultados de la investigación, no llevará ningún tipo de información que pueda llevar a la individualización del/a participante Cualquier dato

personal o de contacto (ejem. nombre, dirección, teléfono, etc.) no será relevante ni será requerido por la investigadora. La entrevista será grabada, para propósitos de facilitar su transcripción y será archivada y respaldada en sistemas informáticos con protección de acceso. Los archivos originales de las entrevistas serán mantenidos intactos por el tiempo necesario para completar la investigación y su informe o posterior publicación.

Participación voluntaria: Su participación es absolutamente voluntaria, por lo que usted puede decidir no participar en la investigación o abandonarla cuando usted lo estime conveniente, sin ningún tipo de consecuencia o cambio de relación con la Universidad de Talca o la Universidad de Minnesota. Ud. también tiene derecho a pedir el retiro de su información de la investigación en cualquier momento luego de haberla entregado, poniéndose en contacto con la investigadora.

Preguntas y contacto: La investigadora desarrollando este estudio es Ps. Tatiana Canales Opazo, a quien le puede hacer cualquier consulta en este momento o a posterioridad. En caso de tener alguna consulta posterior, puede contactarla al correo electrónico: tcanales@gmail.com. Adicionalmente, su profesor guía es el Dr. David W. Johnson, teléfono (1) 612-624-7031, cuyo correo electrónico es johns010@umn.edu.

Si tiene alguna duda o consulta con respecto a este estudio y le gustaría discutirlas con alguien que no sea la investigadora, por favor, póngase en contacto con la Línea de Consejería a los Sujetos de Investigación en D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

Ud. conservará una copia de este consentimiento para sus registros.

Consentimiento: He leído la información contenida en este documento. He hecho las preguntas correspondientes y estoy satisfecho/a con las respuestas y SI NO acepto participar en ella.

Firma:_____ Fecha: _____

Firma de la investigadora:_____ Fecha: _____

4. Informed consent (English version)

Professional Culture fit and quality of work life in academic departments. A phenomenographic approach.

You have been invited to participate in a research study with the purpose of knowing your opinion about the dynamics of your work team (department or academic unit) and its possible relationship with your own quality of life. You have been selected as a possible participant because you are a member of an academic team in a higher education institution. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Tatiana Canales Opazo as a dissertation to partially fulfill the requirements for a doctoral degree for the Department of Educational Psychology, College of Education and Human Development from the University of Minnesota, Campus Twin Cities, USA.

Background Information . The purpose of this study is to explore how relevant the perceptions of academic unit's culture are on the notions of quality of life, while also exploring the fit that the faculty member might perceive towards his/her unit. The results of this study have the potential to distinguish aspects useful to facilitate the acculturation of each new member to their academic team, to understand and later facilitate a better sense of quality of live and, eventually, their academic performance.

Procedures. If you agree to be in this study, we would ask you to do the following things: Answering questions related to your work environments and some basic information of your life that will not involve personal critical information. Additionally, the researcher will ask you to answer a brief scale evaluation your personal and the team way to work. The estimated time of your participation is between 30 mins. and an hour, depending of the interview rhythm.

Risks and Benefits of being in the Study . There are no expected risks for the participants, since no portion of the collected information will be shared with any person external to the research, specially coworkers or direct supervisors. At the same time, no expected benefits are anticipated for the participants.

Compensation. Your participation in this study does not involve any compensation for your time, neither now or in any time in the future of this research.

Confidentiality. The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a participant. Research records will be stored securely in a password protected device and only the researcher will have access to the records. The interviews will be recorded in audio files, which will be stored and filed securely for the time needed to complete the research and its necessary report. No personal information leading to the identification of

the participants (such as name, address, phone number, etc.) will be relevant or asked by the researcher at any time.

Voluntary Nature of the Study. Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota or the University of Talca. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Question. The researcher conducting this study is Ps. Tatiana Canales Opazo, You may ask any questions you have now. If you have questions later, you are encouraged to contact her at tcanales@gmail.com. Additionally, her advisor is Dr. David W. Johnson, telephone number (1) 612-624-7031, and mail address johns010@umn.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

You will be given a copy of this information to keep for your records.

Statement of Consent: I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature:_____ Date: _____

Signature of Investigator:_____ Date: _____

5. Summary of Chilean Higher Education Characteristics.

Chilean structure for higher education is a three-tier system of institutions including universities, professional institutes and technical training centers. In a nutshell, universities focus on long cycle undergraduate and graduate programs that require a degree. Professional institutes are limited to 4-year professional programs without granting a degree. Finally, technical training centers are restricted to short-term vocational careers leading to technical certificates without any degree (Brunner & Briones, 1996).

Nationwide, there are 25 universities that receive direct public funding, 16 of them are state universities, 6 are catholic universities and 3 are laic private universities. Public spending in higher education is 3.3% for the public institutions and 3.1% for the private institutions, mostly in forms of grants and incentives, while each institution's maintenance and payroll relies heavily on the funds retrieved from tuition and other private sources.. Besides the institutions that receive direct public funding, there are 26 private universities, 44 professional institutes and 87 technical training centers. Together, they report 48% of people in the cohort of 18-24 year old enrolled into programs of the higher tiers and about 37% of them enrolled for vocational programs, making it no longer an elite educational level but still very expensive compared to international standards. For Chilean families, the cost of tuition and fees averages a 30% of the national income per capita, three times higher than the American rate (OCDE & World Bank, 2009), which is usually covered by loans more than scholarships or grants.

Institutions offer closed curricula for each major and students are required to enroll for their declared major in the moment they enter each institution. Once the student is progressing in his/her program, there are limited opportunities to switch majors within the same type of institution and it is virtually impossible to transfer from a tier to the other while keeping the credits the students already earned. This fact has multiple consequences that differentiate Chilean higher education from the American one. First, life-time vocational decisions are usually made by students in their late teen years, leading institutions to compete on attracting them mostly based on how effectively their pre-planned curricula will provide them the best quality of education, and consequently, with the highest possibilities of being hired into most desirable positions when they graduate. (Brunner & Briones, 1996). Second, since enrolled students usually take the same classes in the same moment in their program, each cohort becomes a very strong and cohesive group and, therefore, the figure of the school or major is a distinctive source of identity for them and for the university as institution. Third, since the offer of courses is mainly regulated by the school and they are usually limited to one class that meets the requirement of each program level, if a student fails a class, it usually means the student needs to wait for the next year in the same term to retake it, making common that a student taking a 6-year curriculum will complete it in 8 years. Fourth, and also related to low efficiency rates, if a student decides to switch majors either within the same institution or a different one, it usually means the student needs to drop or to suspend his/her program in order to start the new one on the freshman year. Fifth, and as a consequence of all the above, Chilean work market requires professional certifications

and not degrees in order to fill job positions, usually selecting one specific profession and prioritizing their favorite institutions/curricula over job experience for their younger applicants.

For students who complete their higher education, their revenue in terms of difference of salary it is between 40 and 50%, compared to the ones who did not finish that level, with an average of 20% per each additional year studied. A university-educated professional makes 65% more than someone with a professional institute certification and more than twice the salary than someone from a technical training center certification (OCDE & World Bank, 2009). These values are mostly understandable by the high inequality of income in Chile, with a Gini Coefficient of 54.3 in 2003, making it the 14th most unequal country in the world, surpassed only by poorer South American countries like Bolivia and Haiti, and Sub-Saharan countries like Lesotho and Namibia (Central Intelligence Agency, 2010).

In terms of faculty members, there are three levels of employment: "hourly-contract", "limited contract" and the similar to "tenure-track contract", although in some universities the names for these categories might vary. Within the last type contract, there are usually four levels of achievement: instructor, assistant, associated and titular. Although tenure is rarely formally guaranteed, academics in titular positions usually stay in their categories until retirement.

7. University of Talca. Context and organizational structure.

The University of Talca is one of the 17 state-funded universities in Chile. It was founded in 1981 and nowadays, with its four campuses across of the region of Maule, it is considered the best state university that is not based in the country's capital city of Santiago. The university has about 7.000 students in the areas of science, liberal arts and technological innovation. These students are distributed in 21 undergraduate majors, 23 master and 4 doctoral programs.

The basic components of this university's academic units and administrative structure are:

- **College (Facultad):** performs every university function; teaching, research, technological and knowledge transference, and extension. They are divided into academic departments, either based on professional or disciplinary similarity, and they are led by a dean. The dean is a figure of academic leadership who is elected by tenure-track faculty members appointed to that specific college.

- **Departament (Departamento):** units in charge of the academic development of a discipline or sub-discipline, they are part of a college and provide the courses that schools need to fulfill their curricula. Their foci are usually teaching and research. Not every college divides into departments, since several academics of the same area of knowledge are needed to create them.
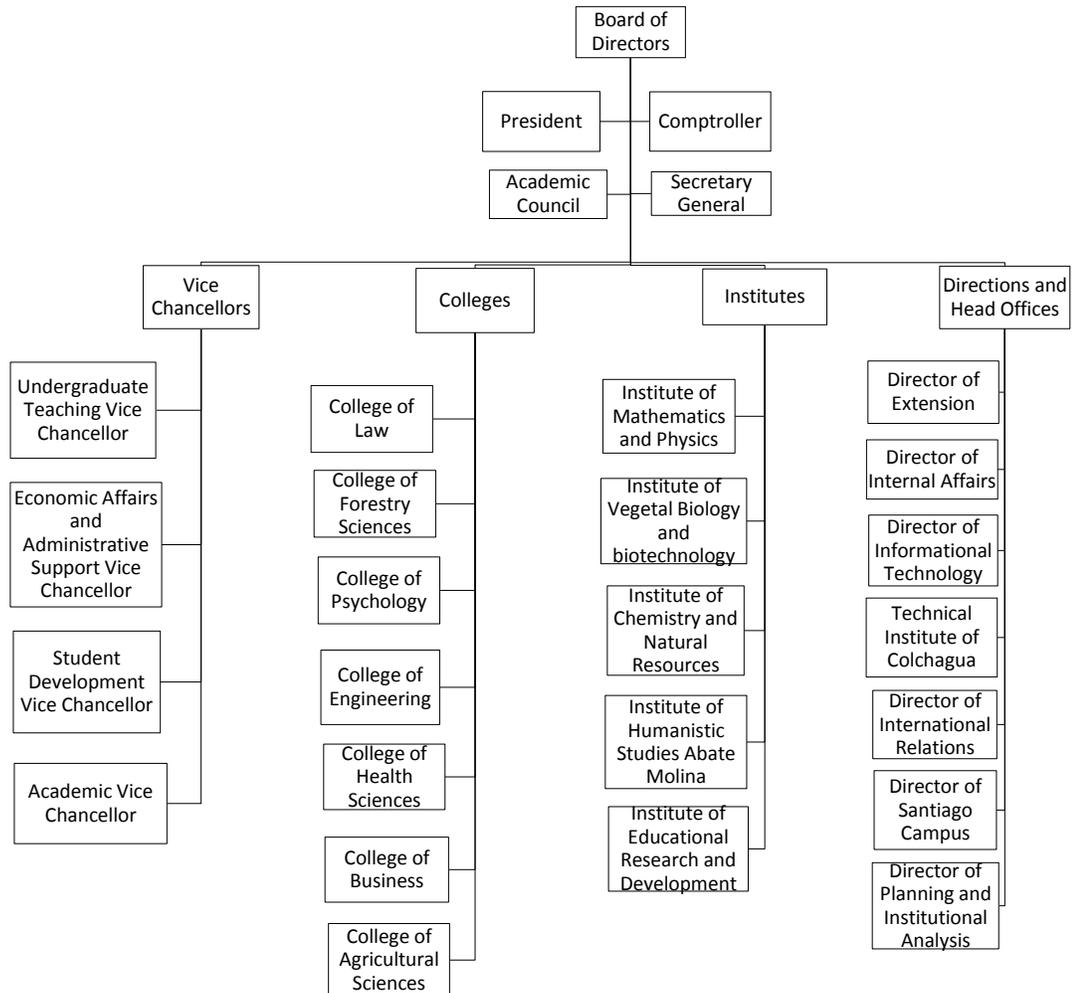
Figure 10 Summary of University of Talca's organizational structure. Source: University of Talca. (2009).

- **Schools (Escuelas):** are the units in charge of the basic administration of an undergraduate major inside a college. They are led by school directors who are appointed directly by their deans. Their main function is to manage each major's curricula and they belong either to a college or to the office of the Undergraduate

Teaching Vice Chancellor. Currently the schools assigned to a college are: Agronomy, Forestry Engineering, Law, Dentistry, Medical Technology, Speech Therapy, Chiropractics, Medicine, Business Administration, Engineering in Business Informatics, Accounting, Civil Engineering in Manufacturing, Construction Engineering, Psychology, Civil Engineering in Computing, Mechanic Engineering, Engineering in Bioinformatics, and Engineering in Mechatronics, The majors assigned to the Vice Chancellor's office are Architecture, Industrial Design and Musical Interpretation and Teaching.

- **Center (Centro):** units that are also part of colleges, but they are not mandatory. They focus mainly on technological transference to the productive and service market in a specific area. Some of them are the Vineyard and Wine Technological Center, Soil and Crops Technological Center, Center of Applied Psychology, Center of International Businesses, among several others.

- **Institute (Instituto):** they perform every function of a college but the management of undergraduate curricula, although they usually generate courses in basic sciences and humanities that serve majors from other academic units. Examples of these are the Institute of Mathematics and Physics, Institute of Biology and Biotechnology, and Institute of Humanistic Studies.

- **Program (Programa):** academic units that perform a specific duty related to teaching, research, extension or any other university need. They are led by a director who is appointed directly by the university president. Some of them are the Languages Program, Environmental Studies Program, and Sports and Physical Activities Program.

More information, in Spanish at www.utalca.cl

Translated from: Universidad de Talca (2009*). Internal evaluation report. University of Talca* [Reporte de Evaluación Interna. Universidad de Talca]. Unpublished Document.