

Université de Montréal

Patterns of discrepancy in perceptions of workgroup and organizational cultures and their relationships to well-being, commitment and organizational citizenship behavior

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Thèse présentée à la faculté des études supérieures
en vue d'obtention du grade de Philosophiae Doctor (Ph.D.)
en psychologie, option général

Avril 2015

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Résumé

La culture organisationnelle influence la manière dont les organismes relèvent les défis externes auxquels elle fait face et façonnent les comportements normatifs de leurs membres. Des études portant sur le degré d'acceptation et d'adoption d'une culture organisationnelle indiquent une grande variance en fonction de multiples facteurs (p. ex. : l'âge, l'occupation, la hiérarchie, etc.) et leurs liens aux résultats subséquents.

Différentes évaluations culturelles considèrent les sondages d'auto-évaluation comme étant des moyens acceptables de créer des liens entre les perceptions et les résultats. En effet, ces instruments mesurent les croyances, les suppositions et les valeurs d'une personne, mais l'un des facteurs pouvant compromettre les réponses est le manque de cadre de référence.

Un des objectifs de l'étude est de déterminer la manière dont la mesure des perceptions culturelles est reliée à la contextualisation des questions du sondage. À l'aide de deux orientations, nous tentons de déterminer si les perceptions de la culture en lien avec l'organisation entière sont différentes de celles en lien avec le groupe de travail immédiat.

De plus, l'étude explore la manière dont les différences algébriques entre les perceptions des deux référents sont simultanément reliées au bien-être psychologique au travail, à l'engagement et aux comportements de citoyenneté organisationnelle. Comme objectif final, nous déterminons lequel des deux référents prédit le mieux ces résultats.

Les cent quatre-vingt-neuf participants de l'étude faisaient partie d'un établissement d'enseignement postsecondaire de langue anglaise du Québec. En premier lieu, les participants recevaient, de façon aléatoire, l'un des deux questionnaires - soit

celui orienté sur l'organisation entière, soit celui orienté sur le groupe de travail immédiat -, puis, en deuxième lieu, son référent opposé correspondant.

Les résultats indiquent que les perceptions de culture en lien avec l'organisation entière sont significativement différentes de celle en lien avec le groupe de travail immédiat. L'étude démontre que les similitudes entre les perceptions sont directement proportionnelles au bien-être ainsi qu'aux engagements organisationnels et de groupe de travail.

De plus grandes différences perceptuelles sont associées à des niveaux plus élevés de bien-être et d'engagement organisationnel normatif. Ces associations sont plus fortes lorsque les perceptions de la culture organisationnelle sont plus positives que les perceptions de la culture du groupe de travail. Les différences algébriques opposées sont liées à des niveaux plus élevés de comportements de citoyenneté organisationnelle ainsi que d'engagements affectifs et de continuité envers le groupe de travail.

Les résultats de l'étude suggèrent aussi que les perceptions de la culture du groupe de travail sont plus liées aux résultats pertinents que les perceptions de la culture organisationnelle. Les implications théoriques et pratiques des mesures de perceptions de culture sont examinées.

Mots-clefs : perceptions de la culture organisationnelle, cadre de référence, bien-être, engagement, comportements de citoyenneté organisationnelle

Abstract

Organizational culture influences how organizations respond to environmental challenges and shape the normative behaviors of its members. Studies that address the extent to which a culture is accepted and practiced indicate much variance as a function of a multitude of factors (e.g. age, tenure, hierarchy, etc..) and their relation to subsequent outcomes.

Various cultural assessments utilize self-report surveys as an acceptable avenue to link between perceptions and outcomes. While these instruments measure one's beliefs, assumptions, and values, one of the factors that may implicate responses is the lack of frame of reference.

One of the study's objectives is to determine how measurements of cultural perceptions are related to contextualization of survey items. Using two orientations, we investigate whether perceptions of culture, in respect to the entire organization, are different from those in reference to the immediate workgroup.

The study further explores how patterns of discrepancies between perceptions of the two referents are simultaneously related to psychological well-being at work, commitment and organizational citizenship behavior. As a final goal, we test which of the two referents better predict those outcomes.

One hundred eighty nine participants in the study were part of a post-secondary, English educational institution in Quebec. Participants were randomly assigned to questionnaires with two different orientations - the entire organization or the immediate workgroup - at time one, and in corresponding opposite referent at time two.

Results indicate that perceptions of culture in relation to the entire organization are significantly different from those in relation to the immediate workgroup. The study demonstrates that similarities between perceptions are positively related to well-being, organizational and workgroup commitments.

Greater perceptual differences are associated with higher levels of well-being and normative organizational commitment. These associations are strongest when perceptions of organizational culture are more positive than perceptions of workgroup culture. Opposite patterns of discrepancy are related to higher levels of organizational citizenship-behavior, affective and continuance workgroup commitments.

The results of the study also suggest that perceptions of workgroup culture are related to relevant outcomes more than perceptions of organizational culture. Theoretical and practical implications for measurement of perceptions of culture are discussed.

Keywords: perceptions of organizational culture, frame-of-reference, well-being, commitment, organizational citizenship behavior

Table of Contents

Résumé.....	ii
Abstract.....	iv
Table of contents.....	vi
List of tables.....	ix
List of figures.....	x
Acknowledgments.....	xi
Introduction.....	1
Organization of the Study.....	5
Chapter 1: Literature Review and Hypotheses.....	6
Organizational culture.....	7
Measurements of organizational culture.....	9
Denison model of organizational culture.....	10
The effect of frame of reference on ratings.....	12
The relationships between perceptions of culture and outcomes.....	15
Well-being.....	16
Organizational and workgroup commitments.....	17
Affective commitment.....	19
Continuance commitment.....	19
Normative commitment.....	20
Organizational citizenship behaviour.....	20
Patterns of discrepancy between perceptions of culture in relation to outcomes.....	26
Person-Environment fit.....	23
Subjective fit.....	24

Mechanisms that govern fit.....	27
Research model.....	30
Chapter 2: Methodology.....	31
Research design.....	32
Participants.....	32
The organization.....	34
Survey distribution procedure and data collection.....	35
Frame of reference.....	36
Instruments.....	37
General information and demographics.....	37
Denison organizational culture survey.....	37
Organizational and workgroup commitments.....	40
Psychological well-being at work.....	41
Organizational citizenship behaviour.....	41
Ethical considerations.....	43
Chapter 3: Results.....	44
Preliminary analyses.....	46
Factor analyses and internal consistency of scales.....	48
Correlational analysis and reliability estimates.....	52
Simple regression analyses.....	54
Data analysis procedures.....	56
Hypotheses Testing.....	58
1.Differences between perceptions of culture.....	58
2.PO-PG dyad in relation to outcomes.....	59
2.1.Perceptions of culture predicting well-being.....	60

2.2.Perceptions of culture predicting commitments.....	62
2.3.Perceptions of culture predicting organizational citizenship behaviour.	68
3.Perceptions of workgroup culture in relation to relevant outcomes	69
Chapter 4:Discussion.....	71
Does the reference make a difference?.....	73
Similarities between perceptions of organizational and workgroup.....	74
Discrepancies between perceptions of culture in relation to outcomes.....	76
1.When perceptions of workgroup culture are more positive than those of of organizational culture.....	76
2. When perceptions of organizational culture are more positive than those of workgroup culture.....	79
Well-being: A special case.....	81
Limitations and recommendations for future research.....	82
Implications for practice.....	84
Conclusion.....	86
References.....	87
Appendix A: Instruments.....	i
Appendix B: Means, Standard Deviation and Coefficient of Variability for measurements in the study.....	ix
Appendix C: Polynomial Regression with Response Surface Analysis.....	xiv
Appendix D: Multiple Regression Analyses.....	xxii

List of Tables

Table 1. Summary of sample characteristics.....	33
Table 2. Descriptive statistic of variables in the study.....	47
Table 3. Summary of factor analyses.....	51
Table 4. Correlations between variables in the study.....	53
Table 5. Regression analysis for perceptions of organizational culture predicting well-being, commitment and organizational citizenship behavior.....	55
Table 6. Regression analysis for perceptions of workgroup culture predicting well-being, commitment and organizational citizenship behavior.....	55
Table 7. Research questions and data analysis.....	57
Table 8. Comparison of perceptions of culture and corresponding culture traits.....	59
Table 9. Frequencies of PG levels over, under and in-agreement with PO.....	59
Table 10. PO-PG dyad as a predictor of well-being.....	61
Table 11. PO-PG dyad as a predictor of commitment.....	64
Table 12. PO-PG dyad as a predictor of organizational citizenship behavior.....	68
Table 13. Hotelling-William t test between correlations of PO and PG.....	68

List of Figures

Figure 1. Hypothesized relationships between Po and PG ratings and related outcomes.	30
Figure 2. Surface relating PO and PG values to well-being.....	62
Figure 3. Surface relating PO and PG values to organizational affective commitment...	65
Figure 4. Surface relating PO and PG values to organizational continuance commitment.....	65
Figure 5. Surface relating PO and PG values to organizational normative commitment..	66
Figure 6. Surface relating PO and PG values to workgroup affective commitment.....	66
Figure 7. Surface relating PO and PG values to workgroup continuance commitment...	67
Figure 8. Surface relating PO and PG values to workgroup normative commitment.....	67

Acknowledgments

First and foremost I would like to thank Professor Robert Haccoun my mentor and thesis supervisor for all the years that he has been working with me. I extend a special gratitude for his support, encouragement and guidance that he provided me throughout my doctoral program.

I would also like to thank the committee members, Professor Marie Achille, Professor Denis Morin and Professor Jean Sébastien Boudrias for their insightful comments, ideas and suggestions. These have been of great help in improving the paper.

I want to thank the organization where the study was conducted, its research ethics board, administrative technician and all personnel who took part in the study. Without your permission, cooperation and willingness to participate, this study could not have been done.

For my children Aidan and Na'ama who encouraged me throughout this process, thank you so much. Finally, I am especially grateful to my wife Iris, to whom I want to dedicate this work, for her continuous support, understanding, patience and love.

INTRODUCTION

Over the past few decades, organizational culture has been a topic of significant interest in the literature, as it has been related to many aspects of individual and organizational lives. Organizational culture is defined as a system of shared meaning, assumptions and underlying values which relies on a system of shared beliefs among organizational members (Schein, 1985, 2004). It is thought to affect the way in which individuals interpret events and how they attach meanings to these events as they are guided by their shared beliefs, values, assumptions and ideologies (Rentsch, 1990).

Studies on organizational culture have focused on perception of culture and the way it is perceived on an individual level, investigating consistency of employees' attitudes towards the culture and their effect on organizational behavior and other outcomes (Graham and Nafukho, 2007; Wiener and Vardi, 1990). The perception- outcome linkage was tested across different organizational levels, ranging from organizational learning (Graham and Nafukho, 2007) through team effectiveness (Guzzo and Dickson, 1996), members' commitment (Ortega-Parra and Sastre-Castillo, 2013) and individuals' intentions to stay (Park and Kim, 2009).

As much as culture has been related to the organization as a whole, it has been linked to sub-groups within the organization as well, characterized by intra-group interactions and communications that are interpreted exclusively by respective group members (Fine, 1979).

Examinations of perceptions of culture have led researchers to conclude that culture is not as monolithic as expected and that, in fact, perceptions of culture are affected by individuals' attributes such as age, gender and ethnicity (Helms and Stern, 2001), education and function in the organization (Keeton and Mengistu, 1992), hierarchy (Shivers-Blackwell, 2006) and work experience (Graham and Nafukho, 2007), to name just a few.

Because perceptions of culture are affected by a multitude of factors, and at the same time culture dominates a substantial amount of individual experience within the organization, understanding how perceptions of culture relate to relevant outcomes is of salience.

Since the construct is being assessed by questionnaires that measure members' beliefs, values and behaviors (Ashkanasy, Broadfoot and Falkus, 2000), one of the factors that may be involved in assessing perceptions of culture is the referent which raters relate to when responding to these instruments. This suggests that culture questionnaires are open to interpretations and that raters may consider some items in respect to the entire organization, while others may relate them to their immediate workgroup. In view of this consideration, we postulate that ratings of culture are dependent - at least in part - on the way in which survey items are contextualized. Using frame of reference (Glick, 1985; Schneider and Reichers, 1983), we will explore whether ratings of perceptions of culture in relation to the entire organization are similar to those in relation to the workgroup.

In view of the apparent differences between perceptions of culture, the question that remains is how do discrepancies between perceptions of culture - in respect to the entire organization and immediate workgroup - relate to relevant outcomes? This question is not only important for examining the simultaneous impact of organizational and workgroup cultures on outcomes, but also for investigating whether this effect may be additive in relation to outcomes.

For example, positive perceptions of organizational and workgroup cultures may prompt high degrees of commitment and well-being. In contrast, positive perceptions of organizational culture and negative perceptions of workgroup culture may result in opposite effects on these outcomes.

One aspect of culture that may help us understand these interactions is related to a culture's role in facilitating a person's adaptation or fit to his or her environment. Defined as the similarity between the characteristics of people and the corresponding characteristics of organizations (Kristof, 1996; Schneider, 2001), Person-Environment (P-E) fit has been differentiated to several environmental subsystems including an individual's congruence with his or her organization (person-organization (P-O) fit) and workgroup (person-workgroup (P-G) fit) (Judge and Ferris, 1992; Kristof, 1996; Seong and Kristof-Brown, 2012).

According to the P-E fit paradigm, fit is based on perceptions of work environment as critical determinants of behavior and attitude. As long as their values and priorities match the values and priorities of an organization (or workgroup), employees are more likely to develop positive attitudes and behaviors as well as maintain an association with the organization or group in question. In light of this consideration, we will explore the relationships between perceptions of culture in relation to relevant outcomes through mechanisms that govern organizational and workgroup fit.

As much as culture dominates a substantial amount of individual experiences in an organization, understanding how perceptions of culture are related to one's quality of organizational life, degrees of engagement and propensity for collaboration are of great importance.

Therefore, the main goal of our study is to investigate how perceptions of organization and workgroup cultures are related to important elements of an individual's functioning within the organization, namely, well-being, commitment and organizational citizenship behavior.

More specifically, the study (1) examines whether - by means of contextualization - perceptions of culture in relation to the entire organization are similar to perceptions of culture in

reference to the immediate workgroup; (2) explores how differences between perceptions of culture are related to well-being, commitment and organizational citizenship behavior; and (3) aims to determine which of the two referents - the organization or immediate workgroup – serve as a better predictor for the relevant outcomes.

Organization of the Study

This study is organized as follows: in the first chapter, the constructs of organizational culture and frame of reference are presented. We then discuss hypothesized relationships between perception of culture and the constructs of well-being, commitment and organizational citizenship behavior. Chapter two consists of research methodology, data collection, and procedures. Chapter three describes the study's results and analyses of the data. Finally, chapter four summarizes the study's major findings and discusses the implications of these findings for theory, practice as well as future research.

CHAPTER 1: LITERATURE REVIEW AND HYPOTHESES

Organizational Culture

Organizational culture influences how organizations respond to environmental challenges and shapes the normative behaviors of its members. Having been first introduced in the field of Anthropology, the concept has evolved to become incorporated into the field of Organizational Behavior as a platform for theory, research, diagnosis and analysis (Hofstede, 1984; Reichers and Schneider, 1990; Schein, 1985). From an anthropological and sociological perspective, culture has long been positioned as an integral feature of a functioning society that ultimately helps individuals to relate to and adapt to their communities. This suggests that culture internalizes values and normative beliefs. Once they are established, they act as ‘built-in’ guides for behavior (Wiener, 1982).

Within organizational settings, this construct was initially introduced in an effort to examine and understand factors that impact business performance. Organizational culture has since become relevant for both public and private organizations.

While many nuances exist in the definition of organizational culture, they all share and incorporate “collective understanding” (Van Maanen and Barley, 1983), a “belief system that is shared by all organizational members” (Schein, 1985; Spender, 1983), or, as Lundy and Cowling (1996) put it, “the way we do thing around here”.

According to Keeton and Mengistu (1992), all definitions of organizational culture revolve around common themes that are manifested in the work environment and include references to (1) a set of values held by all individuals in the organization; (2) values that are embedded in organizational culture which become an implicit part of values and beliefs held by organizational members; and (3) an emphasis on the symbolic means through which the culture is communicated. These patterns of beliefs, values and shared meanings are developed

throughout an organization's lifetime; they are used to cope with experiences presiding over members' beliefs for addressing challenging situations and dictating policies and operational procedures (Brown, 1998).

Most research on organizational culture has operated from the assertion that culture is nearly universally shared within organizations and consistent at both a specific point and across time (Helms and Stern, 2001). Although organizations aim to instill a common set of values and beliefs to all of their members, culture is not as monolithic as expected. Studies that have addressed the extent to which a culture is accepted and practiced have found much variance as a function of demography (Hofstede, Harris Bond and Luk, 1993), age, ethnic background and gender (Helms and Stern, 2001), as well as hierarchy in the organization (Keeton and Mengistu, 1992).

Organizational theories have proposed these parameters in their field, and research has shown that culture affects individuals' motivation and influences members' interpretations of leadership roles (Shivers-Blackwell, 2006), organizational learning (Graham and Nafukho, 2007), training (Keeton and Mengistu, 1992) motivation (Wiener and Vardi, 1990), commitment (Ortega-Parra and Sastre-Castillo, 2013) and identification (Schrodt, 2002).

As much as perceptions of organizational culture are related to organizational outcomes, similar relationships have been demonstrated with respect to perceptions of workgroup culture and performance (Wech, Mossholder, Steel and Bennett, 1998), citizenship (Bentein, Stinglhamber and Vandenberghe, 2002), and commitment (Ellemers, de Gilder and van den Heuvel, 1998; Zaccaro and Dobbins, 1989).

Measurement of Organizational Culture

One of the ways in which culture can be studied is by aggregating survey data. The collection of data in an aggregated form is based on the premise that organizational culture is manifested as a “collective consciousness” (Hofstede, 1980) or an “underlying shared assumption” (Schein, 1984) that conceptualizes culture as a unitary and stable outcome (Pearse and Kanyangale, 2009). This approach focuses on consensus, common sets of values and norms that are expressed and understood by the majority within an organization. However, it has been asserted that relationships between predictors and criteria that are found at the individual level may or may not be found at the aggregate level (Denison, 1996; Glick, 1985; Peterson and Castro, 2006).

Ongoing interactions and socializations of members with immediate supervisors, colleagues and teams expose individuals to various aspects of the culture through multiple foci within the organization (Brown, 1998). As a result, perceptions of culture may be affected by these multiple interactions, creating distinct perspectives in reference to the entire organization and the immediate workgroup.

It has been demonstrated that questionnaires play an important role in the quantitative analysis of perceptions of organizational culture (Reichers and Schneider, 1990). According to Ashkanasy, Broadfoot and Falkus’s (2000) typology for culture questionnaires, culture surveys can be classified as either *typing* or *profiling*. Typing surveys categorize organizations into specific culture types. Based on a competing value framework (Quinn and Rohrbaugh, 1983), these types are differentiated by distinct values and behaviors, and include types such as *clans*, *adhocracies*, *hierarchies* and *markets*.

In contrast, profiling surveys are concerned with a descriptive account of the organization by measuring the strengths or weaknesses of members' beliefs, values and assumptions. These elements, according to the authors, are part of Schein's (1985, 1990, 2004) framework for analysis of culture and are considered as fundamental building blocks of this construct. In these surveys, mean scores on each dimension allow researchers to quantify the extent of disagreement around cultural dimensions in questions. For example, when disagreements about culture values are high or low, cultures are conceptualized as *weak* or *strong*, respectively (Denison, Nieminen and Kotrba, 2014).

The premise that culture is related to organizational outcomes has led to the development of profiling surveys focusing on values that are thought to be part of organizational effectiveness and performance (Ashkanasy et al., 2000). Consistent with our focus on the culture-outcome link, self-report surveys of beliefs, assumptions and values are considered as an appropriate avenue to make the connection between perceptions and behavior. Rentsch (1990) argued - based on the Action Theory (Silverman, 1971) - that a framework for understanding interactions and subsequent behaviors in organizations depends "on the subjective meanings attached to situation and on people's perceptions of those situations" (p. 670). Within this perspective, actions cannot be understood until the actors interpret the situation.

The Denison Model of Organizational Culture

The framework for investigating organizational culture in this study is drawn from Denison's (1990) model of organizational culture. The main premise of this model is that culture can be studied as an integral part of the adaptation process of an organization by means of specific cultural traits that are predictors for performance and effectiveness. Correspondingly, the

model proposes four traits that represent the antecedents of organizational performance and effectiveness:

(1). Involvement: this refers to the extent to which individuals at all levels in the organization are allowed to participate in, and are empowered to fulfill, the organization's mission. As individuals become more involved and empowered, organizations become more responsive and adaptive to change.

2. Consistency: this relates to the positive internal dynamics of the organization. It refers to the system of shared values held by the staff at all levels in the organization. High degrees of consistency in organizations are said to exhibit 'strong' cultures, as it is easier to reach consensus and coordinate group activities. This also helps the stability and direction of the organization.

3. Adaptability: this refers to the external dynamic of the organization. It deals with the extent to which employees are able to understand the needs of their customers/clients and, on this basis, to determine how best to respond within the context of the organization's values and goals.

4. Mission: this describes the vision and direction of the organization and its role in defining the external goals of the organization. In the long run, mission supports organizational stability and direction.

Empirically, studies have demonstrated that these four traits link to organizational effectiveness as manifested by customer satisfaction and sales growth (Gillespie, Denison, Haaland, Smerek and Neale, 2008), leadership (Block, 2003), commitment (Taylor, Levy, Boyacigiller and Beechler, 2008) as well as knowledge management and organizational structure strategy (Zheng, Yang and McLean, 2010).

Within this framework, we can postulate that employees' perception of these organizational characteristics may ultimately relate to relevant outcomes. In order to measure

culture from this perspective, the Denison Organizational Culture Survey (DOCS - Denison, 1996; Denison and Mishra, 1995) is employed in this study. This survey uses a profile approach by individually assessing each trait (Involvement, Consistency, Adaptability and Mission); correspondingly, mean item scores for each trait are calculated in order to generate trait scores: the higher the score, the stronger the perception among employees that the specific cultural trait is present.

Due to multicollinearity of scores between cultural traits and relevant outcomes (see Appendix D), all scores were added to present positive and / or negative effects of perceptions of culture on relevant outcomes. In order to do so, results of the surveys were added to produce summated scores for perceptions of organizational and workgroup cultures.

As much as measurements of culture depend on subjective meanings and situational perceptions, the question that arises is whether ratings of culture with respect to the entire organization are different from those with respect to the immediate workgroup. Individuals who respond to culture inventories may refer to the entire organization to answer some items, but refer to their workgroup to answer others, resulting in within-person variability. In order to reduce this potential inconsistency, contextualization of test items may provide respondents with a common frame of reference that focuses on specific organizational units, including the entire organization or the workgroup.

The Effect of Frame of Reference on Ratings

Context-specific test items provide respondents with a common frame of reference. In this method, survey takers are guided by prompts or referents that induce responses to specific contexts (Bing, Whanger, Davidson and van Hook, 2004; Holtz, Ployhart and Dominguez, 2005;

Hunthausen, Truxillo, Bauer and Hammer, 2003; Robie, Schmit, Ryan and Zickar, 2000).

It has been demonstrated that although individuals respond to generic, non-contextualized inventories, test items are open to interpretations in comparison to context-specific items. Conceptually, the use of contextualized scales has been attributed to the Cognitive-Affective Processing System (CAPS) theory. Based on the assertion that individuals' behaviors are contingent on a given situation, the theory has been considered as a meta-theoretical framework that sets forth general principles in order to explain how an individual psychologically mediates the impact of stimuli and subsequently generates distinct behaviors (Mischel, 1973).

According to CAPS theory, mental events or units mediate the relationship between psychological cues from the environment and resulting behaviors. These units include constructs of the individual, expectancies, affects (subjective values, emotions), goals and values as well as self-regulatory strategies. Subsequently, these units interact with each other and general behavioral outcomes (Mischel and Shoda, 1995; 1998).

The key measurement implication of this theory is that the prediction of people's behaviors can be improved when people are given a context, or frame of reference, when asked to describe themselves (Lievens, De Corte and Schollaert, 2008). Empirically, research has found support for the frame-of-reference effect, which results in reduced within-person inconsistencies by means of conceptually relevant settings and instructions. For example, in a study that was conducted among college students, participants completed personality scales with both an at-school and at-work frame of references. The surveys were designed in such a way that context tags ('at school' or 'at work') were added for each item of the test, leading to reduced within-person inconsistency and further led to higher validity as a result of the reduction of between-person variability and within-person inconsistency. (Lievens et al., 2008).

Contextualization of test items has been used to assess the effect of survey wording on work environment ratings. Glick (1985), as well as Schneider and Reichers (1983), stressed the benefit of reference-based survey questions (when evaluating a work environment) that focus on specific organizational units with recognized boundaries - such as team and department - as opposed to referring to a general 'work environment' as an ambiguous entity.

In a study that assessed the effect of survey wordings on within-group agreement and between-group variability (Klein, Conn, Smith and Sorra, 2001), the authors used two forms of questionnaires: one, an individual-referent- and the other, a group-referent-based survey. Both questionnaires addressed the same group of plant managers. Individual-referent-based questions consisted of elements that referred respondents' attention to their own individual experience, while group-referent-based questions shifted from individual orientation - lessening the personal, intimate focus - to a global, shared experience. For example, the item "The supervisor to whom I report is sensitive to my needs" changed to "The typical supervisor to whom employees report is sensitive to employees' needs". According to the results, the use of a group (rather than individual) referent fostered a decrease in within-group variability and an increase in within-group variability in response to descriptive ('I typically use a computer to perform my work tasks') and evaluative ('My work here is motivating') survey items respectively, highlighting the potential role of survey wording. More recently, Gorman and Rentsch (2009) demonstrated that frame of reference influences how raters process, represent and remember information. The authors also demonstrated that contextualization of test items increases similarity to referent schema as well as general rating accuracy.

In view of these considerations, we propose that measurements of perception of culture in an organization may be perceived in a general, non-contextualized manner that results in diverse

interpretations of the survey items. Consequently, as respondents answer an organizational culture survey they might refer to the entire organization to answer some items and, alternatively, to the immediate workgroup to answer others.

Therefore, we suggest that adding positioning cues to the culture survey questionnaires will prompt respondents to refer to a specific organizational entity, resulting in differentiation between ratings of culture in relation to the entire organization as opposed to the immediate workgroup. For example, one of the items that assesses perceptions of culture, ‘Everyone believes that he or she can have a positive impact’, will be prompted with ‘in my organization’ or ‘in my department’ to orient respondents to the entire organization or to the immediate workgroup referents, respectively. Using this framework, we propose the following hypothesis:

H1: Mean ratings of culture in reference to the
immediate workgroup are different from mean
ratings in reference to the entire organization

The Relationships Between Perceptions of Culture and Outcomes

Experimental social psychologists have demonstrated that perceptions guide people’s impressions, judgments, feelings and intentions. By means of activation processes, perceptions stimulate social knowledge, which, in turn, affect social judgments and behaviors (Ferguson and Bargh, 2004). In organizational contexts, culture has been regarded as a system of meaning, which creates specific cognitive role-perceptions as to what is expected in the work place. Those perceptions are among the factors that lead to behaviors (Hofmann, Morgeson and Gerras, 2003; Tepper, Lockhart and Hoobler, 2001).

Given the potential impact on individuals and the organization, culture is related to important outcomes such as quality of organizational life, degrees of engagement, and propensity for collaboration, which are central to the organization, as we will see in the following sections. Therefore, we will discuss how perceptions of culture are associated with well-being, commitment and organizational citizenship behavior as important elements of an individual's functioning within his or her organization.

Well-Being

Organizational theories emphasize the importance of work environment that cultivates an empowered work force (Peterson and Speer, 2000) and fulfills employees' personal needs through quality of work life (Harris and Mossholder, 1996; Sirgy, Efraty, Siegel and Lee, 2001). The core dimension that characterized these qualities is employees' well-being (Lawler, 1982).

Organizational well-being revolves around one's experience in relation to positive person-organization fit and general positive sentiment within the organization. According to one definition, well-being expresses a positive emotional state as a result of harmony between the sum of specific environmental factors and one's personal needs and expectations (Aeltermann, Engels, Van Petegem and Verhaeghe, 2007). The construct is also described as a subjective and positive experience at work regarding interpersonal fit, ability to thrive, competency, perceived recognition, and desire for involvement. This relates to Dagenais-Desmarais and Savoie's (2011) Psychological Well-Being at Work (PWBW).

According to the happy/productive worker thesis, a tendency to experience a positive emotional state should produce higher levels of work performance. This view has led many scholars to call for human and supportive work environments, which has linked PWBW to

organizational effectiveness (Cropanzano and Wright, 1999). Weiss and Cropanzano (1996) asserted that emotions affect performance by instigating compatible behaviors, so that people who are high in psychological well-being are more likely to be perceived as outgoing, social, helpful and resourceful. Similarly, empirical studies have shown that there is a direct link between well-being and decision-making (Staw and Barsade, 1993), performance evaluations, and general productivity (Staw, Sutton and Pelled, 1994), as well as business outcomes (Harter, Schmidt and Keyes, 2003).

In view of work environment characteristics, it has been demonstrated that organizational and workgroup cultures that emphasized well-designed jobs and supportive environments (Wilson, Dejoy, Vandenberg, Richardson and McGrath, 2004), as well as general work characteristics such as feedback, types of job demands and reduced uncertainty (Van Veldhoven, Taris, Jonge and Broersen, 2005) were related to employees' well-being, illustrating the positive relation between perceptions of culture and this construct. For example, in a study conducted among employees of a large manufacturer (Sauter, Lim and Murphy, 1996), organizational values that promoted conflict resolution, sense of belonging and openness to new technology were significantly related to employees' growth, development and positive sense of well-being. Similarly, Gilbreath and Benson (2004) demonstrated that at a workgroup level, supervisors that promoted values of support, flexibility, empowerment and appreciation related to members' well-being.

Organizational and Workgroup Commitments

The dominant model of 'commitment' is the one proposed by Meyer and Allen (1997). It consists of three lower order variables that are affective, normative and continuance: affective

commitment refers to an employee's emotional attachment to identify with and be involved with the organization. Continuance commitment refers to an awareness of the costs associated with leaving the organization. Finally, normative commitment reflects an employee's feelings of moral obligation to remain with the organization. These types of commitment are a distinguishable component of attitudinal commitment. That is, an individual can experience each type of commitment to varying degrees. The 'net sum' of a person's commitment to the organization, therefore, reflects each of these separable psychological states (Meyer and Allen, 1997).

Organizational commitment is influenced by many factors that are related (among others) to work experience, socialization and organizational fit. Additionally, Meyer and Allen (1997), as well as Wiener (1982) and O'Reilly (1989) identified organizational culture as an antecedent of commitment. Empirical work has supported that view: research has confirmed that an innovative and supportive culture has a positive effect on job satisfaction and commitment (Lok and Crawford, 2003; Ortega-Parra and Sastre-Castillo, 2013).

As much as perceptions of organizational culture may be related to organizational commitment, perceptions of workgroup culture may be associated with workgroup commitment. Brown (1998) asserted that members of organizations do not behave in a "value-free vacuum"; instead, they are governed, directed and tempered by the organization's culture. More specifically, members are exposed to various aspects of the culture through multiple foci in the organization. The ongoing interactions and socializations with other members, immediate supervisors, colleagues and teams serve as antecedents for multiple foci of commitment (Clugston, Howell and Dorfman, 2000).

Affective commitment.

Meyer and Allen (1997) suggest that affective commitment is influenced by the extent to which policies are being perceived by and communicated to organizational members. Research has shown that adequate explanation (Konovsky and Cropanzano, 1991) and a high degree of sensitivity (Greenberg, 1994) that was displayed in organizational communication was related to high levels of affective commitment. More recently, Ortega-Parra and Sastre-Castillo (2013) showed a strong link between a corporate culture that emphasizes ethical values and affective commitment. Besides the affect at the organizational level, it has been identified that affective commitment exists towards supervisors and workgroup referents (Bentein et al., 2002; Vandenberghe, Bentein and Stinglhamber, 2004; Zaccaro and Dobbins, 1989). At group level, this construct may be related members perceptions about their workgroup characteristics that are manifested through group policies and communication (Meyer and Allen, 1997).

Continuance commitment.

Continuance commitment refers to an employee's awareness that costs are associated with leaving the organization; employees who have strong continuance commitment stay because they believe that they *have to* do so (Meyer and Allen, 1997). It is related to employees' perceptions about the transferability of their skills, training and education from one organization to another. Accordingly, we suggest that organizational culture that stresses core values, empowerment and capability development will be associated with one's continuance commitment.

At the group level, this construct may be related to members' perceptions about the transferability of their skills and working conditions from one workgroup to another and

members' awareness of stakes involved with leaving the group. At the same time, groups that emphasize core values, empowerment and capability development may be related to members' sentiments regarding their continuance commitment to their workgroup.

Normative commitment.

Feelings of obligation to remain with an organization develop during early socialization processes of newcomers to the organization (Wiener, 1982). This sense is internalized as a belief about the appropriateness of being loyal to one's organization (Meyer and Allen, 1997).

Normative commitment develops on the basis of a particular kind of investment that seems difficult from an employee's perspective to reciprocate; as a result, employees may feel a sense of obligation to the organization. This obligation can be furnished by organizational and workgroup cultures that emphasize power distance and collectivism (Clugston et al., 2000).

Organizational Citizenship Behavior

Organizational Citizenship Behavior (OCB) is defined as "over and above the call of duty" (Kar and Tewari, 1999), or, as Organ (1988) put it, as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system" (Organ, 1988 ,p. 4). This definition was reconceptualized to a behavior "that supports the social and psychological environment in which task performance takes place" (Organ, 1997 ,p.95).

OCB has been regarded as a beneficial factor that promotes organizational effectiveness by proving a support system and interdependency among employees (Smith, Organ and Near, 1983). It has also been demonstrated that candidates who displayed propensity for OCB were

more likely to get hired and to receive better job offers in comparison to control group (Podsakoff, Whiting, Podsakoff and Mishra, 2011).

Researchers have identified several dimensions of the citizenship behavior that includes helping (Organ, Podsakoff and MacKenzie, 2006) loyalty (Graham 1991) as well as voice (Van Dyne and LePine, 1998) behavior that relates to members' inclination to express constructive challenges in order to promote positive change in the organization.

Due to the positive relations between OCB and organizational performance, several variables have been identified to promote such behavior, for example, dispositional traits and job satisfaction (Batman and Organ, 1983; Tang and Ibrahim, 1998), commitment (Gonzalez and Garazo, 2006) as well as organizational culture (Reed and Kidder, 2005).

OCB can be reinforced or hindered through values, symbols and beliefs that are manifested by culture. For example, Vigoda (2000) demonstrated that the prevalence of political maneuverings and power struggles - that inadvertently lessen perceived justice and equity values - results in diminished OCB in the organization. Alternatively, Farh et al. (1990) found that high values of justice and fairness encouraged employees to engage in OCB.

Cultural manifestations of justice (or injustice) are not the only determinants of OCB. Organ et. al. (2006) suggested that organizational formalization, inflexibility and constraints (among others) - as manifested through cultural context - can affect OCB as well. In a study conducted among restaurant employees, the authors demonstrated that employees in bureaucratic (as opposed to informal) cultural settings were less inclined to display OCB (Stamper and Van Dyne, 2001).

Additionally, contextual settings that are unique to the immediate workgroup may contribute to the construct as well. Naumann and Ehrhart (2005) suggested that group

supervisors and leaders may consider OCB as critical to the success of the group or the entire organization. At group levels, norms that involve pro-social behavior, such as helping with work-related problems, may increase group, and ultimately organizational, performance by promoting members' involvement through empowerment and team orientation.

Patterns of Discrepancies Between Perceptions of Culture in Relation to Outcomes

In view of the two referents, the entire organization and the immediate workgroup, we are looking at two potential sources that may simultaneously relate to relevant outcomes. This framework raises an important question regarding these relationships: how do similarities and discrepancies between perceptions of culture, with respect to the entire organization and the immediate workgroup, relate to PWBW, commitment and OCB? Given the association between perceptions and outcomes, positive perceptions of organizational culture and negative perceptions of workgroup culture (or vice versa) may be respectively associated with positive and negative outcomes of the same constructs. For example, positive perceptions of organizational culture may be associated with a high degree of affective commitment to the organization, while negative perceptions of workgroup culture may be associated with a low degree of workgroup affective commitment.

For the purpose of this study, we denote 'PO' to present perceptions of culture regarding the entire organization, and 'PG' to present perceptions of culture in respect to one's immediate workgroup. Using this framework, we postulate that patterns of discrepancy between PO and PG may be related to higher or lower outcome levels.

Correspondingly, a PO-PG dyad will be congruent when evaluations of culture with respect to the entire organization are reported to be similar to those of the immediate workgroup (PO=PG), whereas incongruence corresponds to dissimilarity between them (PO \neq PG).

One aspect that may help us explore these interactions is related to a person's fit within his or her environment. As organizational culture plays an important role in determining how well an individual fits within an organizational context (Chatman, 1991; Kilmann, Saxton and Serpa, 1986; O'Reilly, Chatman and Caldwell, 1991; Rousseau, 1990; Schein, 1985), perceptions of the work environment that facilitate perceived fit may be a critical determinant of individual behaviors and attitudes. Therefore, we will present the concept of fit, its relation to culture and its underlying psychological processes in the context of the hypothesized relationships between the PO-PG dyad and relevant outcomes.

Person-Environment Fit

Person-Environment (P-E) fit has received much attention in the Management and Industrial/Organizational Psychology literature and has subsequently become one of the dominant conceptual constructs in the field (Schneider, 2001). Drawn from the field of Interactional Psychology (Chatman, 1989; Lewin, 1951), P-E fit relates to the congruence between individual characteristics and organizational or situational characteristics (Muchinsky and Monohan, 1987).

Values and value congruence between a person and his or her organization are the most common sources of fit (Piasentin and Chapman, 2006). According to Chatman (1989), the very base mechanism that creates fit perceptions is imbedded in the process of information gathering about values of oneself as well as values and norms about the environment in question. Within

this mechanism, values serve as a social cognition that facilitates a person's adaptation to his or her environment, which subsequently has implications for corresponding behavior. At the same time, values and norms, that are imbedded in organizational culture, provide an elaborate and generalized justification, both for appropriate behaviors of members and for the activities and function of the system (Chatman, 1989; Enz, 1988).

Studies that have investigated the role of fit have highlighted a multitude of employee experiences that relate to individual and organizational outcomes. Among many differentiations of the concept, person-organization (P-O) fit was attributed to an individual's job choice and organizational selection decision (Cable and Judge, 1996; Lauver and Kristof-Brown, 2001; Schneider, Goldstein and Smith, 1995), work attitudes (O'Reilly and Chatman, 1986; Verquer, Beehr and Wagner, 2003), performance (Goodman and Svyantek, 1999; Tziner, 1987) and organizational outcomes (Adkins, Ravlin and Meglino, 1996; Kristof, 1996; Schneider, Smith and Goldstein, 1994).

At the group level, Person-Group (P-G) fit was related to commitment (Doosje, Ellemers and Spears, 1999) and attachment to workgroup (Brawley, Carron and Widmeyer, 1987) as well as group performance (Seong, Kristof-Brown, Park and Shin, 2012).

Subjective fit.

One of the operational definitions of fit that has been used to explore mechanisms of fit is subjective fit, which involves a person's account of his or her own characteristics and the matching of those to perceived organizational characteristics (Piasentin and Chapman, 2006). This construct is based on the premise that individual perceptions of fit are vital for affective and behavioral outcomes (Kristof, 1996; Kristof-Brown, Zimmerman and Johnson, 2005; Newton

and Jimmieson, 2009). Correspondingly, research that examined the processes relating perceptions of person and environment viewed fit as a psychological phenomenon, such that its effect requires a person to be aware of his or her fit within his or her environment (Edwards, Cable, Williamson, Schurer Lambert and Shipp, 2006). For example, studies have shown that subjective fit is positively related to organizational commitment, intentions to stay (Verquer et al., 2003), perceived organizational support, and citizenship behaviors (Cable and DeRue, 2002).

In light of these considerations, it is important to stress that the subjective-fit paradigm is presented as a general framework to discuss similarity in relation to outcomes. However, the study does not use this approach to test hypothesized relationships between perceptions and outcomes.

Mechanisms that govern fit

It has been asserted that fit between an individual's organization and workgroup stems from similarity-based and need-fulfillment frameworks. From a similarity perspective, individuals are inclined to be more attracted to and satisfied when their cognitions, beliefs, attitudes, goals and values are similar to those represented by the environment (Ostroff and Schulte, 2007). Thereby, fit guides the stability of behavior in the environment, and, at the same time, the environment is seen as reinforcing and satisfying when it resembles the individual. For example, Shaw and Gupta (2004) demonstrated that fit between individual preferences and the characteristics that are presented in the job are related to a variety of health and well-being outcomes.

When the focus on the environment is framed in terms of need fulfillment (Cable and Edwards, 2004), preferences, desires, needs or other personal characteristics are fulfilled by

being in the context that afford opportunities for personal needs, desires and/or preferences to be met (Ostroff and Schulte, 2007). For example, in a study that was conducted among employees in a water treatment agency, the authors demonstrated that social- psychological context variables (e.g. altruism, positive relationships) were related to more positive attitudes of employees when consistent with individuals' desire for respective variables (Cable and Edwards, 2004).

P-E framework can be viewed as a dynamic system as well. As some characteristics of the person are considered stable, values are more susceptible to changes in the environment, suggesting that fit in terms of value congruence may change over time (Ryan and Kristof-Brown, 2003; Sekiguchi, 2004).

According to the Theory of Work Adjustment (TWA - Dawis, Lofquist and Weiss, 1968), individuals attempt to obtain and maintain fit with their environment because of changes in that environment. One of the assumptions of the TWA is that fit effects may be additive, such that different types of fit may accumulate and their combination is likely to be important for outcomes (Lofquist and Dawis, 1969; Ostroff, 1992). Correspondingly, in a study that was conducted among school teachers, results showed that when vocation, personality and ability were congruent with environmental characteristics, participants reported higher levels of well-being, suggesting that the combination of the three congruence aspects had an additive effect (French, Caplan and Van Harrison, 1982; Meir and Melamed, 1986).

In light of these considerations, we postulate that by means of value congruence between a person and his or her environment, where a good fit (or match) produces positive outcomes and poor fit (or mismatch) results in negative outcomes, perception of organizational and workgroup culture are related to outcomes. Given the possible additive effect of value congruence, we

suggest that the combination of similar PO and PG will be positively related to well-being, commitment and organizational citizenship behavior. Thus we propose the following hypothesis:

H2: Similarity of perception of organizational and workgroup culture is positively related to well-being, commitments and organizational citizenship behavior

As much as similarities between perceptions of culture are hypothesized to relate to outcomes, differences between PO and PG may be related to well-being, commitment and OCB as well. In view of the fit paradigm, it has been asserted that multiple types of fit are used for combining fit cues. In studies that investigated multiple kinds of fit, results showed that different types of fit have unique influences on individual outcomes. For example, O'Reilly, Chatman and Caldwell (1991) reported that fit between skills and job profile (P-J fit), as well as the match between the employees' own values and their companies' values (P-O fit), had an independent effect on job satisfaction commitment and intentions to quit. Similarly, Kristof-Brown, Jansen and Colbert (2002) reported that P-J, P-G and P-O fit all had important independent effects on job satisfaction.

These studies suggest that people are able to distinguish between the quality of relationships with coworkers and other aspects of their work environment, making it likely that some types of fit affect individuals' outcomes uniquely (Smith, 1992).

However, given the simultaneous nature of interactions with their organization and with their workgroup, individuals are likely to develop conflicting perceptions about their fit with their organization and workgroup. Drawing from the literature, the Theory of Cognitive Dissonance

(Festinger, 1957) stresses that any inconsistency that an individual might perceive between “any knowledge, opinion, or belief about the environment, about oneself, or about one’s behavior” (p. 3) - coined as *Cognitive Dissonance* - will give rise to measures to reduce or to avoid increases in the dissonance. Festinger argued that individuals will seek a stable state by attempting to reduce the dissonance and, hence, the discomfort.

Research has shown that in order to achieve consistency between attitude and behavior, individuals alter either their attitude or behavior or develop a rationalization for the discrepancy (Cooper, 2012; Newby-Clark, McGregor and Zanna, 2002). For example, in a study conducted among department store employees, the authors demonstrated that workers who entered their organization with the intention to quit subsequently reported lower levels of job satisfaction as opposed to employees with high intentions to stay (Doran, Stone, Brief and George, 1991). These results, according to the authors, were consistent with the cognitive dissonance theory because they demonstrated that need for consistency in cognition about attitudes, behavioral intention and behavior were reflected by the relationship between the intent to leave and job satisfaction.

Using this framework, dissonance between perceptions of culture may exist when perceptions of workgroup culture are different from those of organizational culture. Correspondingly, negative and positive appraisals of respective workgroup and organizational cultures (or vice versa) will result in poor perceived fit to the workgroup and positive fit to the organization.

Given the extent that fit guides the stability of behavior in the environment by means of similarity and need fulfillment, dissonance reduction may result in behavioral and attitudinal change. At the group level, daily interactions and socializations with colleagues may be related

to some outcomes more than others. By means of continuous interactions with workgroup entities, values, rules and dynamics, members may give more credence to their positive sentiments and degrees of commitment to their immediate workgroup. Moreover, as individuals experience positive subjective P-G fit and negative P-O fit, a dissonance reduction option may result in increased well-being and commitment to the workgroup.

Therefore, we suggest that when discrepancy between PO and PG occurs, well-being and workgroup commitments will increase only when perceptions of workgroup culture are superior to those of the entire organization, proposing the following hypothesis:

H3: Discrepancy between perceptions of culture is positively related to well-being, workgroup commitments and Organizational Citizenship Behavior when PG is higher than PO

In contrast, by means of values, norms and regulations, members may attribute their organizational commitment to the culture of the organization. As individuals may experience positive subjective P-O fit and negative P-G fit, a dissonance reduction option may result in increased organizational commitment. Therefore, the discrepancy between perceptions will be related to organizational commitment when PO is higher than PG, proposing the following hypothesis:

H4: Discrepancy between perceptions of culture is positively related to organizational commitments when PO is higher than PG

Research Model

Before we test the possible associations between differences between perceptions of culture and relevant outcomes, we draw a research model that emerges from the above literature review. Figure 1 shows that patterns of discrepancies between PO and PG are simultaneously related to well-being, commitment and OCB. As our discussion suggests, we propose that (1) agreement between perceptions of culture towards the entire organization and the immediate workgroup, $PO=PG$, are related to well-being, commitment and OCB; and that (2) the direction of discrepancy between PO and PG is related to these outcomes. When $PO > PG$, the difference is related to organizational commitment. Conversely, when $PO < PG$, the difference is related to OCB, workgroup commitment, and well-being.

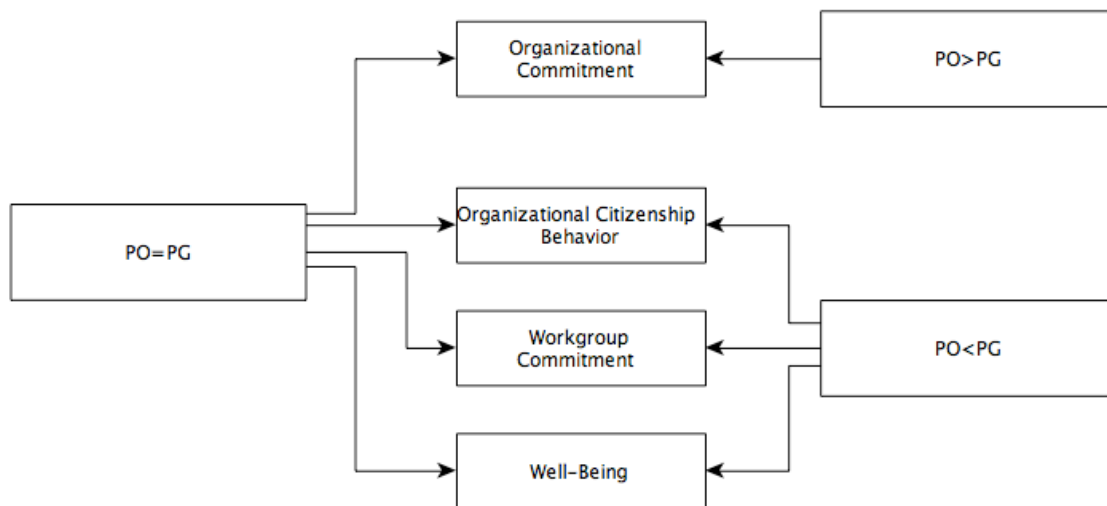


Figure 1. Hypothesized relationships between PO and PG ratings and related outcomes.

CHAPTER 2: METHODOLOGY

This chapter presents the research methodology of the study including research design, participants, procedures of data collection and the instruments used, as well as data collection procedures and analyses that have been employed to test the hypothesized relationships.

Research Design

The purpose of this study was to test hypothesized relationships between the PO-PG dyad, well-being, commitment and organizational citizenship behavior. This study utilized a within-participant, comparative design to explore differences in perceptions of culture in reference to the entire organization and the immediate work group.

Participants

Participants in the present study are part of a post-secondary, English educational institution in Quebec with 720 faculty and staff members. The sample consisted of part and full time employees, engaged in all aspects of the organizational functioning including management, services, faculty and support staff. A total of 189 personnel took part of the study. Table 1 presents the characteristics of participants of the study:

Table 1

Summary of Sample Characteristics

Number of participants	189
Gender	
Female	57%
Male	43%
Age Group	
Less than 20 year	1.6%
20-29years	5.0%
30-39 years	19.0%
40-49 years	28.1%
50-59 years	37.2%
Over 60 years	9.1%
Education	
High School	2.5%
Technical Training	5.8%
Undergraduate Degree	16.5%
Master's	51.2%
Ph.D.	14.0%
Other	7.4%
Job Status	
Full time	91.7%
Part time	4.1%
Other	1.7%
Position	
Faculty	57.9%
Staff	31.4%
Other	8.3%
Tenure	
Less than 6 months	3.3%
6-11 months	1.7%
1-2 years	1.7%
3-5 years	17.4%
6-10 years	20.7%
11-15 years	26.4%
More than 15 years	27.3%

Table 1 (Cont'd)

Summary of Sample Characteristics

Department/Unit/Faculty	
Administration (Office of Director General, Human Resources, Financial Services, Administrative Services, Information Systems, Maintenance, Security, Parking)	5.8%
Academic Dean (Registrar, Institutional Development & Research, Pedagogical Development, Scheduling)	4.1%
Faculty of Social Science, Commerce, Arts & Letters	13.2%
Faculty of Careers & Technical Programs	14.0%
Faculty of Science and General Studies	17.4%
Continuing Education	1.7%
Student Services (Sports, Learning Enrichment & Support, Library)	8.3%
Other	5.0%

The Organization

Located in Quebec, the organization is a public educational institution that offers a variety of pre-university and technical programs. The institution has been operating since the 1970s, with an approximate enrollment of 5000 students per year.

Survey Distribution Procedure and Data Collection

Upon being granted permission from the ethical board of the organization, email invitations were sent to the entire personnel inviting them to participate in the study. Invitations (and subsequent reminders) included a link to an online survey operated by a SurveyGizmo.com, an online platform survey provider.

Data collection was set for two periods (time 1 and 2). At time 1, half of the participants were randomly assigned to questionnaires that oriented participants to questions in respect to the entire organization; the remaining fifty percent of the sample were oriented towards their immediate work group. Access to the surveys was available for 30 days.

At the second part of data collection, participants who were initially assigned to the entire organization- during time 1- were now referred to their immediate work group; similarly, the group that was initially oriented towards their immediate workgroup was assigned to the entire organization. The time delay between the two periods was 30 days.

In order to match and pair participants' responses (from time 1 and 2) for subsequent analyses, three subject coding questions were introduced at the beginning of each survey. Participants were asked - for example- to provide the first two letters of their father's first name and the day of the month in which they were born (see Appendix A).

A total of 720 invitations to participate in the study were sent at time 1. Some of the returned surveys were incomplete, resulting in 215 usable surveys - a 29.8% overall response rate. One hundred and twelve (112) of the returned surveys related to participants' perceptions and experiences in relation to the entire organization, one hundred and three (103) surveys in relation to their immediate workgroup representing, a return rate of 15.6% and 14.3% respectively.

The same number of invitations was sent at time 2. The second wave resulted in a total of 196 usable survey (excluding incomplete surveys) - a 27.2% response rate. One hundred and one (101) related to the immediate work group (14.0%) and 95 to the entire organization (13.2%). Not all members participated in both times; some answered the survey only at time 1 while others did so at time 2 (and vice versa). For those who participated in both times, the matched data resulted in a sample of 189 participants.

Frame of References

Referent- based (entire organization or immediate work group) orientations were employed to constructs of culture and commitment. Constructs of well-being, citizenship behavior and intentions to retire were presented without orientation to a referent point; some were presented at time 1 and some at time 2.

In order to orient respondents to the appropriate referent points, positioning cues were added to the questionnaires, prompting participants to refer to the entire organization or their immediate work group. For example, in the perception of culture questionnaire, the item 'Everyone believes that he or she can have a positive impact' was prompted with 'In my organization' or 'In my department' to orient participants to the entire organization or to the immediate work group referents respectively.

The same mechanism was used for the construct of commitment. For example, the item: 'I do not feel emotionally attached to my organization' was used to refer respondents to the entire organization. Alternatively, the item: 'I do not feel emotionally attached to my department' oriented respondents to their immediate work group.

Instruments

General Information and Demographics

Seven questions (see appendix A) were presented in the demographics section of the survey. Participants were asked about their gender, age group, education, whether their position was considered full-time, job category and tenure. Department/unit affiliation was added to questionnaires with reference to the immediate workgroup.

Denison Organizational Culture Survey (DOCS)

After receiving approval from Denison consulting, perceptions of culture (of the entire organization and immediate work group) were measured using the Denison Organizational Culture Model (DOCS: Denison and Mishra, 1995; Denison and Neale, 1996), a 36-item version of DOCS (Fey and Denison, 2003). Table 3 in Appendix A presents the 36 items arranged by trait and index.

In this instrument questions are equally divided among four traits of Denison's culture model that include: involvement, consistency, adaptability and mission. Each trait is subdivided into three component indices and each index is measured by a response to three survey items. All responses are measured on a five point Likert scale (from 1=strongly disagree to 5=strongly agree). The four traits of the Denison Organizational Culture Model (Denison and Mishra, 1995) are outlined below:

Involvement

This trait measures how well the organization or workgroup facilitates commitment from its members through empowerment, involvement in decision-making and general capability

development. Cultural profile scoring high in the involvement trait helps an organization to attain internal integration of resources by creating a sense of ownership and responsibility. This trait consists of items such as ‘Everyone believes that he or she can have a positive impact.’

Consistency

The second trait measures the level of integration and coordination across the organization or group. Consistency emphasizes stability and involves agreement, coordination and integration among organizational members. These components refer to the degree to which organizational members share sense of identity and a clear set of expectations, are able to reach agreement on critical issues, and co-work together to achieve common goals. This trait consists of items such as ‘Our approach to work is very consistent and predictable.’

Adaptability

This trait is based on creating change, customer focus, and learning. High scores indicate continuous change to improve organizational or workgroup response to the outside environment. Adaptable organizations are driven by their customers’ needs, take risks and learn from their mistakes. This trait is characterized by items such as ‘We view failure as an opportunity for learning and improvement’.

Mission

The mission trait evaluates the clarity of purpose and direction that members have as defined by their understanding of the goals and objectives of the organization or workgroup, as well as their perceived vision. The three indices for this trait are: strategic direction and intent, goals and

objectives and vision. High scores of this trait indicate members' understanding of their role in moving the organization or workgroup towards a desired future. This trait consists of items such as 'We have a shared vision of what the college will be like in the future'.

Based on evaluations of more than 1000 organizations (Denison and Mishra, 1995; Fey and Denison, 2003), a significant relationship has been found between each of the four traits and organizational effectiveness. The psychometric reliability and validity of the survey items was reported at an acceptable level of internal consistency for all twelve indices as the Cronbach's alphas ranged from 0.70 to 0.85.

The link between culture measures and outcomes was the major consideration in the early development of the survey (Denison, Nieminen and Kotrba, 2014). One of the empirical tests that involved 764 organizations provided initial evidence of the predictive validity of the four culture traits with a variety of performance indicators. In a series of case studies and survey data that explore the correlation between organizational culture and effectiveness, results were predominantly positive. Culture measures proved to be weak predictors of sales growth and profit, but for measures of quality, employee satisfaction and overall performance, all correlations were significant at .001 level while correlations vary in magnitude from .20 to .35 (Denison and Mishra, 1995). A recent study (Gillespie, Denison, Haaland, Smerek and Neale, 2008) demonstrated that the four cultural traits explained 28% of the variance in overall customer satisfaction score ($p < .001$). Finally, survey validity examined with organizational samples from countries outside the USA indicated similar means level and predictive patterns between cultural indexes and effectiveness outcomes (Denison et al., 2014).

Organizational/ Workgroup Commitment

In this study, we used Meyer and Allen's (1997) three-component Organizational Commitment Questionnaire (OCQ). The short version survey has six items for each of three scales measuring affective, continuance and normative commitment. All items are presented in Appendix A.

Affective commitment scale measures employees' emotional attachment to identify and to be involved in the organization or workgroup. The item 'I really feel as if this organization problem is my own' represents this component. Continuance commitment scale is based on the cost, such as in the amount of time, money and energy the employee has invested into the organization or the workgroup. The item 'Too much of my life would be disrupted if I decided I wanted to leave the college now' represents continuance commitment.

The component of normative commitment relates to one's moral obligation stay in the organization or workgroup, and is presented by items such as 'I would not leave the college right now because I have a sense of obligation to people in it' (Meyer, Allen and Topolnytsky, 1998).

Each scale has six statements to which the respondent provides a numeric response. The selection of a number from the Likert style scale indicates the degree of agreement or disagreement with each statement (1 = strongly disagree to 5 = strongly agree).

Research using the OCQ scale (Meyer and Allen, 1997) has supported its use as a valid and reliable measure of commitment. The Scale's reliability coefficient alpha varies depending upon the type of commitment. Affective commitment alpha vary from .77 to .88, for normative the value is between .65 and .86, for continuance commitment alpha coefficient values ranged from .69 to .84 (Allen and Meyer, 1990; Cohen and Kirchmeyer, 1995; Meyer, Irving and Allen, 1998).

Psychological Well - Being at Work (PWBW)

The individuals' subjective positive experience at work was measured in this study using the PWBW - English version- questionnaire (Dagenais-Desmarais and Savoie, 2011). This instrument consists of five dimensions that correspond to interpersonal fit, thriving, sense of competence, perceived recognition and desire for involvement at work. Each dimension is represented by five items (Appendix A). The construct emphasizes optimal functioning, meaning, and self-actualization as a base for construct operationalization. The items 'I value the people I work for' is part of the interpersonal fit dimension of the questionnaire. The item 'I find meaning in my work' represents dimension of thriving at work, while the item 'I feel confident at work' represents feelings of competency. The items 'I feel that my work is recognized' and 'I want to take initiative in my work' represent dimensions of perceived recognition and desire for involvement, respectively.

All items are measured on the Likert scale (from 1=strongly disagree to 5=strongly agree). The instrument has an adequate internal consistency, both at the scale and factor level. The general Cronbach's alpha coefficient is .96 while coefficients for sub-dimensions range from .83 to .92. Table 5 in Appendix A presents these items.

Organizational Citizenship Behavior

The Organizational Citizenship Behavior Questionnaire (OCB-C) is a 20 items scale that assesses the frequency of organizational citizenship behaviors performed by employees (Fox and Spector, 2011). This instrument - presented in Appendix A - consists of two subscales: the OCB-Organization, presents acts that are directed toward the organization. The item 'I offered suggestion for improving the work environment' represents items of this subscale.

The OCB-P, presents acts that are directed toward other coworkers by helping them with work related issue, using items such as ‘I volunteered to help a co- worker deal with a difficult co-worker or situation.’

While answering this questionnaire, participants have to indicate the frequency in which they engaged in an organizational citizenship related behavior. For example, in response to the item: ‘ (I) Changed vacation schedule, workdays, or shifts to accommodate co-worker’s needs’, participants had to indicate the frequency in which this act was done, using a frequency scale ranging from 1= Never, to 3= Sometimes, to 5 = Every day.

The items in the scale are based on critical incidents of OCB provided by employees who were given a definition of OCB and then asked to generate examples. The OCB-C’s internal consistency reliability was found to be .89 for the total scale, .89 for the OCBO and .94 for the OCBP (Fox, Spector, Goh, Bruursema and Kessler, 2009). This scale was specifically designed to minimize overlap with scale of counterproductive work behavior. A meta analysis showed that agreement ratings resulted is strong negative relationships ($r = - .54$) and frequency ($r = - .23$) between counter productive behavior and OCB scales (Dalal, 2005).

Ethical Considerations

This study was approved by the ethics committee of Université de Montréal (Comité d'éthique de la recherche de la Faculté des arts et des sciences - CÉRFAAS) and the research board of the participating institution.

Upon receiving an authorization, participants were invited to take part in this study on a voluntary basis. Each participant received an informed consent form prior to each survey (at time 1 and time 2). The forms used are found in appendix B.

The participants' names, ID or any other identifiable information was not collected. Data was matched during the study by a set of coding information – known only to participants. Data gathered throughout the study was kept in a secure location.

CHAPTER 3: RESULTS

This chapter presents the results of the statistical analysis performed for this study. The purpose of this study was to test hypothesized relationships between perceptions of culture and subsequent organizational outcomes. Data for this study was generated by responses to two online surveys (Time 1 and 2) - consisting of 100 and 113 items, respectively. The responses to the survey were analyzed with descriptive statistics and statistical methods to test the hypothesized models, using Excel, and Statistical Package of the Social Sciences (SPSS).

This chapter consists of two parts. In part one, we present preliminary analyses; including descriptive statistics and Factor Analysis for measures used in this study. The second part presents analyses of hypotheses testing by models and corresponding research questions.

Preliminary Analyses

Table 2 presents mean, standard deviation, skewness, kurtosis, variances and alpha coefficient for each variable in the study. Appendix B presents the means and standard deviation for all instruments used in the study.

Table 2

Descriptive Statistic of Variables in the Study

	M	S.D.	Var	Ske	Kur	Min	Max	CV	Alpha	Items
Organization										
PO	2.95	.61	.37	-.38	.20	1.39	4.89	.21	.93	36
Commitment										
Affective	3.32	.70	.49	-.40	1.21	1.00	4.67	.21	.87	6
Continuance	3.08	.62	.62	-.18	-.64	1.67	4.33	.20	.70	6
Normative	3.08	.73	.73	-.34	.20	1.00	4.83	.23	.70	6
Workgroup										
PG	3.37	.66	.44	-.64	.83	1.47	4.97	.20	.91	36
Commitment										
Affective	3.54	.83	.69	-.30	-.87	2.00	4.83	.23	.94	6
Continuance	3.06	.74	.55	-.17	-.04	1.33	4.67	.24	.80	6
Normative	3.19	.80	.64	-.40	-.01	1.00	5.00	.25	.70	6
Well-being	4.25	.56	.31	-1.19	.80	2.72	5.00	.13	.93	25
WB1	4.68	.55	.30	-2.31	5.86	2.50	5.00	.12	.70	5
WB2	4.30	.67	.45	-1.54	2.24	2.00	5.00	.16	.79	5
WB3	4.21	.79	.62	-1.21	.75	2.00	5.00	.19	.70	5
WB4	3.89	1.00	1.00	-1.25	.71	1.00	5.00	3.89	.80	5
WB5	4.07	.68	.47	-.89	-.01	2.33	5.00	.17	.77	5
OCB	3.34	.80	.64	-.72	.16	1.18	4.82	.24	.85	20

Note. M = Mean; S.D = Standard Deviation; Var = Variance; Ske = Skewness; Kur = Kurtosis; Min = Minimum; Max = Maximum; CV = Coefficient of variability; PO = Perceptions of Organizational Culture; PG = Perceptions of Workgroup Culture; WB1 = Feeling of competency; WB2 = Thriving at work; WB3= Fit at work; WB4=Perceived recognition; WB5=Desire for involvement; OCB = Organizational Citizenship Behavior

Factor Analyses and Internal Consistency of Scales

Principal axis factor analyses with varimax rotations were conducted to assess the underlying structure of the culture, commitment, well-being and OCB scales. All results are summarized in Table 3.

Perceptions of Culture

The thirty-six items of the perception of culture questionnaire consists of four sub-components: involvement, consistency, adaptability and mission.

Entire organization (PO). The Kaiser- Meyer-Olkin (KMO = .82) measure verified the sampling adequacy for the analysis. All KMO values for individual items were $> .61$. Bartlett's test of sphericity $X^2 (351) = 6455.29$, $p < .001$, indicated that correlation between items were sufficiently large. A four-factor solution was resolved in the analysis explaining 60.25% of the total variance. After rotation, simple structure was achieved with four factors. Analysis of the eigen values indicate that the mission, involvement, adaptability and consistency factors accounted for 43.66, 6.88, 5.23 and 4.50 percent respectively.

Workgroup (PG). Using the same instrument in reference to the immediate workgroup, the factor analysis results are as follows: KMO = .84, all KMO values for individual items were $> .61$. Bartlett's test of sphericity $X^2 (190) = 5831.02$, $p < .001$, indicated that correlation between items were sufficiently large. A four-factor solution was resolved in the analysis explaining 57.20% of the total variance. After rotation, simple structure was achieved with four factors. Analysis of the eigen values indicate that the consistency, mission, involvement and adaptability factors accounted for 40.76, 6.12, 5.57 and 4.80 percent respectively.

Commitment

The eighteen items of the commitment questionnaire resolved to a three factor structure: affective, continuance and normative.

Organizational Commitment

A factor analysis for the 18 items of the organizational commitment scale produced the following: KMO = .70, all KMO values for individual items were > .50. Bartlett's test of sphericity $X^2 (153) = 1886.80, p < .001$. A three-factor solution was resolved in the analysis explaining 54.67% of the total variance. After rotation, simple structure was achieved with three factors. Analysis of the eigen values indicate that the affective, continuance and normative factors accounted for 27.25, 16.12 and 11.31 percent respectively.

Workgroup Commitment

Similar to organizational commitment, factor analysis of workgroup commitment produced the following results: KMO = .81, and all KMO values for individual items were > .50. Bartlett's test of sphericity $X^2 (153) = 1794.48, p < .001$. A three-factor solution was resolved in the analysis explaining 55.26% of the total variance. After rotation, simple structure was achieved with three factors. Analysis of the eigen values indicate that the affective, continuance and normative factors accounted for 32.50, 8.08 and 7.68 percent respectively.

Well-being

The analysis was conducted on the 25 items of the well-being instrument. The Kaiser-Meyer-Olkin (KMO = .81) measure verified the sampling adequacy for the analysis. All KMO values for individual items were > .57. Bartlett's test of sphericity $X^2 (300) = 4442.74, p < .001$, indicated that correlation between items were sufficiently large.

A five-factor solution was resolved in the analysis explaining 72.40% of the total variance. After rotation, simple structure was achieved with five factors. Analysis of the eigen values indicate that ‘feeling of competency, ‘thriving at work’, ‘fit at work’, ‘perceived recognition’ and ‘desire for involvement’ factors accounted for 41.47%, 10.78%, 9.11%, 6.08% and 4.96% respectively.

Organizational Citizenship Behavior (OCB)

Factor analysis on the 20 items scale produced the following results: KMO = .86, all KMO values for individual items were $> .76$, Bartlett’s test of sphericity $X^2 (190) = 3124.75, p < .001$.

A two-factor solution was resolved in the analysis explaining 58.80% of the total variance. After rotation, simple structure was achieved with two factors. After rotation, simple structure was achieved with two factors. Analysis of the eigen values indicate that the OCB - organization, and OCB – colleagues factors accounted for 45.12% and 13.67% respectively.

Table 3

Summary of Principal Component Analyses

Variable	KMO	Factors	Eigenvalue	Variance Explained	Alpha
		Organization			
PO	.82	Four factors	---	60.24%	
		Mission	15.72	43.66%	.82
		Involvement	2.48	6.88%	.91
		Adaptability	1.90	5.23%	.80
		Consistency	1.61	4.50%	.76
Commitment	.70	Three factors	---	54.67%	
		Affective	4.90	27.25%	.87
		Continuance	2.90	16.12%	.70
		Normative	2.04	11.31%	.70
		Workgroup			
PG	.84	Three factors	---	57.20%	
		Consistency	14.67	40.76%	.78
		Mission	2.20	6.12%	.81
		Involvement	2.00	5.57%	.88
		Adaptability	1.71	4.80%	.70
Commitment	.81	Three factors	---	55.26%	
		Normative	7.11	32.50%	.70
		Affective	1.45	8.08%	.94
		Continuance	1.38	7.68%	.80
Well-being	.81	Five factors	---		
		Feelings of competency	10.37	41.47%	.92
		Thriving at work	2.69	10.78%	.89
		Fit at work	2.28	9.11%	.86
		Perceived recognition	1.52	6.08%	.87
		Desire for involvement	1.24	4.96%	.71
OCB	.86	Two Factors	---	58.80%	
		OCB- Organization	9.02	45.12%	.88
		OCB- Employee	2.74	13.67%	.90

Note. KMO = Kaiser- Meyer-Olkin for verification of the sampling adequacy for the analysis; PO = Perceptions of culture in reference to the entire organization; PG = Perceptions of culture in reference to the immediate workgroup; OCB = Organizational Citizenship Behavior; N=189

Correlational Analysis and Reliability Estimates

Correlations and reliability estimates for all variables in the study are presented in Table 4. All scales attained acceptable Cronbach alpha reliabilities, ranging from .70 (construct of consistency -workgroup culture) to .92 (the construct of Feeling of competency as a sub-category of well-being). Given the sample size involved, all correlations below .15 are statistically non-significant, those between .15 and .19 are significant at the $< .05$ level, and all those above .20 obtain significance at or above the 0.01 level.

It is to be noted that that the continuance sub-dimension of the commitment scale was not significantly related to any other variable in the study.

Simple Regression Analyses

Regression analyses were conducted between cultural referents and corresponding outcomes. In these analyses, each cultural referent was posited as an independent variable. The constructs of well-being, commitment and OCB were posited as dependent variables. The results - presented in Table 5, show that perceptions of organizational culture (PO) explain portion of the observed variance in dependent variables, with R^2 ranging from .12 to .43. Analyses showed that Well-being $F(1,187) = 30.128, p < .001$, Affective Commitment $F(1,187) = 84.07, p < .001$ and Continuance Commitment $F(1,187) = 26.06, p < .001$, were positively related to perceptions of organizational culture.

In relation to perceptions of workgroup culture, all regression models were significant with R^2 ranging from .06 to .77. According to the results - presented in table 6, Well-being $F(1,187) = 13.41, p < .001$ was positively related to perceptions of organizational culture. Similar results were shown in relation to Affective commitment $F(1,187) = 616.60, p < .001$, Continuance Commitment $F(1,187) = 32.72, p < .001$, Normative Commitment $F(1,187) = 34.49, p < .001$, OCB-O $F(1,187) = 17.33, p < .001$, and OCB-C $F(1,187) = 23.27, p < .001$.

Table 5

Regression Analysis for Perceptions of Organizational Culture Predicting Well-being, Commitment and OCB (N=189)

	Well-being		Affective Com.		Continuance Com.		Normative Com.		OCB						
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β			
PO	.34	.6	.37**	.61	.07	.56**	.26	.05	.35**	.13	.07	.13	-.08	.08	-.07
	R ² =.14			R ² =.31			R ² =.12			R ² =.02			R ² =.01		
	F(1,187)=30.13**			F(1,187)=84.07**			F(1,187)=26.06**			F(1,187)=3.74			F(1,187)=.97		

Note. PO= Perceptions of Organizational Culture; Com. = Commitment; OCB = Organizational Citizenship Behavior; * $p < .05$, ** $p < .001$

Table 6

Regression Analysis for Perceptions of Workgroup Culture Predicting Well-being, Commitment and OCB (N=189)

	Well-being		Affective Com.		Continuance Com.		Normative Com.		OCB						
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β			
PG	.22	.6	.26**	1.09	.04	.88**	.19	.03	.95**	.34	.06	.40	.36	.07	.35
	R ² =.06			R ² =.77			R ² =.14			R ² =.15			R ² =.12		
	F(1,187)=13.41**			F(1,187)=616.60**			F(1,187)=37.72**			F(1,187)=34.49			F(1,187)=26.51		

Note. PG= Perceptions of Workgroup Culture; Com. = Commitment; OCB = Organizational Citizenship Behavior; * $p < .05$, ** $p < .001$

Data Analysis Procedures

This study was set to explore hypothesized relationships between, individual differences and performance. At the center of this study is the hypothesized difference between perceptions of culture in relation to the immediate workgroup and those in relation to the entire organization. Detailed descriptions of the statistical tests including research questions and related hypotheses are summarized in table 7.

Table 7

Research Questions and Data Analysis				
Research questions	Hypotheses	Independent variables(s)	Dependent variable(s)	Data analysis
1. Are perceptions of culture in respect to the entire organization similar to those in reference to the immediate workgroup?	H1: Mean ratings of culture in reference to the immediate workgroup are different than mean ratings in reference to the entire organization	Referent points: <ul style="list-style-type: none"> • Entire organization • Immediate workgroup 	Perception of Culture: <ul style="list-style-type: none"> • PO • PG 	Paired-Sample t-Test
2. How do patterns of discrepancies between perceptions of culture, in respect to the entire organization and immediate workgroup, relate to psychological well-being at work, commitment and organizational citizenship behavior?	H2: Similarity of perception of organizational and workgroup culture is positively related to well-being, commitments and organizational citizenship behavior H3: Discrepancy between perceptions of culture is positively related to well-being, workgroup-commitments and organizational citizenship behavior when PG is higher than PO H4: Discrepancy between perceptions of culture is positively related to organizational commitments when PO is higher than PG	<ul style="list-style-type: none"> • PO • PG 	<ul style="list-style-type: none"> • Psychological well-being • Organizational commitment • Workgroup commitment • Organizational citizenship behavior 	Polynomial Regression with Response Surface Analysis

Hypotheses Testing

1. Differences between perceptions of culture

The first hypothesis of our study was to test whether perceptions of culture in respect to the entire organization were different from those in relation to the immediate workgroup.

H1: Mean ratings of culture in reference to the immediate workgroup are different than mean ratings in reference to the entire organization

A paired-sample t-test indicated that PG ratings were significantly higher ($M = 3.37$, $SD = .66$) than PO ratings ($M = 2.95$, $SD = .61$), $t(188) = 7.73$, $p < .001$. Results are presented in Table 8. A measure of magnitude of treatment effect for the two dependent samples - Omega square, indicates that 14% of the variance on the PG and PO is associated with variability on the difference level of the independent variable (reference to the immediate workgroup versus reference to the entire organization). Based on these results, hypothesis 1 is supported; perceptions of culture in respect to the entire organization are significantly different from those in relation to the immediate workgroup.

Table 8

Comparisons of Perceptions of Culture PO and PG and Corresponding Cultural Traits

Variable	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	ω^2
PG- PO	.42	.75	7.73**	188	.14

Note. N=189; ** $p < .001$

2. PO-PG dyad in relation to outcomes

In order to explore the relationships between the PO-PG dyad and respective outcomes, we conducted a Polynomial Regression with Response Surface Analyses (Edwards, 1994; Edwards and Parry, 1993). Prior to the analysis, an inspection of the occurrences of predictor discrepancies were performed to assess the rate of discrepancies in our sample (recommended by Shanock, Baran, Gentry and Pattison, 2010). A source to conduct this procedure is based on Fleenor, McCauley and Brutus (1996) recommendations. Correspondingly, all PO and PG scores were standardized. Any participants with a standardized score on PO that was half a standard deviation above or below the standardized score of PG was considered to have discrepant value. These scores were then determined in terms of percentages of ‘in agreement’ values, and the percentages of discrepant values in either direction. As presented in Table 9, 64% of the sample has values of PO and PG that are different from each other in one direction or the other, which confirm a reasonable discrepancy rate between the two variables.

Table 9

Frequencies of PG Levels Over, Under, and In-Agreement with PO

Agreement groups	Percentage	Mean PG	Mean PO
PG more than PO	36.0	3.90	2.50
In agreement	36.0	3.26	3.20
PG less than PO	28.0	2.07	2.77

Note. N= 189

The following hypotheses were tested:

H2: Similarity of perception of organizational and workgroup culture is positively related to well-being, commitments and organizational citizenship behavior

H3: Discrepancy between perceptions of culture is positively related to well-being, workgroup-commitments and organizational citizenship behavior when PG is higher than PO

H4: Discrepancy between perceptions of culture is positively related to organizational commitments when PO is higher than PG

2.1 Perceptions of culture predicting Well-being

With discrepancies between PO and PG, the construct of well-being was regressed on PO (the regression coefficient b_1), PG (the regression coefficient b_2), the square of PO (the regression coefficient b_3), the product of PO and PG ratings (the regression coefficient b_4), and the square of PG ratings (the regression coefficient b_5). According to the results (presented in Table 10 and figure 2), PO-PG ratings account for 22% of the variance in well-being. The significant value of positive a_1 indicates that general psychological well-being at work increases as PO and PG increase. In addition, a significant positive a_4 indicates a convex (upward curving) surface, that is, well-being increases more sharply as the degree of discrepancy between PO and

PG increases. Finally, a positive-significant a_3 suggests that well-being is higher when the discrepancy is such that PO is higher than PG than vice versa. These results support hypothesis H2. Hypotheses H3 and H4 have been partially supported.

Table 12

<i>PO-PG Dyad as Predictor of Well-being</i>		
Well-being		
Variable	<i>b</i>	(se)
Constant	4.20	(.05)**
PO (b1)	.52	(.12)**
PG (b2)	-.04	(.08)
PO squared (b3)	.02	(.09)
PG squared (b4)	-.21	(.07)*
POxPG (b5)	-.28	(.11)*
R^2	.22**	
Surface tests		
a ₁	.48**	
a ₂	-.05	
a ₃	.56*	
a ₄	.51*	

Note: $a_1 = (b_1 + b_2)$, where b_1 is beta coefficient for PO and b_2 is beta coefficient for PG. $a_2 = (b_3 + b_4 + b_5)$, where b_3 is beta coefficient for PO squared, b_4 is beta coefficient for the cross-product of PO and PG, and b_5 is beta coefficient for PG squared. $a_3 = (b_1 - b_2)$. $a_4 = (b_1 \cdot b_2)$. $a_4 = (b_3 - b_4 + b_5)$. *b* unstandardized regression coefficient, (se) standard-error.
* $p < .05$ ** $p < .001$, N

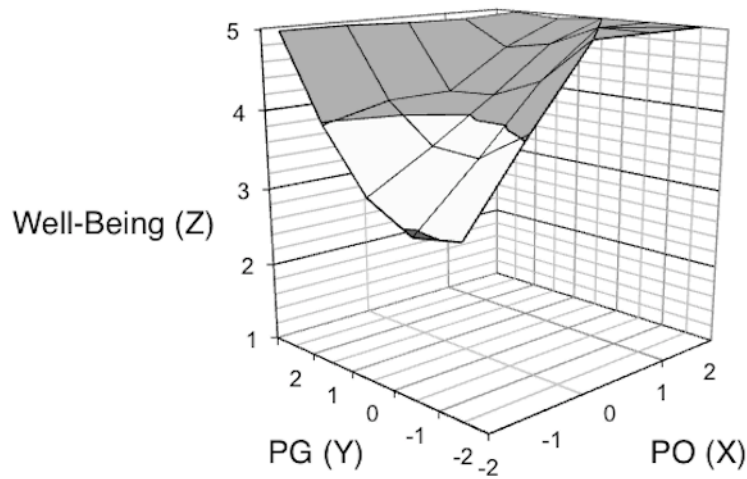


Figure 2. Surface relating PO and PG values to Well-being.

2.2 Perceptions of culture predicting organizational and workgroup commitments,

In order to explore the relationships between the PO-PG dyad, organizational and workgroup commitments, we conducted a Polynomial Regression with Response Surface Analyses (Edwards, 1994; Edwards and Parry, 1993). In total, six regressions were computed—one for each commitment’s sub-category. Results are presented in Table 11 and figures 3-8.

According to the results, PO-PG ratings account for 39% of the variance in affective organizational commitment. The significant values of positive a_1 , such that high levels of agreement between PO and PG are related to high levels of affective organizational commitment rather than agreement between PO and PG at lower levels. These results support hypothesis H2, Hypotheses H3 and H4 have been partially supported.

Ratings for organizational and workgroup cultures account for 18 and 9 percent of the variances in continuance and normative organizational commitments, respectively. The significant a_1 indicates that high levels of agreement between PO and PG are related to high levels of continuance and normative organizational commitments. These results support hypothesis H2. In addition a significant positive a_4 indicates a convex surface, that is, normative organizational commitment increases more sharply as the degree of discrepancy between PO and PG increases. A positive-significant a_3 indicates that normative organizational commitment is high when the discrepancy is such that PO is higher than PG than vice versa. These results partially support hypotheses H3 and H4.

The same analyses were conducted examining PO and PG in relation to workgroup commitment; results are presented at the bottom part of Table 11.

The PO-PG dyad accounts for 79%, 17% and 19% of the variance in affective, continuance and normative workgroup commitments respectively. The significant values of positive a_1 suggest that affective, continuance and normative workgroup commitments increases as PO and PG increases. These results support hypothesis H2.

A significant negative a_4 indicates a concave surface (downward curving), that is affective and continuance workgroup commitments decrease more sharply as the degree of discrepancy between PO and PG increases. A negative a_3 indicates that affective and continuance workgroup commitments are higher when the discrepancy is such that PG is higher than PO. These results partially support hypotheses H3 and H4.

Table 11

PO-PG Dyad as a Predictor of Commitment

Organizational						
Variable	Affective		Continuance		Normative	
	<i>b</i>	(se)	<i>b</i>	(se)	<i>b</i>	(se)
Constant	3.11	(.06)**	3.14	(.04)**	3.18	(.06)**
PO(<i>b</i> ₁)	.27	(.12)*	.22	(.10)*	.48	(.13)**
PG(<i>b</i> ₂)	.28	(.09)*	.15	(.07)*	-.13	(.09)
PO squared(<i>b</i> ₃)	-.41	(.09)**	-.02	(.08)	.25	(.10)*
POxPG(<i>b</i> ₄)	-.17	(.11)	-.02	(.13)	-.39	(.12)*
PG squared(<i>b</i> ₅)	.12	(.07)	.03	(.06)	-.03	(.08)
<i>R</i> ²	.39**		.18**		.9*	
Surface tests						
a1	.55**		.37**		.36**	
a2	-.12		.02		-.17	
a3	-.03		.07		.61*	
a4	-.45		.05		.61*	
Workgroup						
Variable	Affective		Continuance		Normative	
	<i>b</i>	(se)	<i>b</i>	(se)	<i>b</i>	(se)
Constant	3.25	(.04)**	3.00	(.03)**	3.01	(.06)**
PO(<i>b</i> ₁)	-.28	(.09)*	-.17	(.07)*	-.15	(.12)
PG(<i>b</i> ₂)	1.26	(.06)**	.29	(.05)**	.41	(.09)**
PO squared(<i>b</i> ₃)	-.26	(.07)**	-.05	(.05)	-.05	(.10)
POxPG(<i>b</i> ₄)	.16	(.08)	.17	(.06)*	.15	(.11)
PG squared(<i>b</i> ₅)	-.09	(.05)	-.06	(.04)	-.01	(.07)
<i>R</i> ²	.79**		.19**		.17**	
Surface tests						
a1	.98**		.12**		-.56**	
a2	-.02		.11		0.11	
a3	-1.54**		-.46**		0.26	
a4	-.33**		-.28**		-0.20	

Note: $a_1 = (b_1 + b_2)$, where b_1 is beta coefficient for PO and b_2 is beta coefficient for PG.
 $a_2 = (b_3 + b_4 + b_5)$, where b_3 is beta coefficient for PO squared, b_4 is beta coefficient for the cross-product of PO and PG, and b_5 is beta coefficient for PG squared.
 $a_3 = (b_1 - b_2)$. $a_4 = (b_1 \cdot b_2)$. $a_4 = (b_3 - b_4 + b_5)$, b unstandardized regression coefficient, (se) standard error. * $p < .05$ ** $p < .001$, N = 189

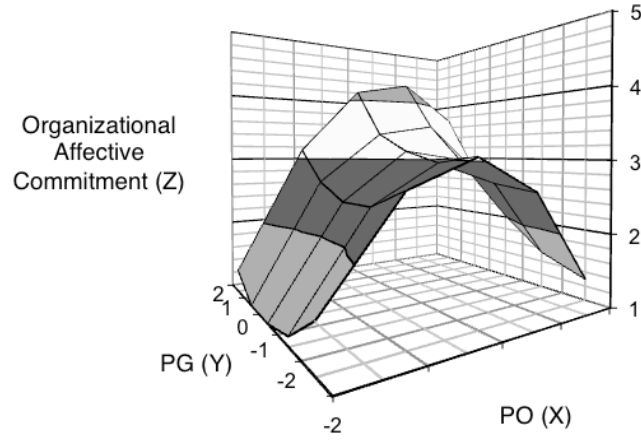


Figure 3. Surface relation PO and PG to organizational affective commitment

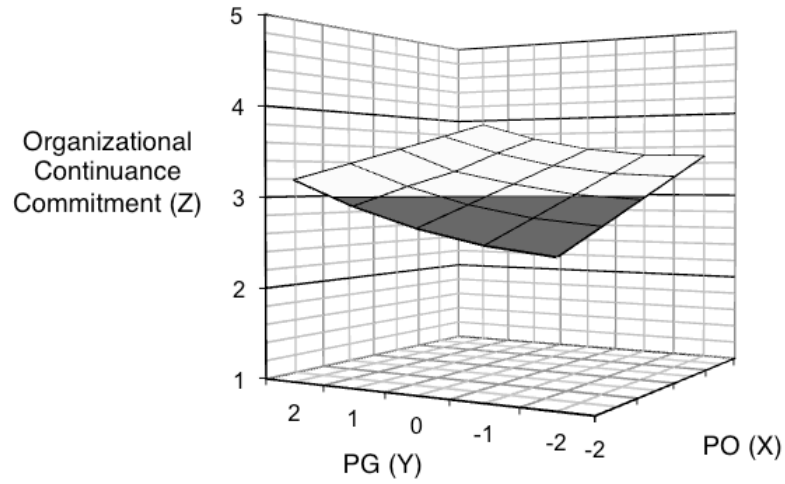


Figure 4. Surface relation PO and PG to organizational continuance commitment

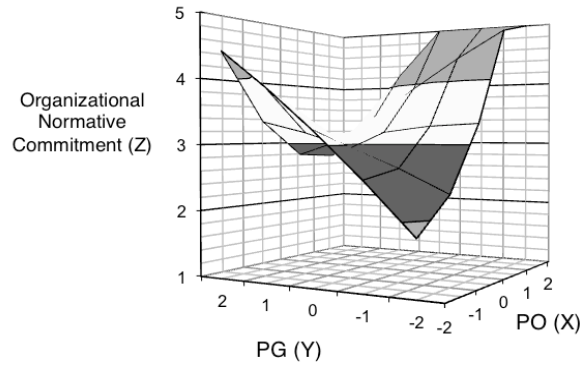


Figure 5. Surface relation PO and PG to organizational normative commitment

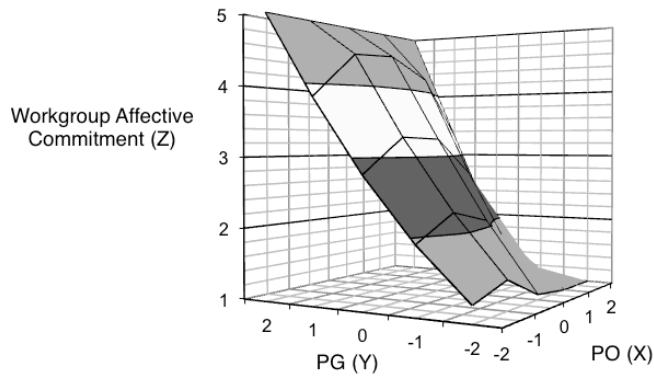


Figure 6. Surface relation PO and PG to workgroup affective commitment

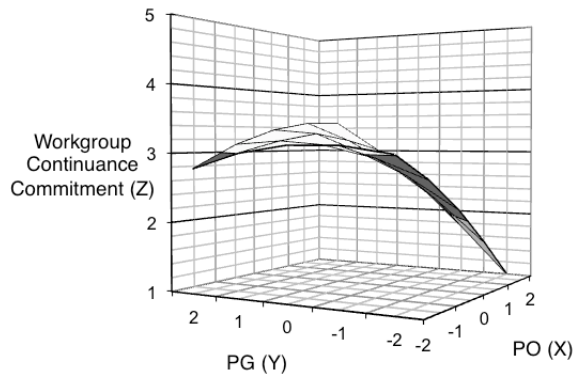


Figure 7. Surface relation PO and PG to workgroup continuance commitment

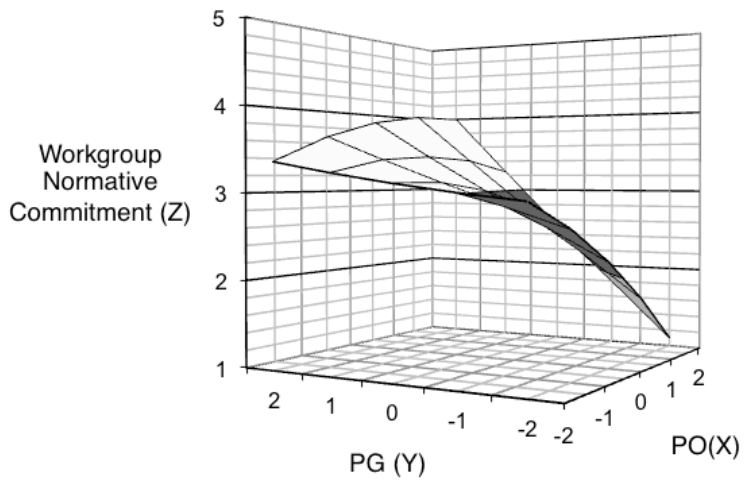


Figure 8. Surface relation PO and PG to workgroup normative commitment

2.3 Perceptions of culture predicting OCB

According to the results (presented in table 12), the variance explained for organizational citizenship behavior is not significant $R^2 = .06$, and therefore, could not be evaluated with regard to the surface test values (Edwards and Parry, 1993).

Table 12

PO-PG Dyad as a Predictor of OCB

Variable	OCB	
	<i>b</i>	(se)
Constant	3.10	(.06)**
PO (b1)	-.24	(.15)
PG (b2)	.43	(.10)**
PO squared (b3)	.01	(.12)
POxPG(b4)	.03	(.13)
PG squared (b5)	.02	(.09)
R^2	.06	
Surface tests		
a1	.19	
a2	.06	
a3	-.07	
a4	.01	

Note. $a_1 = (b_1 + b_2)$, where b_1 is beta coefficient for PO and b_2 is beta coefficient for PG. $a_2 = (b_3 + b_4 + b_5)$, where b_3 is beta coefficient for PO squared, b_4 is beta coefficient for the cross-product of PO and PG, and b_5 is beta coefficient for PG squared. $a_3 = (b_1 - b_2)$. $a_4 = (b_1 - b_2)$. $a_4 = (b_3 - b_4 + b_5)$, b unstandardized regression coefficient, (se) standard error. * $p < .05$ ** $p < .001$, $N = 189$

3. Perceptions of workgroup culture in relation to relevant outcomes

A Hotelling - Williams (Hotelling, 1931; Williams, 1959) t -test was conducted in order to determine if correlations between PO, PG and outcomes were significantly different. The results of the t -tests are presented in table 13. According to the analyses, significant differences between PO and PG were obtained for PG in relation to workgroup affective $t(186) = -13.81$, $p < .001$, continuance $t(186) = -3.77$, $p < .001$, and normative $t(186) = -3.65$, $p < .001$ workgroup commitments. Similar results were attributed to PG in relation to WB4 - perceived recognition $t(186) = 3.64$, $p < .001$, OCB $t(186) = -5.38$, $p < .001$, OCB-O $t(186) = -5.01$, $p < .001$ and OCB-P $t(186) = -3.87$, $p < .001$.

Perception of culture in relation to the entire organization - PO were significantly different in relation to organizational affective commitment $t(186) = 3.55$, $p < .001$.

Table 13

Hotelling - Williams t test between correlations for PO and

PG^a (N=189)

	<i>POr12</i>	<i>PGr13</i>	<i>t(186)</i>
Organization			
Affective commitment	.56**	.30**	3.55**
Continuance commitment	.35**	.32**	0.33
Normative commitment	.13	.11	0.23
Workgroup			
Affective commitment	.24**	.88**	-13.81**
Continuance commitment	.09	.39**	-3.77**
Normative commitment	.11	.34**	-3.65**
Well-being			
WB1	.44**	.47**	-0.46
WB2	.20**	.09	0.22
WB3	.04	-.08	0.18
WB4	.49**	.22**	3.64**
WB5	.17*	.24**	0.35
OCB	-.07	.35**	-5.38**

Note. POr12= correlation between PO and outcomes; PGr13= correlation between PG and outcomes; POPGr23 = correlations between PO and PG; WB1 = Feeling of competency; WB2 = Thriving at work; WB3= Fit at work; WB4=Perceived recognition; WB5=Desire- for involvement; OCB= Organizational Citizenship-Behavior.

^aCorrelations between PO and PG = .31**

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

CHAPTER 4:DISCUSSION

The purpose of this study was to empirically assess how perceptions of culture were linked to relevant outcomes. The study examined whether perceptions of organizational culture were similar to perception of immediate workgroup culture. Discrepancies and similarities between these two perceptions of culture were related to well-being, commitment and organizational citizenship behavior: variables of considerable interest in the field of Industrial/Organizational Psychology. The results of the study have implications at the methodological, theoretical and practical levels for the field of Organizational Psychology in its study of employees' perceptions of organizational culture in relation to individual outcomes.

Using a counter balanced design; one hundred eighty nine participants reported their perceptions of the culture of their immediate work group, and, separately of their entire-organization. They also answered questionnaires measuring well-being, commitments and organizational citizenship behavior. It was expected based on the existing theoretical implications (principally Cognitive System Theory) and empirical documentation, that differences would be detected between these two perceptions, and specific hypotheses were formulated to identify how these anticipated discrepancies related to outcomes. The empirical results of this study provide support for some hypotheses, but this was not the case for others.

The following sections discuss both the supported and the non-supported hypotheses from methodological, theoretical and inferential perspectives. The practical implications of these results as well as the future research it suggests are discussed, as are the limitation of the study.

Does the Referent Make a Difference?

Previous studies assumed that questionnaires related to the whole organization's culture, and not to the specifically workgroup culture. But that not necessarily be true; as individuals answer organizational culture survey, they might refer to the entire organization or they might refer to the immediate workgroup and/or to the organization for some items and to workgroup for others. This ambiguity in response set may create interpretational difficulties. The purpose of this study is to investigate this issue.

The first hypothesis of the study tested whether mean ratings of organizational culture were different from those of work group culture. This was clearly supported, showing that mean ratings of workgroup cultures were significantly higher than mean ratings of organizational culture. This result clearly supports Cognitive Affective Processing Systems Theory (CAPS - Mischel, 1973) that predicts that contextualization of culture items impose a specific frame of reference on survey takers which subsequently makes a difference in the responses they produce.

These findings support Brown's (1998) empirical research that ongoing interactions with different entities within the organization expose individuals to various aspects of the culture. Subsequently, these interactions create distinct perspectives in reference to the entire organization and the immediate workgroup cultures.

The support for CAPS theory has distinct methodological implications. Previous research dealing with culture perceptions has implicitly been vague as to the object to which respondents referred while answering their questionnaires: their immediate workgroup or their entire organization. If some of the respondents in the same study referred to one object and others to the other, interpretation of the results would be obscured, as would be the case should those in some studies consistently be thinking of their organization and, in other studies their work group.

This would cause inter and/or intra study variations that would confuse the conclusions. Consequently, it appears of relevance for studies on culture to be very specific, in their instructions, as to the object- work group or organization- which is of interest. This indicates the need for researchers to pay greater attention to the referent used when 'culture' is measured. Depending on the methodological choice and outcome in question, it is important to explicitly specify a referent because some outcomes measures are more clearly related to perceptions of the workgroup while others are better predicted from perceptions of the overall organization, as stated in subsequent hypotheses.

Is it the case that outcome measures - well being, commitment and organizational citizenship behaviour- are differentially predicted by the differences in the response sets of the participants? It is to this issue that hypotheses 2 through 4 were addressed. Here the results indicate that some hypotheses were clearly supported, others only partially, while others were not.

Similarities Between Perceptions of Organizational and Workgroup Cultures

Hypothesis 2 tested how similarity between perceptions is related to relevant outcomes. This 'consistency' hypothesis suggests that well-being, commitments and organizational citizenship behaviour are most positive when respondents hold similar positive perceptions of their group and their organization, and least positive when the similar perceptions are negative.

a. Well-being, organizational and workgroup commitments were high when perceptions of organizational and workgroup cultures were both high, and low when both perceptions were low. This is consistent with hypothesis 2.

The results indicate that similarity between perceptions of culture fosters or hinders well-being and commitments, which is aligned with the empirical evidence that fit perceptions are additive and their combination is important to outcomes (Lofquist and Dawis, 1969; Meir and Melamed, 1986). Therefore, the more organizational and workgroup environments are perceived as similar and positive, the more positive are well-being, organizational and workgroup commitments.

b. With regard to organizational citizenship behavior, hypotheses 2 was not supported.

Organizational citizenship behavior was not related to similarity between perceptions of workgroup and organizational cultures. In fact further analysis demonstrated that organizational citizenship behavior was better predicted from perceptions of workgroup culture than from organizational ones.

Organizational citizenship behavior is defined as contributing to the tasks of others with behaviours that are not specifically part of the incumbent's job description. Presumably helping co-workers is of use to the organization as it permits co-workers to contribute more fully to it. Hence a positive perception of the organizational culture should be related to organizational citizenship behavior especially if the workgroup culture is also perceived positively. The results of this study do not support that logic. Rather it shows to a larger extent than anticipated that one's overall perception of the organization may be irrelevant to the display of behaviors that help group members. These seemingly paradoxical finding may be resolved if we can assume that the perceptions of the workgroup culture are heavily influenced by the interpersonal relationships among group members. When such are positive, helping behaviour is more likely and this remains the case whether or not the perceptions of the overall organization is positive. Hence similarity between the two - workgroup and organizational cultures- is unrelated to

organizational citizenship behavior. The discussion of the other hypotheses of the thesis, those dealing with discrepancies between the perceptions of workgroup and organizational culture, offer additional support to that interpretation, as shall be discussed.

At a theoretical level this finding suggests that the concept of organizational citizenship behavior may perhaps be misnamed. It might profitably be altered to be ‘Work Group Citizenship Behaviour’. And, at a practical level it further suggests that interventions designed to enhance organizational citizenship behavior might be more profitably targeted towards the workgroup as opposed to the overall organization.

Discrepancies Between Perceptions of Culture in Relation to Outcomes

At the theoretical level the relationships between perceptions of culture and individual outcome are complex. Psychological well-being, organizational citizenship behaviour and organizational commitment are indeed related to differences in perceptions of organizational and workgroup culture, but they are differently so.

For some of the respondents perceptions of the workgroup culture were more positive than were perceptions of organizational culture, while for others, the reverse was true. Did those different patterns of perceptions make a difference in the predictions of the outcome variables? Hypotheses 3 and 4 explored this issue.

1. When perceptions of workgroup culture are more positive than those of organizational culture. It was hypothesized (Hypothesis 3), that all three outcomes (well-being, workgroup commitments and organizational citizenship behavior) would be increasingly positive, as the perceptions of workgroup culture were increasingly more positive than those of the

organizational culture. The result was observed, but only for the workgroup affective and continuance commitment outcomes:

a. Affective and continuance workgroup commitments were higher when the discrepancy was such that specific discrepancy was observed. This supports hypothesis 3, as perceptions of workgroup culture were increasingly higher than those of organizational culture, affective and continuance workgroup commitments were increasingly more positive, the greater the discrepancy the greater these outcomes.

This suggests that perceptions of workgroup culture are very important to those outcomes. The results are aligned with the empirical evidence that environmental characteristics that are perceived as positive and are congruent with a person's values and norms foster affective commitment (Meyer and Allen, 1997), as well as continuance commitment, when capability development (Rousseau and Parks, 1992; Silverthorne, 2004) is manifested by those characteristics.

Under the assumptions that perceptions of workgroup culture are more directly affected by interpersonal relationships, such relationships are more salient within the immediate workgroup. It follows that affective and continuance commitments would prove highest for those who entertain positive perceptions of the workgroup culture.

But more importantly, the greater the differences between the positive perceptions of workgroup culture and less positive perceptions of the organizational culture, the greater the commitment outcomes are. As shown in table 4, organizational affective and continuance commitments are positively linked to perceptions of organizational culture; the better one feels about his or her organization, the greater the affective and continuance commitments. However, when perceptions of the workgroup culture are higher than those of the organization, we presume

that individuals were more attuned to their own day-to-day work experiences than they are to less tangible characteristics of the organizational culture, resulting in greater workgroup affective and continuance commitments. This suggests that perceptions of organization culture are important, but not as much as when there is a difference between the two orientations.

Cognitive Dissonance Theory (Festinger, 1957) offers an explanation for these results. Consistent with the theoretical expectations, differences between perceptions of workgroup and organizational culture prompted measures to reduce or to avoid dissonance that were manifested through changes in workgroup affective and continuance commitments. From this perspective, when an employee has negative perceptions towards his or her organization, but at the same time positive perceptions about the workgroup, his or her attachment and desire to stay with the immediate workgroup are enhanced through dissonance reduction. In this study, explanation is detected through increase in commitments (affective and continuance): “ I like this group and I want to remain in this workgroup, in spite of the organization”.

Well-being was also higher when that particular discrepancy of perceptions of culture was great. The explanations of these findings are more complex, an issue to which we will turn into while discussing hypothesis 4.

b. The extent of difference between perceptions of workgroup and organizational culture was not related to workgroup normative commitment.

This was not predicted but an explanation for that may be found in Robbins and Jude’s (2010) findings that one of the factors that promote reduction in dissonance - and subsequent behavioral or attitudinal modification - depends on the importance of the elements creating it. The relative importance is reflected by self-interest or identification with individuals or groups that a person

values. Normative commitment is valued and internalized as a belief about the appropriateness of being loyal to the entire organization (Meyer and Allen, 1997), it refers to the fundamental value of loyalty towards one's organization, the construct is not focused on immediate workgroup. This may suggest that daily interactions and the proximity of the workgroup may be perceived as less important to the individual in terms of his or her loyalty to the organization. Therefore the extent of difference between positive perceptions of workgroup culture and less positive perceptions of organizational culture should be irrelevant to the normative commitment.

As for organizational citizenship behavior, hypothesis 3 was not supported. In view of previous findings this is not surprising. Again and counter to the hypothesis, organizational citizenship behavior was unrelated to the extent to which workgroup culture perceptions are more positive than organizational culture perceptions. As previously discussed organizational citizenship behavior, is clearly more fully under the control of workgroup than of the organization, and as such the gap between the two perceptions of cultures is irrelevant.

2. When perceptions of organizational culture are more positive than those of workgroup culture. Hypothesis 4 dealt with the case where perceptions of organizational culture were more positive than those of workgroup culture. The hypothesis suggested that organizational commitments would be increasingly positive, as the perceptions of organizational culture were increasingly more positive than those of the workgroup culture.

The hypothesis was partially supported by empirical evidence, the results showed that:

a. Normative organizational commitment was higher when the discrepancy was such that specific discrepancy was observed. This supports hypothesis 4, as perceptions of organizational culture were increasingly higher than those of workgroup culture, normative organizational

commitment was increasingly more positive, the greater the discrepancy the greater this outcome. This suggests that perceptions of organizational culture are very important to organizational normative commitment, and reinforces the findings discussed with regard to hypothesis 3 that, normative commitment is fundamentally an organizational based commitment. In this case perceptions of the group become relatively irrelevant.

More importantly, the greater the difference between positive perceptions of organizational culture and less positive workgroup culture, the greater the normative organizational commitment is. This suggests that perceptions of organization culture are important when there is a difference between the two orientations in relation to organizational normative commitment. Therefore it is not surprising for normative commitment to be highlighted when perceptions of organizational culture are more positive than those of the workgroup culture.

As before, the results provided support for the Cognitive Dissonance framework, showing that discrepancy between positive perceptions of organizational culture and less positive perceptions of workgroup culture promotes reduction in dissonance that was manifested through changes in organizational normative commitment. From this perspective, when an employee has negative perceptions towards his or her workgroup, but at the same time positive perceptions about the organization, his or her sense of obligation and loyalty to the organization are enhanced through dissonance reduction. In this study, explanation is detected through increase in organizational normative commitment.

b. Discrepancy between perceptions of culture was not related to organizational affective and continuance commitments. Although perceptions of organizational and workgroup cultures were significantly related to these outcomes, dissonance reduction was not evident when

organizational affective and continuance commitments were considered. These results also aligned with Robbins and Jude's (2010) findings that factors that promote reduction in dissonance depends on the importance of the elements creating it. These findings are supported by our analysis showing that organizational affective and continuance commitments are more clearly influenced by perceptions of the entire organization. This may suggests that organizational - as oppose to workgroup -characteristics that are congruent with a person's values and norms relate to affective commitment (Meyer and Allen, 1997) as well as to continuance commitment when capability development (Rousseau and Parks, 1992; Silverthorne, 2004) are manifested by the culture of the organization.

Well-Being: A Special Case

The single most interesting result of this thesis deals with the relationships between the perceptions of culture and psychological well-being. Hypothesis 2 showed that when both cultures - those of the organization and the workgroup - are perceived as similar and high, psychological well-being is high; when both culture are perceived as similar and low, so is well-being. However and most importantly, if there is a difference between the two perceptions, as long as one of them is high - psychological well-being is fostered. This implies that positive perception of the workgroup culture foster well-being, and that is 'insulates' the employee for his or her less positive perceptions of the organization. Similarly, well-being is high when the organizational culture is rated more favorably than the workgroup culture. These patterns indicate that a high level of perceptions - either in reference to the organization or workgroup - insulates one's sense of well-being against the opposite lower perceived culture.

Limitations and Recommendations for Future Research

In this section, limitation in research design and methods of data collection are discussed; recommendations for future research are presented as well.

One of the limitations is related to the type of organization where the study was conducted. Being part of the provincial educational system, employment conditions such as job-security, tenure and retirement imply the objective reasons to stay in the organization are homogenous than would be the case in other types of organizations. Hence, future studies would benefit from more diversified contexts such as private organizations.

The main assumption in which the study was based on was that when respondents answer a culture survey, they might refer to the entire organization to answer some items or alternatively, to the immediate workgroup to answer others. Yet, it is also possible that some respondents consistently use an organizational referent, while others use their immediate workgroup when responding to a culture survey. Therefore, future research is needed to integrate a control group that will not be subjected to referent cues that are specific to the organization or the workgroup in question.

Another assumption that was made in this study, is that perceptions of workgroup culture are related to the proximity and interpersonal relationships among group members which presumably lead to increase in organizational citizenship behavior as well as affective and continuance commitments. Future research should explore how interpersonal relationships and/or sense of belonging moderate the relationships between perceptions of workgroup culture and subsequent outcomes.

In addition, we presumed that discrepancies were not related to outcomes because some of the factors that were said to promoted dissonance were not important or relevant. Therefore

we suggest that future research will explore whether identification to the workgroup and/or the organization moderate between perceptions of cultures and relevant outcome

Although our study found support for the cognitive dissonance framework, discrepancies between cultures were not always related to relevant outcomes. One of the possible reasons was that individual differences were not considered as a moderator for perception- outcomes relation. For example, tenure may be related to perceived differences between cultures. As individuals spend time in the organization, differences between cultures may become more evident for those who are more tenured than others. In the same vein, some individuals may be more averse to cognitive inconsistency than others. Coined as Preference for Consistency (PFC: Cialdini, Trost and Newsom, 1995), the construct distinguishes between high and low levels of PFC. Accordingly, people with high PFC are more susceptible to dissonance reduction (and subsequent attitudinal and behavioral change) than those with low PFC. In light of this consideration, we postulate that low PFC among participants in the study are related to a lesser degree of dissonance reduction, with no subsequent attitudinal or behavioral change. Therefore, we propose that future research will explore how individual differences - such as tenure, and preference for consistency - moderate the relationships between perceptions of culture and outcomes.

In terms of data collection our study measured differences in perceptions by separately (time 1 and time 2) asking participants to evaluate culture in reference to their organization and workgroup. However, it has been argued that an experience of inconsistency is more likely to occur when a person is simultaneously aware of his or her contradictory cognitions (Zenna, Lepper and Abelson, 1973). Termed as Simultaneous Accessibility, Newby-Clark et al., (2002) demonstrate that opposing cognitions that are presented at the same time moderate perceived and

felt ambivalences. In view of this consideration, we propose that future research will incorporate simultaneous exposure of the two referents. That is, to assess differences, items that relate to organizational culture and those in relation to workgroup culture will be presented simultaneously to elicit a sense of inconsistency between the two referents.

Finally, in relation to the organizational culture survey, analyses showed a high multicollinearity between cultural traits of involvement, consistency adaptability, and mission, suggesting that perhaps alternative instruments would be more powerful for future studies.

Implications for Practice

Understanding how culture is perceived in organizational context is important for practitioners and managers attempting to investigate, evaluate and introduce culture in an organization. In this section, we propose implications for both research and management practices.

The present study demonstrates that contextualization of survey items is related to differentiation between ratings of culture in reference to the entire organization and workgroup. Thereby, the construction of context-specific culture items provides an opportunity to reduce error and to improve predictions of related outcomes.

In practice, organizational culture questionnaires used in applied settings contain items that may vary in their degree of contextualization. The results of this study suggest that evaluations of culture and subsequent interventions may benefit from consistency of survey items by establishing a common frame of reference, implying that organizational or workgroup culture surveys will include cues that are specific to the referent in question. By doing so, practitioners mandated to impact employees' commitments, organizational citizenship behavior

or well-being, could chose to intervene at the organizational or the work group level. The data collected here does offer some guidance in that choice: Depending on the outcome desired, the focus of the intervention can be chosen accordingly.

Results of the study imply that organizational and workgroup cultures that simultaneously promote employees' welfare, sense of security, loyalty and commitment could benefit the organization and workgroup. Therefore, we suggest that managers at both levels should maintain consistency between organizational and workgroup policies, interventions and practices.

In terms of discrepancies between perceptions, the results highlight the importance of monitoring whether practices are being communicated at the organizational or workgroup level. This implies that when normative organizational commitment is being considered, intervention should take place at the organizational level, whereas interventions at workgroup level important for affective and continuance workgroup commitments. The results also suggest that in order to promote well-being, managers and practitioners should consider the way in which practices are being communicated and implemented, either at the organizational or workgroup levels.

Finally, as much as similarities between perceptions of organizational and workgroup cultures are related to outcomes, congruence between Person- Organization fit and Person- Group fit may result in positive outcomes as well. However, one must also consider that differences between perceptions implicate outcomes, suggesting that fit theorists should consider the referent of the fit in order to develop their theoretical models.

Conclusion

The study demonstrated that when measuring organizational culture with different referents, mean level difference existed between the two scores. Depending on the methodological choice, the results showed that it was important to focus on either the overall organizational culture or that of the immediate workgroup, because some outcome measures were more clearly influenced by perceptions of the work group while others were more affected by perceptions of the overall organization.

This study also suggested that the relationships between perception of organizational and workgroup cultures held more complex relationships to well-being, commitments and organizational citizenship behaviors than was anticipated. Response surface analyses showed that similarities and discrepancies between perceptions of culture related to variations in these outcomes.

Finally, results indicated that perceptions of culture - in reference to the entire organization or workgroup - were uniquely related to outcomes, supporting our assumption that individuals were attuned to their daily experience when forming attitudes of citizenship behavior and commitment to their workgroup. Conversely, precursors to organizational commitment were attributed to the entire organization.

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APPENDIX A: Instruments

1. Coding Questions:

The following three questions are for coding purposes only; this information will be used to match you current responses and future responses.

1. The first two letters of your mother's maiden name:
2. In which day of the month you were born?
3. The first two letters of your father's first name:

2. Demographics Items

Item	Demographic Attribute	Responses
1	Gender	Female Male
2	Age group	Less than 20 years 20-29 years 30-39 years 40-49 years 50-59 years Over 60 years
3	Highest level of education completed	High School Technical Training Undergraduate Degree Master's Ph.D. Other (Please Specify)
4	Job Status	Full time Part time Other (Please Specify)
5	Position in organization	Faculty Staff Other (Please Specify)
6	Number of months/years in organization	Less than 6 months 6-11 months 1-2 years 3-5 years 6-10 years 11-15 years More than 15 years
7	Department/Unit/Faculty	-Administration (Office of Director General, Human Resources, Financial Services, Administrative services, Information Systems, Maintenance, Security, Parking) -Academic Dean (Registrar, Institutional Development & Research, Pedagogical Development, Scheduling) -Faculty of Social Science, Commerce, Arts & Letters -Faculty of Careers & Technical Programs - Faculty of Science and General Studies - Continuing Education - Student services (Sports, Learning Enrichment & Support, Library) - Other (Please Specify)

3. Perceptions of Culture (Based on Denison Organizational Culture Survey (DOCS))

Index	Scale	Items: Entire Organization	Items: Immediate Workgroup
Involvement	Empowerment	<p>1. Most employees are highly motivated in their work.</p> <p>2. Information is widely shared so that everyone can get the information he or she needs when it's needed.</p> <p>3. Everyone believes that he or she can have a positive impact.</p>	<p>1. Most employees are highly motivated in their work.</p> <p>2. Information is widely shared so that everyone can get the information he or she needs when it's needed.</p> <p>3. Everyone believes that he or she can have a positive impact.</p>
	Team Orientation	<p>4. Cooperation across different parts of this College is actively encouraged.</p> <p>5. Teamwork is used to get work done, rather than hierarchy.</p> <p>6. People work like they are part of a team.</p>	<p>4. Cooperation across different parts of this department is actively encouraged.</p> <p>5. Teamwork is used to get work done, rather than hierarchy.</p> <p>6. Staff/faculty work like they are part of a team.</p>
	Capability Development	<p>7. Authority is delegated so that people can act on their own.</p> <p>8. The capabilities of people are viewed as an important source of competitive advantage.</p> <p>9. There is continuous investment in the skills of employees.</p>	<p>7. Authority is delegated so that people can act on their own.</p> <p>8. The capabilities of people are viewed as an important source of competitive advantage.</p> <p>9. There is continuous investment in the skills of staff/faculty.</p>
Consistency	Core Values	<p>10. There is a characteristic management style and a distinct set of management practices in comparison to other colleges.</p> <p>11. Ignoring core values will get you in trouble.</p> <p>12. There is an ethical code that guides our behavior and tells us right from wrong.</p>	<p>10. There is a characteristic management style and a distinct set of management practices in comparison to other departments.</p> <p>11. Ignoring core values will get you in trouble.</p> <p>12. There is an ethical code that guides our behavior and tells us right from wrong.</p>
	Agreement	<p>13. There is a "strong" culture.</p> <p>14. There is a clear agreement about the right way and the wrong way to do things.</p> <p>15. We often have trouble reaching agreement on key issues. (Reverse)</p>	<p>13. There is a "strong" culture.</p> <p>14. There is a clear agreement about the right way and the wrong way to do things.</p> <p>15. We often have trouble reaching agreement on key issues. (Reverse)</p>
	Coordination & Integration	<p>16. Our approach to work is very consistent and predictable.</p> <p>17. People from different parts of the college share a common perspective.</p> <p>18. It is easy to coordinate projects across different parts of this college.</p>	<p>16. Our approach to work is very consistent and predictable.</p> <p>17. People from different parts of the department share a common perspective.</p> <p>18. It is easy to coordinate projects across different parts of my department.</p>

Index	Scale	Items: Entire Organization	Items: Immediate Workgroup
Adaptability	Crating Change	19.The way things are done is very flexible and easy to change in this College. 20.Attempts to create change usually meet with resistance. (Reverse) 21.We respond well to challenges and other changes in the educational environment.	19.The way things are done is very flexible and easy to change in this department. 20.Attempts to create change usually meet with resistance. (Reverse) 21.We respond well to challenges and other changes in the educational environment.
	Student Focus	22.Students' input directly influences our decisions. 23.All members have a deep understanding of students' wants and needs. 24.The interests of the students often get ignored in our decisions. (Reverse)	22.Students' input directly influences our decisions. 23.All members have a deep understanding of students' wants and needs. 24.The interests of the students often get ignored in our decisions. (Reverse)
	Organizational Learning	25.We view failure as an opportunity for learning and improvement. 26.Learning is an important objective in our day-to-day work. 27.Innovation and risk taking are encouraged and rewarded.	25.We view failure as an opportunity for learning and improvement. 26.Learning is an important objective in our day-to-day work. 27.Innovation and risk taking are encouraged and rewarded.
Mission	Strategic Direction & Intent	28.There is a long-term purpose and direction. 29.Our strategic direction is unclear to me. (Reverse) 30.There is a clear mission that gives meaning and direction to our work.	28.There is a long-term purpose and direction. 29.Our strategic direction is unclear to me. (Reverse) 30.There is a clear mission that gives meaning and direction to our work.
	Goals & Objectives	31. There is widespread agreement about our goals. 32. We continuously track our progress against our stated goals. 33. Leaders set goals that are ambitious, but realistic.	31. There is widespread agreement about our goals. 32. We continuously track our progress against our stated goals. 33. Leaders set goals that are ambitious, but realistic.
	Vision	34. Leaders have a long-term viewpoint. 35.Our vision creates excitement and motivation for our employees. 36.We have a shared vision of what the college will be like in the future.	34. Leaders have a long-term viewpoint. 35.Our vision creates excitement and motivation for our faculty/staff members. 36.We have a shared vision of what our department will be like in the future.

4. Commitment

Scale	Organization	Workgroup
Affective	<p>1. I would be very happy to spend the rest of my career with this organization.</p> <p>2. I really feel as if this organization problem is my own.</p> <p>3. I do not feel a strong sense of “belonging “to my organization. (Reverse)</p> <p>4.I do not feel “emotionally attached” to the college. (Reverse)</p> <p>5.I do not feel like “part of the family” at this college. (Reverse)</p> <p>6. This college has a great deal of personal meaning for me.</p>	<p>1.I would be very happy to spend the rest of my career with this department.</p> <p>2. I really feel as if this department problem is my own.</p> <p>3.I do not feel a strong sense of “belonging “to my department. (Reverse)</p> <p>4.I do not feel “emotionally attached” to my department. (Reverse)</p> <p>5. I do not feel like “part of the family” at my department. (Reverse)</p> <p>6. This department has a great deal of personal meaning for me.</p>
Continuance	<p>7.Right now, staying with the college is a matter of necessity as much as desire.</p> <p>8. It would be very hard for me to leave this college right now even if I wanted to.</p> <p>9.Too much of my life would be disrupted if I decided I wanted to leave the college now.</p> <p>10. I feel that I have too few options to consider leaving this organization.</p> <p>11. If I had not already put so much of myself into this organization, I might consider working elsewhere.</p> <p>12. One of the few negative consequences of leaving this college would be the scarcity of available alternatives.</p>	<p>7.Right now, staying with my department is a matter of necessity as much as desire.</p> <p>8.It would be very hard for me to leave my department right now even if I wanted to.</p> <p>9. Too much of my life would be disrupted if I decided I wanted to leave the department now.</p> <p>10. I feel that I have too few options to consider leaving my department.</p> <p>11. If I had not already put so much of myself into this department, I might consider working elsewhere.</p> <p>12. One of the few negative consequences of leaving this department would be the scarcity of available alternatives.</p>
Normative	<p>13. I do not feel any obligation to remain with this college.</p> <p>14. Even if it were to my advantage, I do not feel it would be right to leave my organization now.</p> <p>15. I would feel guilty if I left the college now.</p> <p>16. This college deserves my loyalty.</p> <p>17.I would not leave the college right now because I have a sense of obligation to people in it.</p> <p>18.I owe a great deal to this organization.</p>	<p>13. I do not feel any obligation to remain with my current department.</p> <p>14. Even if it were to my advantage, I do not feel it would be right to leave my department now.</p> <p>15.I would feel guilty if I left my department now.</p> <p>16. My department deserves my loyalty.</p> <p>17. I would not leave my department right now because I have a sense of obligation to people in it.</p> <p>18. I owe a great deal to my department.</p>

5. Psychological Well Being at Work (PWBW)

Dimension	Item
Interpersonal Fit	1.I value the people I work for 2.I enjoy working with the people at my job. 3.I get along well with the people at my job. 4.I have a relationship of trust with the people at my job. 5. I feel that I am accepted as I am by the people I work with.
Thriving at Work	6.I find my job exciting. 7.I like my job. 8.I am proud of the job I have. 9.I find meaning in my work. 10.I have a great sense of fulfillment at work.
Feeling of Competency	11.I know I am capable of doing my job. 12.I feel confident at work. 13.I feel effective and competent in my work. 14.I feel that I know what to do in my job. 15.I know my value as a worker.
Perceived Recognition	16.I feel that my work is recognized. 17.I feel that my work efforts are appreciate. 18.I know that people believe in the projects I work on. 19.I feel that the people I work with recognize my abilities. 20.I feel that I am a full member of my organization.
Desire for Involvement	21.I want to take initiative in my work. 22.I care about the good functioning of my organization. 23.I like to take on challenges in my work. 24.I want to contribute to achieving the goals of my organization. 25.I want to be involved in my organization beyond my work duties.

6. Organizational Citizenship Behavior - Questionnaire (OCB-C)

Dimension	Item
Organizational Citizenship Behavior - Person	<ol style="list-style-type: none"> 1.Picked up meal for others at work. 2.Took time to advise, coach, or mentor a co-worker. 3.Lent a compassionate ear when someone had a work problem. 4.Lent a compassionate ear when someone had a personal problem. 5. Changed vacation schedule, workdays, or shifts to accommodate co-worker's needs. 6.Finished something for co-worker who had to leave early. 7.Helped a less capable co-worker lift a heavy box or other object. 8.Helped a co-worker who had too much to do. 9.Took phone messages for absent or busy co-worker. 10.Volunteered to help a co-worker deal with a difficult co-worker or situation. 11.Went out of the way to give a co-worker encouragement to express appreciation. 12.Defended a co-worker who was being "put-down" or spoken ill of by other co-workers or supervisor.
Organizational Citizenship Behavior - Organization	<ol style="list-style-type: none"> 13.Helped co-worker learn new skills or share job knowledge. 14.Helped new employees get oriented to the job. 15.Offered suggestion to improve how work is done. 16.Offered suggestion for improving the work environment. 17.Volunteered for extra work assignments. 18.Said good things about your employer in front of others. 19.Gave up meal and other breaks to complete work. 20.Decorated, straightened up, or otherwise beautified common workspace.

APPENDIX B: Mean, Standard -Deviation and Coefficient of Variability for measures in the study

1. Perceptions of Culture (N =189)

Item	Organization			Workgroup		
	Mean	S.D.	C.V.	Mean	S.D.	C.V.
1	3.30	.99	.30	3.98	.95	.24
2	2.99	1.07	.36	3.47	1.21	.35
3	2.70	.97	.36	3.48	1.12	.32
4	3.10	1.01	.33	3.66	1.15	.31
5	3.08	1.22	.40	3.68	1.19	.32
6	3.25	1.09	.33	3.40	1.26	.37
7	3.10	1.00	.32	3.49	1.11	.32
8	2.89	1.02	.35	3.49	1.14	.33
9	2.93	1.19	.40	3.29	1.06	.32
10	3.23	.96	.30	3.54	.86	.24
11	3.21	1.03	.32	3.52	.99	.28
12	3.78	1.02	.27	3.82	.98	.26
13	3.63	.92	.25	3.46	1.04	.30
14	2.88	.95	.33	2.98	1.14	.38
15	3.46	.92	.27	2.86	1.18	.41
16	3.23	.72	.22	3.33	1.00	.30
17	2.86	.92	.32	3.52	.90	.25
18	2.41	.84	.35	3.10	1.09	.35
19	2.08	.81	.39	2.74	1.05	.38
20	3.77	.84	.22	3.19	1.05	.33
21	2.97	.92	.31	3.31	1.00	.30
22	3.21	0.93	0.29	3.43	1.06	.31
23	2.77	0.98	0.35	3.22	1.00	.31
24	2.88	1.11	0.39	2.33	1.11	.47
25	2.99	0.89	.30	3.54	.85	.24
26	3.74	.86	.23	3.95	.98	.25
27	2.76	.90	.32	3.15	1.00	.32
28	3.05	1.05	.34	3.28	1.08	.33
29	3.53	.95	.27	2.86	1.07	.37
30	3.02	.88	.29	3.52	1.06	.30
31	2.81	.90	.32	3.28	1.05	.32
32	2.84	.93	.33	3.16	1.09	.34
33	2.85	.84	.29	3.28	.97	.30
34	2.81	.88	.31	3.33	1.15	.35
35	2.46	.80	.32	3.05	.98	.32
36	2.74	.87	.32	2.93	1.12	.38

Note. All items are measured on a five point Likert scale (1=strongly disagree - 5=strongly agree); S.D.= Standard-Deviation; C.V.= Coefficient of Variance

2. Commitment (N = 189)

Item	Organization			Workgroup		
	Mean	S.D.	C.V.	Mean	S.D.	C.V.
1	3.36	1.19	.36	3.30	1.32	.40
2	2.84	1.08	.38	2.60	1.21	.46
3	3.71	1.09	.29	3.69	1.00	.27
4	3.20	1.13	.35	3.19	.98	.31
5	2.97	1.05	.35	3.26	1.06	.33
6	2.41	1.06	.44	2.97	1.08	.37
7	3.27	1.03	.31	3.30	1.19	.36
8	2.63	1.11	.42	2.29	1.27	.56
9	2.76	.93	.34	2.76	1.23	.45
10	2.60	1.13	.43	2.40	1.22	.51
11	2.98	1.09	.36	2.84	1.05	.37
12	2.61	1.00	.38	2.34	1.27	.54
13	3.16	.91	.28	3.63	.97	.27
14	2.80	1.04	.37	2.61	.97	.37
15	3.23	1.10	.34	3.07	1.04	.34
16	3.63	.95	.26	3.57	.99	.28
17	3.08	1.01	.36	3.23	1.01	.31
18	2.95	1.01	.34	2.93	1.01	.34

Note. All items are measured on five point Likert scale (1=strongly disagree - 5=strongly agree); S.D.= Standard-Deviation; C.V.= Coefficient of Variance

3. Psychological Well-Being at Work (N=189)

Item	Mean	S.D.	C.V.
1	3.91	1.11	.28
2	4.08	.89	.21
3	4.84	.39	.08
4	3.78	1.23	.32
5	4.52	.77	.17
6	4.32	.96	.22
7	4.42	.81	.18
8	4.58	.69	.15
9	3.89	1.28	.33
10	4.47	.88	.20
11	4.34	.90	.21
12	4.58	.64	.14
13	4.65	.67	.14
14	3.83	1.04	.27
15	4.53	.68	.15
16	4.11	.86	.21
17	4.49	.79	.18
18	4.64	.65	.14
19	3.94	1.19	.30
20	4.2	.72	.17
21	4.08	1.04	.25
22	3.96	.90	.23
23	4.59	.58	.13
24	4.11	1.08	.26
25	3.48	1.10	.32

Note. All items are measured on five point Likert scale (1=strongly disagree - 5=strongly agree);
S.D.= Standard Deviation; C.V.= Coefficient of Variance

4. Organizational Citizenship Behavior

Item	Mean	S.D	C.V.
1	2.03	.89	.44
2	3.54	.99	.28
3	3.66	.97	.26
4	3.75	1.12	.30
5	3.98	.82	.21
6	3.84	1.09	.28
7	2.67	1.12	.42
8	3.44	.89	.26
9	3.44	.96	.28
10	2.81	1.03	.37
11	2.91	1.20	.41
12	3.09	.94	.30
13	3.08	.90	.32
14	2.49	1.30	.53
15	3.63	.90	.27
16	3.71	.90	.24
17	3.12	1.23	.39
18	3.59	.89	.25
19	3.07	1.14	.37
20	2.98	1.13	.38

Note. All items are measured on five point Likert scale (1=strongly disagree - 5=strongly agree); S.D.= Standard-Deviation; C.V.= Coefficient of Variance

APPENDIX C: Polynomial Regression with Response Surface Analysis

Polynomial Regression with Response Surface Analysis

In order to study simultaneous relationships between perceptions of culture and relevant outcomes, the study employed polynomial regressions with response surface analyses. This section presents a step-by-step process of how polynomial regressions with response surface analyses were conducted to explore how discrepancies between perceptions of organizational and workgroup cultures relate to relevant outcomes.

Background

Polynomial regressions with response surface analysis provides a detailed view of relationships between two predictors and an outcome variable by graphing the results of polynomial regression analyses in a three-dimensional space (Edwards, 1994, 2002, 2007; Edwards and Parry, 1993; Shanock, Baran, Gentry and Pattison, 2010b).

According to Edwards (2002), congruence of two predictors has been calculated to be the algebraic, absolute, squared difference or the sum of squared or absolute differences between two profiles of measures. Despite their widespread use, difference scores were prone to methodological and interpretational problems. For example, Phillips (2013) asserted that algebraic difference scores confound statistical information and theoretical meaning, which increases the risk of both Type I and Type II errors. Other problems relate to a lack of reliability and the confounding effect of component measures on related outcomes (Edwards, 1994, 1995, 2002). These problems, according to Edwards (1994) and Edwards and Parry (1993), can be avoided by using polynomial regression, which constitutes the difference in terms of the square and the product of these measures. Respectively, response surface analysis provides a detailed view of these

differences by graphing the results of polynomial regression analyses in a three-dimensional space.

The Procedure

This section describes the steps needed to perform response surface analyses (based on Atwater, Ostroff, Yammarino and Fleishman, 1998; Edwards, 1994, 2002; Fleenor, McCauley and Brutus, 1996; Shanock, Baran, Gentry and Pattison, 2010b). For demonstration purposes, we will use discrepancies between perceptions of organizational culture (PO), workgroup culture (PG) and their relation to the construct of well-being. As with any regression technique, the assumptions of multiple regression analysis (Tabachnick and Fidell, 2007) must be met: (1) the two predictor variables must represent the same conceptual domain, and (2) both predictor variables must be measured on the same numeric scale (Edwards, 2002).

Step 1

The first step includes an inspection of data to verify what percentage of participants would be considered to have discrepancies between the two predictors. In order to do so, all scores for each predictor variable (PO and PG) were standardized. Any participant with a standardized score on one predictor variable that was half a standard deviation above or below the standardized score was considered to have a discrepant value. Next, percentages of 'in-agreement' and discrepant values were determined. If it turns out that very few participants have discrepant values (e.g., $PO > PG$ or $PG > PO$),

then the practical value of exploring how discrepancies relate to an outcome variable would be small.

Step 2

In order to reduce the potential for multicollinearity, both predictors (PO and PG) were centered on the midpoint. Using a Statistical Package for the Social Sciences (SPSS) syntax, the following variables have been formulated: (1) the square of the centered PO variable; (2) the cross-product of the centered PO and PG variables; and (3) the square of the centered PG variable. With the help of SPSS software, these variables were used to perform a polynomial regression analysis. The ‘well-being’ outcome variable was regressed on the centered predictor variables (PO and PG), the product of centered PO and PG, the centered PO and PG squared terms into the regression equation.

Based on this analysis, the results of the polynomial regression were evaluated with regard to four surface test values, namely, a_1 , a_2 , a_3 and a_4 :

1. The slope of the line of perfect agreement ($PO = PG$) as related to well-being, which is given by $a_1 = (b_1 + b_2)$, where b_1 and b_2 are unstandardized beta coefficients for the centered PO and PG variables, respectively.
2. The curvature along the line of perfect agreement as related to well-being, which is calculated by $a_2 = (b_3 + b_4 + b_5)$, where b_3 and b_5 are the unstandardized beta coefficients for the square of the centered PO and PG variables, respectively, and b_4 is the unstandardized beta coefficient for the cross-product of the centered PO and PG variables.

3. The curvature of the line of incongruence as related to well-being, indicating the degree of discrepancy between PO and PG and the outcome, which is assessed by calculating $a_4 = (b_3 - b_4 + b_5)$.
4. The slope of the line of incongruence as related to well-being, indicating the direction of the discrepancy ($PO > PG$ or vice versa), which is assessed by calculating $a_3 = (b_1 - b_2)$.

Step 3

In order to enhance the interpretation of the results, an Excel template (Shanock, Baran, Gentry and Pattison, 2010a) was used to create a three-dimensional response surface. All beta and unstandardized regression coefficients were entered into the template to produce the surface area graph.

Step 4

Upon data entry, calculations of the surface values were performed in order to interpret the following:

1. How does agreement in PO and PG relate to well-being?

A positive significant a_1 indicates a linear relationship along the line of perfect agreement ($X = Y$) as it relates to well-being. A significant a_2 indicates a non-linear slope of the line of perfect agreement. If a_2 is significant and positive, it would suggest that the line of perfect agreement as it relates to well-being is positive and a convex surface, whereas a significant and negative a_2 value would indicate a concave surface along the line of perfect agreement.

2. How does the degree of discrepancy between PO and PG relate to well-being?

Discrepancy between PO and PG is assessed by the curvature along the line of incongruence ($X = -Y$) as it relates to well-being with a_4 . A significant negative a_4 indicates a concave surface, that is, well-being decreases more sharply as the degree of discrepancy increases. A significant positive a_4 indicates a convex surface, that is, the outcome would increase more sharply as the degree of discrepancy increases.

3. How does the direction of the discrepancy between PO and PG relate to well-being?

Direction of discrepancy is related to the outcome as indicated by the slope of the line of incongruence as it relates to well-being by assessing the value of a_3 . A significant negative a_3 indicates that well-being is higher when the discrepancy is such that PG is higher than PO, rather than vice versa. A significant positive a_3 indicates that well-being is higher when the direction of the discrepancy is such that PO is higher than PG, rather than vice versa.

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APPENDIX D: Multiple Regression Analyses

Table 1

Multiple Regression Analysis for Perceptions of Culture Predicting Well-being (N=189)

Variable	Organization															
	WB1			WB2			WB3			WB4			WB5			
	B	SE	β	B	SE	β	B	SE	β	B	SE	β	B	SE	β	VIF
Involvement	.12	.08	.17	.22	.10	.26*	.11	0.11	0.11	.20	.14	.16	-.07	.10	-.08	2.945
Consistency	.35	.10	.33*	.13	.13	.10	0.81	0.13	.53**	.62	.16	.32**	.46	.13	.35**	1.805
Adaptability	-.25	.11	-.29*	.02	.13	.02	0.04	0.14	0.03	-.01	.18	-.01	.03	.13	.03	3.353
Mission	-.14	.10	-.19	.22	.10	.26	-.021	0.14	-0.19	.13	.17	.10	-.09	.13	-.10	4.05
	$R^2=.09$			$R^2=.04$			$R^2=.24$			$R^2=.25$			$R^2=.06$			
	$\Delta R^2=.11$			$\Delta R^2=.06$			$\Delta R^2=.25$			$\Delta R^2=.26$			$\Delta R^2=.08$			
	$F(4,184)=5.62**$			$F(4,184)=2.94*$			$F(4,184)=15.47**$			$F(4,184)=16.30**$			$F(4,184)=3.74*$			
	Workgroup															
	$R^2=.06$			$R^2=-.01$			$R^2=.23$			$R^2=.06$			$R^2=.09$			
	$\Delta R^2=.08$			$\Delta R^2=.02$			$\Delta R^2=.24$			$\Delta R^2=.08$			$\Delta R^2=.11$			
	$F(4,184)=3.90*$			$F(4,184)=.94$			$F(4,184)=14.61**$			$F(4,184)=16.30**$			$F(4,184)=5.88**$			
	<i>Note:</i> WB1= Feelings of competency; WB2 = Thriving at work; WB3 = Fit at work; WB4 = Perceived recognition; WB5= Desire for involvement: * $p < .05$, ** $p < .001$															

Table 2

Multiple Regression Analysis for Perceptions of Culture Predicting Commitment (N=189)

Variable	Organization									VIF
	Affective			Continuance			Normative			
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	
Involvement	.27	.09	.31*	.12	.10	.15	.00	.11	.00	2.945
Consistency	.34	.11	.25*	-.14	.12	-.11	.01	.13	.01	1.805
Adaptability	.38	.11	.36*	.17	.12	.19	.10	.14	.09	3.353
Mission	-.26	.11	-.28*	-.16	.12	-.20	.20	.14	.21	4.050
	$R^2 = .33$			$R^2 = .01$			$R^2 = .07$			
	$\Delta R^2 = .34$			$\Delta R^2 = .03$			$\Delta R^2 = .09$			
	$F(4,184) = 23.93^{**}$			$F(4,184) = 1.36$			$F(4,184) = 4.45^*$			
	Workgroup									
Involvement	-.06	.15	-.05	.15	.16	.12	.07	.14	.06	3.127
Consistency	-.06	.17	-.04	.16	.19	.10	.23	.17	.14	2.769
Adaptability	.62	.17	.42**	-.27	.19	-.18	.13	.17	.09	3.042
Mission	.14	.15	.12	-.11	.17	-.09	.25	.15	.21***	3.614
	$R^2 = .19$			$R^2 = .01$			$R^2 = .19$			
	$\Delta R^2 = .20$			$\Delta R^2 = .02$			$\Delta R^2 = .20$			
	$F(4,183) = 11.60^{**}$			$F(4,138) = .96$			$F(4,138) = 9.48^{**}$			

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

Table 3

Multiple Regression Analysis for Perceptions of Culture Predicting

OCB-O and OCB-P(N=189)

Variable	Organization							VIF
	OCB-O			OCB-P				
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β		
Involvement	-.25	.12	-.26*	-.42	.12	-.42*	2.945	
Consistency	.13	.15	.09	.52	.15	.33**	1.805	
Adaptability	-.14	.16	-.12	.38	.16	.31*	3.353	
Mission	.19	.15	.18	-.16	.15	-.14	4.050	
	R ² = .02			R ² = .09				
	$\Delta R^2 = .04$			$\Delta R^2 = .11$				
	<i>F</i> (4,184)=1.92			<i>F</i> (4,184)=5.58**				
Variable	Workgroup							
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β		
Involvement	.41	.12	.42*	-.04	.12	-.04	3.126	
Consistency	-.32	.14	-.26*	.06	.15	.04	2.779	
Adaptability	-.07	.14	-.06	.09	.15	.08	3.048	
Mission	.19	.12	.20	.28	.13	.29*	3.626	
	R ² = .14			R ² = .10				
	$\Delta R^2 = .15$			$\Delta R^2 = .12$				
	<i>F</i> (4,184)=8.35**			<i>F</i> (4,184)=6.40**				

Note. **p* < .05 ***p* < .001

