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The Influences of National and Organizational Cultures on Teacher Perceptions of Distributed Leadership

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**THE INFLUENCES OF NATIONAL AND ORGANIZATIONAL CULTURES ON
TEACHER PERCEPTIONS OF DISTRIBUTED LEADERSHIP**

by

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ABSTRACT

This paper aims to examine the influences of national culture and organizational culture on teacher perceptions of distributed leadership (DL) in the context of US-accredited schools in Colombia. On a global scale, many schools and districts, as well as educational researchers, have begun to take a closer look at DL, a model of school leadership in which teachers participate directly in many or all of the school leadership functions. This paper demonstrates the motivators and inhibitors which have influenced the implementation of DL experiments in four English-speaking countries which share a common cultural and educational background: the US, UK, Canada, and Australia (CASK). Cross-cultural empirical evidence from previous studies is used to propose a structural framework in which CASK teachers demonstrate a greater acceptance of DL than their Colombian counterparts, and in which Colombian teachers working in a US-accredited school demonstrate greater acceptance of DL than those who work in schools with predominantly Colombian organizational culture. A mixed-method study design is used to collect quantitative and qualitative data on the perceptions of teachers from a Colombian and from a CASK background regarding the involvement of teachers in supportive and supervisory school leadership functions. The findings indicate Colombian teachers to be more accepting of DL than their CASK counterparts, a conclusion in direct opposition to the study´s original structural framework. All teachers expressed a desire to share strengths to act as the strongest motivator for DL, and a lack of additional time to act as the strongest inhibitor. Suggestions are made for future practices by schools and for future research in the area of cross-cultural perceptions of leadership.

CHAPTER I

Introduction

Background

A current trend in school reform initiatives in the US, UK, Canada, and Australia is the flattening of traditional power hierarchies and the creation of team-based school communities, a situation referred to as distributed leadership (Hallinger & Heck, 2009; Harris and Muijs, 2007; Leithwood, Mascall, Strauss, Sacks, Memon, & Yashkina, 2007; Spillane, Halverson, & Diamond, 2004). In schools implementing distributed leadership models, leadership does not emerge directly from formal roles, but rather from the relationships between people and from the specific tasks that need to be accomplished (Heck & Hallinger, 2009; Somech, 2010). High performing schools appear to award greater leadership opportunities to teachers (Grant, 2011; Louis, University of Minnesota, & Wallace Foundation, 2010), and collective forms of leadership appear to more strongly influence student achievement than individual leadership (Leithwood, Patten & Jantzi, 2010; Newmann, 1997; Waters, Marzano & McNulty, 2003).

While increased teacher leadership and other emerging models for distributed leadership have resonated among scholars and educators in the US, UK, Canada, and Australia, a growing body of cross-cultural research on perceptions of leadership in other cultural settings suggests that opportunities for greater involvement in leadership activities by teachers may not be universally understood or welcomed. National culture plays a strong role in forming individual perceptions (Hofstede, 1980, 2001; House & Global Leadership and Organizational Behavior Effectiveness Research Program, 2004; Schwartz & Boehnke, 2004; Triandis & Gelfand, 1998). The specific concept of culture remains contested and in constant evolution in modern anthropological research (Kral, Ramírez, Aber, Masood, Dutta & Todd, 2010). Despite a myriad

of proposed definitions, current research generally defines culture by employing elements of

Boas´ (1940) exclusionary reference to culture as ''socially constructed networks of meaning

that divide one human group from another'' (Elliott 2002, p. xi), and Geertz´ (1973) inclusionary

reference to, "historically transmitted pattern of meanings embodied in symbols, a system of

inherited conceptions expressed in symbolic form by means of which [people] communicate,

perpetuate and develop their knowledge about and attitudes towards life'' (Kral et al., 2010, p.

47). Extensive research has found cultural values to be deeply influential on the degree of

individualism or collectivism each individual demonstrates within their social context, as well as

their desire to follow and respect formalized power structures, a construct known as power

distance (Hofstede, 1980, 2001; House et al., 2004; House, Wright, & Aditya, 1997).

Specifically, research has consistently found cultures in Central and South America, the Middle

East, Africa, and Asia to prefer greater stratification of leadership and thus less direct

involvement of employees in organizational decision-making, a central element of distributed

leadership models.

Global organizations and educational initiatives with multicultural communities are often

able to create and maintain their own culture, distinct from that of their local and national context

(Adams, 2005; Barth, 2002; Peterson & Deal, 1998; Schein, 1992). Such is the case of most

international schools, which generally create an internationalized or Americanized organizational

culture, rather than simply replicating the culture of their host country. Empirical studies which

assess this interplay of the relative roles of national and organizational cultures on employees´

perception of leadership models are scarce (Bennett, Wise, Woods, & Harvey, 2003). Studies

specifically comparing the perceptions of distributed models of leadership held by employees

from distinct cultural groups within organizations, such as international schools that employ both host country national and expatriate teachers, are even scarcer (Pruitt, 2008).

Research Questions and Design

This causal-comparative study examined the degree to which national and organizational cultures each influence teacher acceptance of the distributed leadership model, in the context of preschool, elementary and secondary schools in Colombia. A review of existing research on the emergence of distributed leadership models in the US, UK, Canada, and Australia established commonalities of understanding and application of distributed leadership between the four countries. This mixed-method study employed an online survey and follow-up focus group interviews to examine the perceptions of distributed leadership held by teachers from three different groups outside of the US, UK, Canada and Australia, for comparison with patterns found in the literature regarding trends and perceptions of teachers within each of the four countries. The three groups involved in the study are: (i) teachers representing cultural and educational models from the US, UK, Canada, and Australia (referred to using the acronym 'CASK' in this study) working in US-accredited schools with multicultural teaching faculties in Colombia (AdvancED, 2011), (ii) Colombian teachers working in the same schools, and (iii) Colombian teachers working in Colombian schools, not accredited by organizations from any of the four CASK countries. Teachers from the US, UK, Canada, and Australia were combined as a single group in this study due to their shared cultural and linguistic history, as well as the many commonalities in teacher education programs found in the four countries. Teachers from the four CASK countries are highly recruited by school directors in US-accredited schools in Colombia due parallels among the cultural and linguistic profiles of the teachers and the school visions in which they ultimately work. By obtaining data which is both cross-organizational and

cross-cultural, the study examined and compared the degree to which the organizations and cultural backgrounds of teachers each influence their perception of distributed leadership.

Definition of Terms

The study employed a framework for leadership functions similar to that which was proposed by Hulpia et al (2009) to quantify and evaluate teacher perceptions, as will be further explained in the study´s Methodology section. Taking into account findings by Hulpia et al. (2009) as well as other research summarized in the review of literature, this study defined distributed leadership in schools as a school leadership model and attitudes which most actively involves all teachers in the support and supervision of other teachers. The outcome variable for the study was the degree to which teachers perceived that teachers outside of formal leadership roles should assume supportive and supervisory leadership functions (Hulpia, Devos & Rosseel, 2009) within their schools.

The two proposed predictor variables for this causal-comparative study included teachers´ (i) national culture and the (ii) organizational culture within which the teachers were working. National culture was determined as the teacher´s country of birth, and was grouped as either (i) CASK (including teachers from the US, UK, Canada, and Australia), or (ii) Colombian. The two categories of organizational culture included (i) the organizational culture found in all of the US-accredited (AdvancED, 2011) schools included in the study, and (ii) the organizational culture found in Colombian national schools included in the study, also servicing students from a similar socio-economic background to those studying in the US-accredited schools. Additionally, the study performed focus group interviews with school leaders from each of the schools included in the study to determine prevailing attitudes towards distributed leadership and further illustrate and qualify the variable of organizational culture.

The study used quantitative survey tools and focus group interview questions to examine the specific factors reported by teachers as motivators or inhibitors for distributed leadership. Many possible motivators and inhibitors for distributed leadership in schools are discussed in the literature review section of this study. Motivators and inhibitors for distributed leadership were also explored further in focus group interviews subsequent to the initial quantitative data collection phase of the study.

Research Questions

The questions I proposed to examine in the context of selected Colombian schools are:

RQ1: What differences exist in the degree to which each of the following groups of teachers accepts teacher involvement in (i) supportive and (ii) supervisory leadership functions within their school?

- CASK (US, UK, Canadian, and Australian) teachers in US-accredited schools in Colombia
- Colombian teachers in US-accredited school in Colombia
- Colombian teachers in Colombian schools in Colombia

RQ2: What do each of the above groups perceive as the primary motivators for distributed leadership in schools?

RQ3: What do each of the above groups perceive as the primary inhibitors to distributed leadership in schools?

A review of current literature in the areas of sociology, psychology, culture, and leadership suggested that both national and organizational cultures are significant influences on teacher perceptions of leadership. This study was guided by the structural framework which suggested that a survey of teachers in the three groups would demonstrate statistically significant differences between the perceptions held by each group. Within the context of US-accredited schools in Colombia, the structural framework for the study proposed a greater acceptance of distributed leadership among teachers from the four CASK countries examined than that of Colombian teachers. Similarly, the framework proposed a greater acceptance of distributed

leadership among Colombian teachers working in the context of US-accredited schools than that

of Colombian teachers working in other Colombian schools. A graphical representation of the

structural framework for the study is demonstrated in Figure 1. Initial statistical results from

Figure 1. Structural framework regarding level of acceptance of distributed leadership among groups included in the study

High Acceptance

Group Number	National and Organizational Cultural Backgrounds
1	Teachers from CASK countries working in US-accredited schools in Colombia
2	Teachers from Colombia working in US-accredited schools in Colombia
3	Colombian teachers working in Colombian-accredited schools in Colombia

Low Acceptance

each of the three groups were further investigated through focus group interviews of CASK and

Colombian teachers working in a US-accredited school in Colombia. The questions for the focus

group interviews explored differences and commonalities found in the initial quantitative data.

Significance

This study was useful for deepening our understanding of the cultural and organizational

influences on employee perceptions of leadership. Due to the ever-increasing globalization of

education (U.S. Department of State, 2011), practices designed to improve schools and

contribute to effective teaching and learning, such as teacher leadership and the democratization

of schools, must now be considered in a culturally-diverse context. The findings from this study

will potentially assist international institutions planning to implement and foster distributed

leadership in the future.

Chapter 2: Literature Review

The Emergence of Distributed Leadership (DL)

Current research from CASK education systems has demonstrated that for educational

leadership to be most effective it should not be practiced solely by those who hold top-down

positional power (Harris, 2007; Jantzi, & Leithwood, 2005; McGuinness, 2009, Spillane &

Harris, 2008). Experiments in organizational restructuring and flattening have increasingly

demonstrated that leadership which is distributed among stakeholders in an organization taps into

a much more diverse and valuable range of skills and perspectives. As leadership tasks have

become more and more complex, many schools have moved away from the heroic individual

leadership paradigm, and towards an approach that stresses the sharing of leadership among the

school team of administrators, teachers and community (Bush & Glover, 2003). Practices of

distributed leadership have led to both improved organizational performance and more desirable

student outcomes (Leithwood et al., 2004, 2007). While demonstrating a direct causal link is

empirically difficult, many case studies (McGuinness, 2009) and mixed-method experiments

(Day & Great Britain, 2009) have come to the same general conclusion: "There is increasing

research evidence that distributed leadership makes a positive difference to organisational

outcomes and student learning." (Spillane & Harris, 2008, p.32)

  The transactional-transformational leadership continuum. The study of school

leadership is not new. Scholarly discourse on distributed leadership has grown over the past 40

years, as academics and practitioners have dissected leadership and probed the systems of

institutional organization and power. Burns (1978) proposed a conceptual framework in which a

continuum of effectiveness existed between two types of leadership: transactional and

transformational. Burns contended that transactional leadership relied solely on an exchange of

things of value (such as money, goods, services or ideas), did not promote a greater investment

by either party in the organization and thus did not lead to greater or more effective performance.

A transformational relationship, however, which was based on the achievement of common goals

and a common vision, led stakeholders to transcend the terms of simple transactions and achieve

far more while working together. Bass (1985) added greatly to the discussion of transactional

and transformational leadership. While he did not consider transactional leadership to be

ineffective, data he obtained from 70 senior executives, 176 senior US Army officers, 256

business managers, 23 educational administrators, and 45 professionals demonstrated that

transactional leadership operated only on a superficial level and did little to bring about true

change in an organization (Bass, 1985).

Leithwood (Leithwood & Jantzi, 1999; Leithwood, Louis, Anderson & Wahlstrom, 2004;

Leithwood, Mascall, Strauss, Sacks, Memon & Yashkina, 2007; Leithwood, Patten & Jantzi,

2010) has further explored the transactional-transformational continuum. In earlier work,

Leithwood suggested that organizational leadership exists on a spectrum of types A to Z (1992).

Power differences and systems for ensuring top-down control are high in Type A organizations.

In Type Z organizations, power is shared to a greater degree, and vertical consensus is often

sought before decisions are made. Leithwood later demonstrated both quantitative and qualitative

evidence of educational organizations which had made the shift from A to Z and as a result

enjoyed more positive outcomes (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Adler and

Borys (1996) used the analogy of early photocopier design to demonstrate the shift in mindset

and ensuing benefits related with transformational leadership in industry: "According to one

rationale, the user is a source of problems to be eliminated; according to the other, the user is a

source of skill and intelligence to be supported" (p. 68). Avolio, Waldman and Yammarino

(1991) labeled transformational leadership "leaders developing leaders", again referencing the coaching and mentoring aspect of transformational leaders.

Transformational leadership versus distributed leadership. Transformational leadership, however, is not synonymous with distributed leadership. In 1994, Leithwood classified the following dimensions of transformational leadership:

- building school vision
- establishing school goals
- providing intellectual stimulation
- offering individualized support
- modeling best practices and important organisational values
- demonstrating high performance expectations
- creating a productive school culture
- developing structures to foster participation in school decisions

All of these dimensions can be performed by individual leaders, however only the final dimension truly points to an active distribution of leadership among the school community. Leithwood´s research has demonstrated transformational leadership to be leadership which stimulates greater teacher collaboration and commitment, in essence inspiring individuals in an organization to work together to achieve more and produce solutions to organizational problems (Leithwood, 2004; Leithwood, 2007). To conceptualize and promote the practice of distributed leadership in schools, Spillane, Halverson and Diamond (2001) suggested, "The collective properties of the group of leaders working together to enact a particular task lead to the evolution of a leadership practice that is potentially more than the sum of each individual´s practice" (p.25). They framed much of the future discussion in the area by proposing distributed leadership in schools to be most exemplified by, "…a distributed process, stretched over the school´s social and situational context" (Spillane, Halverson, and Diamond, 2001, p. 23). A distributed leadership structure attempts to achieve greater participation of stakeholders in decision making processes, access to a deeper and wider set of skills and resources and greater organizational

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performance (Harris, 2009; Spillane, 2006). Distributed leadership, "…emphasizes interaction and interdependence, rather than reaction and dependency" (Harris, 2009, p.4). Central to the concept of distributed leadership is the inherent trust, support and openness to power sharing required by all of the members of the organization (Silins & Mulford, 2004).

Models of distributed leadership commonly promote the creation of professional networks within and between schools which share existing knowledge that can help personalize every school as a learning community, adopt solutions for their own needs, and help children learn better (Association of California School Administrators, 2001; Hargreaves & Fink, 2008). Distributed leadership also stimulates the professional fulfillment and motivation that comes from learning and interacting with colleagues, and provides teachers with opportunities for problem-solving and lateral leadership of people and programs beyond their own classroom (Hadfield et al., 2002; Jackson, 2004). Through distributed leadership in schools, teachers are given opportunities to draw on and develop practices which are informed by evidence and research, as well as providing them with a voice in professional and school-based decision making (Veuglers and O'Hair, 2005).

Defining distributed leadership. Researchers and practitioners have made several important efforts in recent years to clearly define what distributed leadership models look like, and how they may best be put into practice (Harris, 2009; Hulpia, Devos & Roseel, 2009; Spillane, Halverson and Diamond, 2004).

Gronn (2000) proposed three different models for distributed leadership which occur in schools (p. 657):

1. Spontaneous collaboration: In this natural form of distributed leadership, groups of teachers discuss ideas and support each other with or without the involvement of formal leaders.

2. Intuitive working relations: Professional support relationships often develop between individuals over time but are not necessarily formalized.

3. Institutionalized practice: Committees, grade-level or subject teams, and teacher leaders are all examples of institutionalized practices in schools which may have been created as a response to naturally developed work relationships or through intentional administrative design.

Gronn´s (2000) first and second examples of distributed leadership models reflect the democratic and reflective forms of leadership which differentiate from his third example, commonly referred to as teacher leadership. Formalized systems of teacher leadership in schools simply extend traditional power hierarchies, while informal situations of distributed leadership frame school leadership as decentralized. Distributed leadership in schools is, "fluid and emergent, rather than a fixed phenomenon" (Gronn, 2000, p. 324).

In 2009, Hulpia, Devos and Roseel investigated the degree to which leadership was perceived to be distributed between members of leadership teams in 46 secondary schools in Flanders, Belgium. While the authors opted not to include teachers outside of formal leadership positions as possible school leaders in their examination, the set-up for the study took an important step in identify three core functions of effective school leadership which could potentially be distributed: (a) setting a vision, (b) developing people, and (c) supervising teachers´ performance (2009). The three core functions of leadership were proposed using research on instructional and transformational leadership models (Hallinger, 2003; Leithwood &

Jantzi, 1999) and educational change (Heller & Firestone, 1995). Hulpia et al. then create a Distributed Leadership Inventory based on the three core functions of leadership identified in their research and used the inventory to obtain responses from 1,522 teachers of second-grade (14 to 16 year old) students, 248 teacher leaders, 85 assistant principals, and 47 principals regarding the extent to which principals, assistant principals and teacher leaders were perceived to be performing each of the core leadership functions. Initial exploratory factor analysis prompted the combination of the first two functions of leadership into one, labeled "supporting teachers" (Hulpia et al., 2009, p.10), thus creating a two factor model for future data analysis. Results from the study demonstrated that support was commonly perceived to be a leadership function of the principal, assistant principals and teacher leaders, while supervision was predominantly perceived to be a leadership function of the principal and assistant principals (Hulpia et al., 2009, p.13). Hulpia et al. (2009) explained the two-factor model of leadership functions supported by the study as representative of current leadership trends. The supportive leadership functions identified in the study conducted by Hulpia et al. (2009) parallel transformational school leadership actions, often initiated by individual leaders but requiring common goals and vision throughout the school. The supervisory leadership functions parallel instructional school leadership, which is often conducted by a school administrator. The results from this study mirror those of earlier studies suggesting that teachers express greater expectations for and desire to participate in collegial discourse and institutional goals, while expressing lower expectations for and desire to participate in administrative and managerial school decisions (Conley, 1991).

In a follow-up study, Hulpia et al. found participative decision-making and distribution of the supportive leadership function to have a significant positive impact on teachers'

organizational commitment (Hulpia et al., 2009a), which has in turn been found to have moderate to significant effects on student engagement (Leithwood & Jantzi, 2000), staff morale, student behavior and learning outcomes (Day & Great Britain, 2009). In contrast, distribution of the supervisory leadership functions had a significant negative impact on teachers´ organizational commitment (Hulpia et al., 2009a). Teachers in the Flanders-based study did not demonstrate acceptance of evaluations of their professional performance given to them by teacher leaders, preferring to be evaluated by individuals occupying higher levels within the leadership hierarchy of the school.

Barriers to distributed leadership in schools. Other educational researchers have also demonstrated resistance to accepting teachers as school leaders. Lortie (1975) used historical analysis, as well as a survey of all teachers in Dade County, Florida and data from intensive interviews with 94 elementary and secondary teachers, to illustrate three leading barriers to greater teacher involvement in educational improvement: conservatism, individualism and presentism.

1. Conservatism: Teachers often experience mistrust of new educational initiatives, preferring their "tried and true" practices regardless of data which support the proposed change (Lortie, 1975).

2. Individualism: Many teachers feel safer developing and testing teaching practices alone, avoiding the criticisms and intrusions of other professionals around them. Lortie used the term "egg-crate school" (2002, p.14) to illustrate the way in which individualism is encouraged in most school systems.

3. Presentism: Although most schools and school districts work with multi-year school improvement plans, the focus for improvement as well as the bulk of the work to be done

day-to-day in schools is decidedly short term. An overwhelming focus on the short term often reduces teacher motivation or prevents involvement in collaborative efforts directed at long term, systemic change, including the support and supervision of fellow teachers. Lortie (1975) used quantitative and qualitative data to demonstrate constant teacher complaints of clerical duties and intrusions of other adults in the classroom.

In addition to teacher-level barriers to greater teacher involvement in educational improvement, Lortie demonstrated how the evolution of schooling over history has shifted the decision-making process away from teachers. Teachers in rural, one-room schoolhouses were the leading authority and decision-maker in terms of curriculum, classroom management, school calendar and resources. Over time, however, the teacher has been placed below increasing levels of structured hierarchies of educational administration, removing them from the decisions which affect them and their students most (Lortie, 1975).

Lortie (2002) recognized that several recent initiatives in education have promoted greater teacher involvement in leadership and school change. Examples include a trend towards greater investment of time and resources in the area of teacher professional development, and evidence of greater use of reflective practices in and between schools, similar to that which was presented in the previous section. Lortie noted that greater collaboration between teachers has reduced teacher conservatism and individualism, two of the three teacher-level barriers to greater involvement in school leadership and change. However, Lortie insisted that unless schools and districts are able to remove all three barriers, teachers will continue to work in a cycle of short term, semi-professional activity (Lortie, 2002).

A review of evidence suggests that the barrier of presentism has actually increased in years since Lortie´s original study. An increased focus in many countries on accountability in

education has placed immense pressure on schools and district to improve levels of student performance both quickly and dramatically (Hargreaves & Goodson, 2006; Hargreaves & Shirley, 2009; Theoharis, 2007). Teachers experienced "increased vulnerability and decreased status" (Cohn & Kottkamp,1993, p. 107) in the wake of A Nation at Risk (National Commission on Excellence in Education, 1983) which conflicted with their sense of ethical obligations to attend to the social and emotional aspects of learning. Similarly, faced with very real threats to resources and job security due to top-down accountability programs such as No Child Left Behind, many teachers, principals and superintendents have been found to only adopt short- and medium-term solutions to avoid short-term consequences, rather than implementing long-term strategies such as a deep commitment to changing leadership structures (Hargreaves & Fink, 2005, Hargreaves & Shirley, 2009).

Teacher individualism may also still exist, despite the robust literature illustrating its short-comings. Empirical research has linked teacher individualism to lower levels of student achievement in literacy and math (Newmann & Wehlage, 1995; Rosenholtz, 1989), diminished degrees of teacher efficacy and self-efficacy (Ashton & Webb, 1986; Rosenholtz, 1989), a lack of relational trust which has a negative influence on student achievement (Bryk & Schneider, 2004), and failed implementation of innovations and reforms (Fullan, 2001). Regardless, many teachers still feel safer in their classroom than they would either supervising or being supervised by a colleague (Lortie, 2002), a relationship of trust which is central to distributed leadership. The extent to which teachers from different cultures demonstrate varying levels of individualism, as well as the degree of influence of the organizations in which they are working, remains to be found.

Current Views of DL in CASK countries

Current research in the area of distributed leadership in the US, UK, Canada, and Australia (CASK) has demonstrated an increasing extension of leadership in schools beyond those in formal leadership or administrative roles (Hallinger and Heck, 2009; Harris, 2009). While empirical evidence for implementing distributed leadership models continues to develop, many school systems have encouraged distributed leadership as a reaction to the limitations of previous reform strategies which used heavy top-down pressure in the name of accountability (Hargreaves & Shirley, 2009). Governments and school districts in the four countries have started to employ lateral strategies of professional learning, exchange, and engagement in order to increase professional motivation and facilitate improvement across schools, through in-school and cross-school networks of mutual learning and assistance (Fullan, 2007; Hargreaves, 2004). Highly accepted forms of laterally driven strategies for school improvement first arose outside the US in Canada (Fullan, 2007), and England (Hopkins, 2007), which entered the era of curriculum standards and high-stakes testing earlier than the United States. Many researchers and practitioners have suggested that school governance models which foster and encourage greater participation on the part of teachers in supportive and supervisory school leadership functions may continue to replace the more punitive strategies of top-down reform in all four countries (Fullan, 2007; Hargraves & Shirley, 2009; Harris, 2009).

Distributed leadership models have found wide-spread support among institutions and teachers in the US. The Educational Commission of the States and the Council of Chief State School Officers in the US have both expressed interest in developing policies and practices which expand teachers´ participation in leadership and in decision-making tasks (Louis et al., 2010). Some schools and districts in the US have already moved to even more extreme versions of distributed leadership. In decentralized schools such as the Avalon School, located in St.

Paul, Minnesota, teacher cooperatives perform all supportive and supervisory leadership functions; no non-teaching school administrators, secretaries or librarians work in the school (Avalon School Staff, 2010). Each of the teachers employed at the school works on a site operations committee, which accomplish all of the non-instructional tasks required to run the school. Hamline University opened the Avalon School as a charter school in 2001, founded on the concept that principals can interfere with the learning process. Two important components exist within the Avalon School governance model: (1) all people on the teaching staff have equal authority in all decision-making situations. No one person, or group of persons, can make a decision without the consensus of the entire staff, and (2) all teaching staff members assume administrative duties. Schools such as the Avalon School often need to analyze and tweak their governance model, as they identify the situation which allows for distributed leadership, while also managing all necessary school-related issues. The Avalon School currently has reduced the teaching load of three teachers so that they can assume responsibilities normally performed by a Business Manager and Program Coordinator, however, the three teachers have no increase in authority or decision-making power.

Opened in 1994, and the New Country School in Minnesota was one of the first teacher-run charter schools in the US. Since 1994, 50 teacher-run charter schools have opened in Minnesota and nine other states, supported by the teacher cooperative Edvisions (2011). While charter schools in Minnesota have been allowed to operate as teacher-run schools for many years, the Minnesota State Legislature passed a law in 2009 that also allows traditional school districts to operate teacher-run schools. Many rural districts around the country, unable to afford administrators, are looking into the concept, while cities such as Boston, Denver, Milwaukee, Detroit and Los Angeles have adopted the practice on a much larger scale. Contrary to findings

by Hulpia et al. (2009a) in Belgium, the teacher cooperative governance models used in the Avalon School and the New Country School have succeeded despite a requirement that teachers perform supervisory leadership functions. While distributed leadership models such as these are still far from typical in the US, a growing number of similar examples demonstrate the increased acceptance of distributed leadership in schools in the US (United Teachers Los Angeles, 2010).

Many researchers and practitioners in the UK have also lobbied for the creation of structures which permit greater teacher involvement in supportive and supervisory school leadership functions. Studies performed in the UK have demonstrated that greater involvement of teachers in school decision-making processes leads to greater teacher morale and self-efficacy, which in turn leads to greater student achievement (Harris and Muijs, 2007). The state-funded Specialist Schools and Academies Trust (SSAT) works with 90% of secondary schools throughout England to raise student achievement (Hargreaves & Fink, 2008). SSAT has developed a program called Raising Achievement/Transforming Learning (RATL) which connects teachers and principals (head teachers) around the country to SSAT mentor schools and the collective expertise of local, regional and national educators and administrators. Rather than proposing structured hierarchies within each school, RATL provides teachers and schools with the opportunity to work laterally on improving results. The program does not give teachers additional money or formalized leadership titles, but does provide resources for schools to employ replacement teachers while teachers observe and interact with others in and outside of their school. In their study, Hargreaves and Fink (2008) found schools implementing the strategies offered by RATL to be energized by cross-school and within-school collaboration efforts.

Both as a researcher and in his role as Special Advisor to the Premier and Minister of Education in Ontario, Michael Fullan (2008) has played a pivotal role within Canada and abroad in promoting the concept of initiating systems change through the use of strategies that foster leadership at all levels of the system. Through empirical research, frequent workshops and direct application in the province of Ontario, Fullan has demonstrated repeatedly how the supportive and supervisory actions of each positive teacher leader in these schools help to cultivate other teacher leaders, who then begin to collaborate together for a common good (2001, 2007, 2008). Continued growth can then reach a critical mass of interacting and coalescing leadership for change within the school community. As the change increases, teacher leaders increase in volume by operating as interactive expert learners (Fullan, 2008). In Ontario, steady increases in performance are partly a result of networking strong schools with weaker performing peers across districts. The provincial government has placed a focus on providing significant career development for existing school leaders, while also developing distributed capacity and lines of succession within each schools (Hargreaves & Shirley, 2009).

Similar to England´s RATL program, in 1999 the province of Alberta created the Alberta Initiative for School Improvement (AISI), designed to provide a province-wide network of improvement and innovation (Hargreaves et al., 2009). AISI encourages schools to move from top-down hierarchies of school leadership, to lateral, peer-driven teams focused on change, through a culture of collaborative inquiry, openness, reflection and adaptation (Hargreaves et al., 2009). To facilitate distributed leadership and collaborative decision-making in schools, AISI provides resources to schools so that teachers may have the time to observe and interact with others. RATL, AISI and the provincial government in Ontario have all used the same strategy in an attempt to tackle the traditional problem of "presentism" (Lortie, 1975).

Schools in Australia have historically been less subjected to external state control and programs for accountability than counterparts in the US, UK and Canada. School inspections, a key tool of state control used in other countries, ceased to be performed in Australia 30 years ago (Gronn, 2008). Around the same time, momentum began to build for self-managed schools, now common around the country (Caldwell, 2004). Many self-managed schools in Australia receive professional support from the International Networking for Educational Transformation (iNet) group, under the guidance and leadership of England´s SSAT. Self-managed schools are not directly synonymous with distributed leadership, as the schools generally implement a hierarchy for decision-making. However, models for school governance, such as the model put in place in 1988 and still common today in the state of Victoria, employ many elements of distributed leadership (Caldwell and Spinks, 1988). Administrative "Policy Groups" control goal-and policy-setting process, while "Programme Teams", mostly comprised of teachers, are responsible for planning, approving, budgeting, developing, implementing and evaluating school programs (Caldwell, 2004). Thus evidence exists to suggest that Australian teachers would perceive most leadership functions of teacher support and teacher supervision to be performed by teachers.

Summary of CASK perspectives of distributed leadership in schools. As examples demonstrated in the previous section, teachers in all four of the CASK countries (US, UK, Canada, and Australia) are often open to assuming increased leadership roles in their schools. Many teachers are willing to take on both supportive and supervisory leadership functions when given the opportunity, and may accept support and supervision from individuals other than positional leaders. While schools may reward teachers with financial incentives or recognition through formal teacher leadership titles, the most successful and extensive programs in the US, UK, Canada, and Australia focus on providing teachers the extra time needed to perform

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supportive and supervisory leadership functions. However, research has not yet compared these findings with data from CASK and non-CASK teachers in the context of American and host national schools outside of CASK countries in order to examine the influences of national and organizational cultures on teacher perception. Future research must also further our understanding of the perception of each group of teachers towards specific actions taken by schools to promote greater teacher involvement in school leadership, such as providing teachers with extra time away from their teaching responsibilities.

Influences of National Culture on Perceptions of Distributed Leadership

No single study of cross-cultural values and perceptions has been undertaken to date which is completely global in scope. In addition, most large-scale cross-cultural studies are subject to threats to validity and extraneous variables, such as cultural biases on the part of the researchers (Goodstein, 1981; Hofstede, 1980), translation issues (Hunt, 1981; Schwartz, 1992), data collection issues and data analysis issues (Hofstede, 1980; House et al., 2004), among others (Hofstede, 2006; House et at, 2004; Lenartowicz & Johnson, 2002). Despite the limitations of individual studies, an extensive body of cross-cultural research in the past 30 years has collectively demonstrated several important findings: (a) national culture has a significant influence on the values and choices assumed by individuals (House, Wright, & Aditya, 1997; Schwartz, 1995; Triandis, 1996), (b) in-country variations are typical, however overall data from each country can be generalized and indexed for comparative uses (Hofstede, 1980, 2001; House et al., 2004), and (c) countries can be clustered according to similarities in country-wide statistical outcomes (Hofstede, 1980; House et al., 2004; Triandis, 1995). Seminal research by Hofstede (1980; 2001), Triandis & Gelfand (1998), Schwartz (1992), and House et al (2004) will

be used to demonstrate these findings and the potential importance of the findings on influencing individuals´ perceptions of distributed leadership models.

Hofstede´s cultural dimensions. Hofstede (1980) produced a landmark study of national culture, employing existing survey responses from 116,000 IBM employees in 40 different countries regarding their personal values and work attitudes. The results of the large-scale study enabled Hofstede to propose four dimensions of national cultures which have been highly cited in cross-cultural research over the past 30 years: Power distance, individualism, uncertainty avoidance and masculinity. Hofstede used data from the survey to create an index and ranking to compare surveyed countries and regions in each of the four dimensions. In 2001, Hofstede produced a follow-up study which up-dated much of the data from the original study and addressed issues related to cultural bias cited by other researchers (House, Wright, & Aditya, 1997). Of the four dimensions Hofstede initially proposed, the dimensions of power distance and individualism/collectivism most directly influence ways in which individuals perceive and seek distributed leadership, and are therefore of greatest interest in the current study. To frame the context and goals of the current study, the following section will examine specific findings by Hofstede and others regarding constructs of power distance and individualism in the US, UK, Canada and Australia and compare those findings to power distance and individualism indices in Colombia.

Power distance (PD). Power distance reflects an expectation and acceptance of unequal power distribution in a given unit, such as a country, an organization or a family. Hofstede's study employed a power distance index (PDI) ranging from 11 to 104 which scored countries based on three items: (i) percentage of respondents who choose consultative leadership as their ideal leadership style (reverse scored), (ii) percentage who choose autocratic or directive

leadership as the typical leadership style, and (iii) mean response to subordinate fear of expressing disagreement (Hofstede, 1980; 2001). Using the PDI, power distance in a society can be categorized as high or low; high PDI scores indicate high power distance and low PDI scores indicate low power distance. High power distance societies tend to be organized by firmly structured and respected hierarchies. High power distance cultures are generally found in collectivistic societies, such as Central and South America, the Middle East, Africa and Asia (Hofstede, 1980; 2001). People in large power distance societies usually value unequal distribution of power and support institutions of hierarchy and status. Rank, role, age, experience and title are attributed high levels of importance (Hofstede, 1980; 2001; Ting-Toomey, Yee-Jung, Shapiro, Garcia, Wright, & Oetzel, 2000).

Low power distance societies are typical of individualistic societies such as North America and Western Europe. In these societies, people value equality, rights, independent thinking and democratic decision-making (Hofstede, 1980; 2001). Of the 78 total countries and regions for which Hofstede was able to calculate a PDI, the United States (PDI = 40), Canada (PDI = 39), Australia (PDI = 36) and Great Britain (PDI = 35) were ranked in positions 62, 63, 65 and 68 respectively. The low PDI and global ranking of these four countries would appear to indicate greater rejection of hierarchical forms of leadership, and thus increased acceptance of leadership models such as distributed, shared and transformative leadership.

Responses from Colombia demonstrated a much higher PDI (67), with a mid-group rank of 31 out of the 78 countries and regions surveyed. As previously stated, a high PDI indicates a preference by subordinates for more direct and controlling leadership (Hofstede, 1980; 2001). Responses to Hofstede´s survey from Hong Kong demonstrated a similar mid-group PDI score (68) to that of Colombia. Lam (2001) surveyed 2,413 teachers in Hong Kong and found that

while most teachers did not frequently perform peer coaching or leadership, a larger percentage (41.2%) preferred to have their classes observed by other teachers than by a school principal (15.7%). However, teacher preference for peer observations may actually reflect a result of high power distance in Hong Kong; 71.1% of survey respondents reported "pressure felt by teachers" as the primary detractor of observations performed by a principal (Lam, 2001).

In one of the few other cross-cultural leadership studies involving people living in Latin America, Lenartowicz and Johnson (2002) conducted a values survey with retail store managers in 12 different countries in an attempt to support or disprove cultural clusters of countries proposed by past researchers. Typical of most other countries in the region, retail store managers surveyed in Colombia ranked elements of both "Integrity" and "Civility" higher than elements of "Drive" and "Self-Direction", suggesting that social hierarchy is an important factor in maintaining good social relationships and high power distance (Lenartowicz & Johnson, 2002).

Pertinent to the discussion of the current study, it is important to recall the results from the two-factor Distributed Leadership Inventory used by Hulpia et al. (2009) in Flanders, Belgium which indicated that principals, assistant principals and teacher leaders are all perceived to be involved in the support functions of leadership, while only principals and assistant principals are involved in the supervision functions of leadership. While it is not clear if all of the respondents in the Hulpia et al study were actually from Flanders, we can assume that a majority was from that region. Flanders is located in the dutch-speaking region of Belgium, which was grouped together with the South Holland region of the Netherlands for the sake of Hofstede´s study (1980). The combined Belgium-Netherlands region was distinguished by Hofstede from two other neighboring regions, French Belgium and the Netherlands, which were both also included in the study. The Belgium-Netherlands region recorded a PDI score of 61,

which ranked 40th among the 78 countries and regions with data collected in the study, indicating

greater power distance similarities to Colombia than to CASK countries. The French Belgium

region recorded a high PDI score of 67, which is identical to the score attributed to Colombia,

while the Netherlands region (North Holland) recorded a low PDI score of 38, indicating

responses very similar to those in CASK countries. All of the Power Distance scores for

countries referenced in this study can be found in Table 1. These findings justify Hofstede´s

Table 1: Power Distance Indexes (PDI), Ranks, and Classifications of Countries/Regions
Discussed in the Current Study (Hofstede, 1980)

| | Power Distance (PD) (Hofstede, 1980) | | |
Country/Region	Index (PDI)	Rank (of 78)	Classification
French Belgium	67	30	High
Colombia	67	31	High
Belgium-Netherlands (Flanders)	61	40	Medium
United States	40	62	Low
Canada	39	63	Low
Netherlands (North Holland)	38	64	Low
Australia	36	65	Low
Great Britain	35	68	Low

separation of the three regions in his study. The findings also serve useful for comparative

analysis of results of the present study, which will use the model of distributed leadership created

by Hulpia et al in Belgium-Netherlands to compare perceptions of distributed leadership of

teachers from two other cultural settings and in two distinct organizational settings: teachers

from CASK countries and teachers from Colombia working in schools in Colombia which are

US-accredited and culturally influenced, as well as Colombian teachers working in non US-accredited Colombian schools.

   Individualism/Collectivism. According to Hofstede´s conceptualization, high individualism in a society reflects the importance placed on the needs of the individual or an individual´s immediate family, rather than those of the surrounding community. Highly individualist societies tend to experience constant change, as the society is frequently and strongly influenced by the needs and rights of individuals, rather than the inverse (Hofstede, 1980; 2001). Many highly individualist societies also demonstrate low power distance. However, while statistical and cultural connections may be found between power distance and individualism, Hofstede conceptualized and defined the two dimensions to be quite different, and found many examples of countries in his research to support his conclusions. Several countries such as Poland, for example, demonstrated high power distance as well as high individualism (Hofstede, 1980; 2001).

   Hofstede´s study produced an individualism index (IDV) that ranged from six to 91. Among the countries and regions which contributed data to Hofstede´s original study (1980), only six countries ranked individualism as the highest of the four dimensions: USA (91), Australia (90), United Kingdom (89), Netherlands and Canada (80), and Italy (76). The Belgium-Netherlands region (78) ranked eighth in individualism out of the countries and regions in Hofstede´s study (1980). All of the Individualism scores for countries referenced in this study can be found in Table 2. Workers in highly individualist societies may attribute effective job performance to their personal efforts and qualities. Accordingly, they have a strong desire to be more "in control" of their environment. Highly individualist teachers may prefer peer support and supervision over the support and supervision of a school administrator, but would likely

Table 2: Individualism Indexes (IDV), Ranks, and Classifications of Countries/Regions Discussed in the Current Study (Hofstede, 1980)

Country/Region	Individualism (IND) (Hofstede, 1980)		
	Index (IDV)	Rank (of 78)	Classification
United States	91	1	High
Australia	90	2	High
Great Britain	81	3	High
Canada	80	5	High
Netherlands (North Holland)	80	6	High
Belgium-Netherlands (Flanders)	78	8	High
French Belgium	72	10	High
Colombia	13	74	Low

prefer not to overly rely on external support or supervision at all (Hofstede, 1980; 2001). In stark contrast to the results from surveys in CASK countries, Colombian responses to the survey produced an individualism index of 13, which was the fifth lowest IDV recorded in the study, preceded by four other countries sharing similar cultural heritage: Venezuela, Panama, Ecuador and Guatemala. Countries ranking low in individualism can also be referred to as highly collectivist societies. Respondents in the study performed by Hulpia et al (2009) in the Belgium-Netherlands region perceived teacher support to be a leadership function of teacher leaders as well as other school administrators. Teacher supervision was only perceived to be a leadership function of school administrators higher up the school hierarchy.

Two major replication studies undertaken since Hofstede´s 1980 study supported all four

proposed dimensions as they were originally conceptualized and presented (Merritt, 2000). Four

more major replication studies supported three of Hofstede´s four dimensions, but did not all

identify the same dimension under dispute (Hofstede, Hofstede & Minkov, 2010). However,

Hofstede's (1980) IBM study is subject to limitations. Hofstede attempted to classify countries

and regions in his large-scale study using four broad cultural dimensions, but clearly concluded

that neither his data nor his research methodology could be applied on an individual level. Many

researchers criticized Hofstede's dimensions as overly broad, and his country-wide conclusions

as overly generalized (House et al., 2004; Schwartz, 1994; Triandis, 1995, 1998). The following

section will outline the responses by three other cross-cultural researchers, Triandis (1995, 1998)

Schwartz (1992, 1994) and House et al (2004), to Hofstede´s study and the contribution each

subsequent study added to the body of cross-cultural research. A specific focus will remain on

the influence each cultural construct may be demonstrated to have on individual perceptions of

models of distributed leadership.

Horizontal and vertical variations of IND.   Triandis (1995; 1998) argued that neither a

country nor an individual can be appropriately measured as simply individualistic or

collectivistic. Triandis (1995; 1998) argued that Hofstede´s (1980) constructs of individualism

and collectivism should not be perceived as a dichotomy, separate from other dimensions of

culture, but rather should be combined with values similar to Hofstede´s dimension of power

distance to create vertical, or high PD, and horizontal, or low PD, variations of the original

individualism-collectivism spectrum. By adding vertical and horizontal qualifiers to the

individualism scale, Triandis emphasized the importance of social relationships and self-concept.

Individuals demonstrating horizontal patterns assume that they are similar to everyone else,

while individuals demonstrating vertical patters view and support a natural hierarchy around them. The following descriptions of the four resulting categories are presented in the context of the influence they may have on teacher participation in distributed leadership in schools:

- Horizontal Individualism (HI): Individuals demonstrating HI are self-reliant but do not attach great importance to social class and status. We may assume that teachers demonstrating HI would be risk-takers and open to informally sharing ideas with peers, but would not desire to be supervised by peers or by formal school administrators, nor would they seek the opportunity to formally mentor or support others.

- Vertical Individualism (VI): Individuals demonstrating VI seek status and recognition. Teachers demonstrating VI may work hard to be supervised, recognized and applauded by school administrators, but might not give much value to supervision and support by peers. They most likely would be motivated to participate in leadership functions if given a title or special recognition within the school. They might also experience high levels of burn-out or demotivation if not frequently recognized for their constant struggle for success.

- Horizontal Collectivism (HC): Individuals demonstrating HC believe in equality, common goals and interdependence, especially within a social group. Teachers demonstrating HC may be the most open to participating in teaching teams, peer mentoring, peer observations and other forms of distributed leadership, preferring lateral collaboration to hierarchical impositions. While open to supporting and supervising others, these teachers may be uncomfortable with the idea of receiving benefits or recognition for their involvement in leadership functions.

- Vertical Collectivism (VC): Individuals demonstrating VC focus on the goals of the group to which they belong, even when self-sacrifice is required. Teachers demonstrating VC

may work well collaboratively and thrive when their group is faced with external

accountability, but may experience stress and confusion if not formally supervised by a

school administrator.

Triandis claimed that most researchers conceive of individualism and collectivism primarily in

their horizontal forms (1998). Triandis used empirical research and examples from well-known

systems around the world to support the four new constructs (Triandis & Gelfand, 1998).

Additional scales for cultural values. While the constructs of power distance and

individualism-collectivism are two of the most widely employed concepts in cross-cultural

psychology, other large-scale empirical studies have proposed the use of additional types of

universal values. Research by Schwartz (1992) attempted to reach beyond CASK values to

demonstrate 10 universal motivational value types, each of which represent a category of

secondary motivational values. Schwartz used confirmatory factor analysis of 10,857 samples

from 27 different countries to confirm the universality of the 10 motivational values, as well as

to empirically demonstrate the connections between them (Schwartz & Boehnke, 2004). None

of the 10 value types conceptualized by Schwartz are directly synonymous with those proposed

by Hofstede (1980) or Triandis (1995). However, each of Schwartz´ proposed motivational

value types may be considered to influence perceptions of distributed leadership according to the

descriptions below:

1. Self-Direction: Teachers seeking independence of opinions and actions, a position

   criticized by Lortie (2002) as leading to "egg-crate schools" (p.14), may reject the

   imposition of support and supervision by other teachers, just as they may reject the need to

   support and supervise others. As stated earlier, distributed leadership, "…emphasizes

   interaction and interdependence, rather than reaction and dependency" (Harris, 2009, p.4).

2. Universalism: An appreciation, tolerance and protection of the welfare of all people may be a central motivator for practicing distributed leadership. Kubow (2007) suggested, "democracy in practice often falls short of the ideals of social justice, which are necessary to improve life conditions for more and more people" (p. 309).

3. Benevolence: Traits such as honesty and loyalty strengthen in-group support, and are vital for collaborative systems such as distributed leadership. The professional orientation of school leaders, as opposed to a bureaucratic orientation, and the degree of faculty trust are both related to teacher professionalism (Tschannen-Moran, 2009). Trust, support and openness are vital elements for organizations attempting to practice distributed leadership (Silins & Mulford, 2004).

4. Tradition: In a cultural-historical context with overwhelming examples of hierarchical organizations, individuals demonstrating a deep respect for tradition may not readily assume the flattened power structure imposed by distributed leadership models.

5. Conformity: Restraint of action and unwillingness to upset or harm others may act as a barrier to open, honest sharing of ideas and criticisms between colleagues. Teachers supporting or supervising other teachers may not feel comfortable challenging the status quo, which is a required action if distributed leadership is to lead to positive change in schools (Silva, Gimbert & Nolan, 2000).

6. Security: Unless the school principal and teachers have established an environment of deep trust, teachers will not freely participate in decision-making processes (Smylie, 1992). Teachers may, however, feel more secure once a culture of distributed leadership has been established, as the success and progress of the school is no longer placed so heavily on a single heroic leader who may not be in the school forever (Fink & Brayman, 2006).

7. Power: Teachers who are motivated by status, control, resources and personal image may demonstrate more openness to distributed leadership if accompanied by financial rewards, formal titles or other personal benefits. They may not be open to supervision by their colleagues. Similiarly, if principals are not secure with the distributed leadership process they may feel frustrated by the loss of direct authority over school decision-making (Weiss & Cambone, 1994).

8. Achievement: The motivation of personal success may be amplified in a distributed leadership setting, as ambitious teachers are able to show-off effective practices at the same time as acting as an authority for others. In-group achievement, accomplished through the lateral support and supervision mechanism of distributed leadership may encourage individuals demonstrating vertical collectivist traits (Triandis, 1998).

9. Hedonism: The selfish aspect of hedonism, in direct opposition to benevolence, tradition and conformity according to Schwartz (1992), may cause friction for teachers when required to support and supervise others.

10. Stimulation: Working in a school with a distributed leadership model, teachers would be exposed to a range of new challenges, expectations and decisions not normally shared outside of school administration. Similarly, by replacing the singular view of one teacher supervisor with that of a myriad of collegial leaders, teachers would be more encouraged to take risks and break the repetitive molds of traditional instruction (Hallinger & Heck, 2009).

According to the preceding descriptions and inferences, teachers´ reported perceptions of distributed leadership could be explained using one or several of Schwartz´s (1995, 2004) basic motivational values.

Schwartz´ data confirmed the 10 basic motivational values used in his study and the two-dimensional, circular continuum which existed between them. By using the location of the 10 basic values on the motivational continuum, as well as data from respondents on each of the 56 secondary values identified, Schwartz was able to synthesize the 10 basic values into two bipolar continuums of "higher order value types" (1995, p.43). The first bipolar pair of high order value types was developed by combining the motivational values of stimulation and self-direction to create the construct "openness to change", which is directly opposite the combination of the motivational values of security, conformity and tradition, which Schwartz labeled "conservation" (1995, 43). Conservation relates directly to Lortie´s (1975) concept of conservatism, which Lortie claimed to be one of the leading obstacles to greater teacher participation in school leadership.

The second bipolar pair of high order value types was developed by combining the motivational values of universalism and benevolence, which Schwartz labeled "self-transcendence", and the motivational values of power, achievement and hedonism, which Schwartz labeled as "self-enhancement" (1995, p.43). Similar to Triandis´ construct of vertical individualism, an over-emphasis by teachers on self-enhancement may create a lack of relational trust which has a negative influence on school change (Fullan, 2001) and student achievement (Bryk & Schneider, 2004). However, one of Schwartz´ empirically supported claims regarding cross-cultural values was the universal location of benevolence atop the pan-value motivational hierarchy (Schwartz & Bardi, 2001), an encouraging finding for supporters of distributed leadership models in schools around the world.

The 10 motivational value types proposed by Schwartz helped to expand Hofstede´s original model for cultural values by including values demonstrated by cross-cultural data to

exist universally (Schwartz, 1995). The Global Leadership and Organizational Effectiveness

(GLOBE) research program represents an additional proposal for universal value dimensions

with even greater empirical support. The GLOBE Research Project was initiated in 1991 by

Robert J. House as an international research project on leadership, later moving deeper into

investigation on other aspects of national and organizational cultures. By 2004, similar in scope

to Hofstede´s landmark study, the GLOBE program involved 170 volunteer social scientists and

cross-cultural scholars, who collaborated to collect data from over 17,000 managers in 951 local

(non-multinational) organizations in 62 societies throughout the world (House et al., 2004). The

meta-goal of the GLOBE program was to develop an empirically based theory to "describe,

understand, and predict the impact of cultural variables on leadership and organizational

processes and the effectiveness of these processes" (House, 2004, p.2). The GLOBE research

program found strong data to support the claim that cultural differences strongly influence ways

in which people think about leaders and models of leadership. Data from the large-scale, cross-

cultural study found "… a high and significant in-society agreement with respect to questions

concerning the effectiveness of leader attributes and behavior" (House, 2004, p. 17).

The GLOBE program used data from their study to rank each of the 62 different societies

according to nine different cultural dimensions proposed by the program: Future Orientation,

Gender Egalitarianism, Assertiveness, Human Orientation, In-Group Collectivism, Institutional

Collectivism, Performance Orientation, Power Concentration versus Decentralization (Power

Distance) and Uncertainty Avoidance. Data from the GLOBE program was also used to identify

the extent to which each of the 62 societies found six major leadership behaviors to be effective

or ineffective, seeking to identify leadership behaviors which were universal and those which are

culturally-specific. Individuals in a society develop implicit leadership theories to conceptualize

how leaders should behave and what is expected of them (House, Javidan, Hanges, & Dorfman, 2002). Charismatic-transformational leadership was found to be universally endorsed, while other leadership styles, such as participative and autonomous leadership, were found to be culturally-specific (Den Hartog, House, Hanges, Ruiz-Quintanilla & Dorfman, 1999).

Central to the GLOBE research program was the integrated theory, widely supported in cross-cultural literature, which demonstrated strong theoretical connections between seven key variables: (1) societal cultural norms, values and practices, (2) leader attributes and behavior, (3) organizational form, culture and practices, (4) culturally endorsed implicit leadership theories, (5) strategic organizational contingencies, (6) leader acceptance, and (7) leader effectiveness (House et al., 2002). The GLOBE integrated theory is immediately relevant for the current study, which seeks to examine the acceptance by Colombian teachers of distributed leadership, a leadership model which does not reflect the societal cultural norms, values and practices of Colombia (Hofstede, 1980, 2001; House et al., 2004). An important distinction in the current study, however, is the relative influence of organizational culture, and the interplay of national and organizational cultures on teachers´ perceptions of leadership. As the following section will demonstrate, organizational culture, especially when consciously developed and nurtured, often has the power to transcend basic national cultural values.

Organizational Influences on Perspectives of Leadership

As the previous section demonstrated, national culture has a powerful influence over perspectives held by individuals regarding leadership (Den Hartog et al., 1999, Hofstede, 1980, 2001; House et al., 2002, 2004; Triandis, 1995, 1998). The GLOBE research project proposed a theoretical model for interplay between implicit leadership theories founded on societal norms, values and practices, and the form, culture and practices of organizations (House et al., 2002).

One of the key assumptions of the GLOBE theoretical model, however, is that the cultural values of leaders in an organization parallel the cultural values of workers in the organization, both of which contribute to the culture of the organization itself. Indeed, in most cases organizations are founded in one cultural setting by leaders who espouse the culture of that setting. However, leaders in many international schools are often selected due to their American, British, Canadian or Australian cultural and linguistic background, while the schools they are asked to lead are located in diverse cultural settings and with multi-cultural teacher staffs. The GLOBE research program was openly critical of Hostede´s (1980) cross-cultural findings, citing the employment of all of his survey subjects by a single multi-national company (IBM) as a limitation of his country-specific generalizations. According to House (2004), Hofstede´s data was highly influenced by the American organization in which the respondents worked. Through his criticism of Hofstede, House demonstrated support for the idea that leaders of organizations may be able to import leadership styles from outside of the local culture, and through consistent, and assumedly effective, implementation of the leadership style, also influence the innate responses to leadership of the workers within the organization. Northouse (2007) suggested that organizational culture, distinct from the culture of the local or national context, is developed by organizations sharing their expectations with workers both formally and informally. While not always positive, organizational culture has frequently been demonstrated to highly influence employee perception, sometimes over and above the influence of their national culture (Schein, 2010; Smylie, 1992; Trumbull, Pacheco, Institute of Education Sciences, & Education Alliance at Brown University, 2005).

Trumbull et al. (2005) conducted a six-year longitudinal study which assessed the extent to which training within an organization could change teachers´ practices and styles of

communication. The study found the training to effectively lead to new cultural awareness and understanding, which in turn led to altered practices by the teachers in and outside of the classroom (Trumbull et al., 2005). Important to the results of the study, teachers reported greater success in their relationships with students and parents due to the training they had received. The sense of achievement they experienced may have acted as a powerful motivator for teacher acceptance of the new model, as previously demonstrated by Schwartz (1995). Similarly, the sense of effectiveness fits the theoretical model proposed by House et al (2004), forming a reinforcing motivational loop together with teacher acceptance of models of leadership. While the degree to which teachers involved in the Trumbull et al. (2005) study changed their practices varied, the study provided evidence that all of the teachers involved had internalized and applied the new ideas in some way. These changes were found to have improved parent involvement in school which ultimately had positive effects on students (Trumbull et al., 2005).

Basis for Research Study

      Perception of leadership in international contexts. Education is not the only field seeking to import leadership models around the world. The International Civil Aviation Organization (ICAO) conducts crew resource management (CRM) in all 185 member states (Helmreich & Foushee, 1993; Merritt, 2000). While standardization would seem to promote greater air safety, the ICAO experienced difficulties creating standardized operating procedures for such a culturally diverse range of pilots. Even in such a highly specialized, highly regulated profession, national culture still exerted a meaningful influence on attitudes and behaviors over and above the occupational context (Merritt, 2000). For example, when introducing American pilots into East-Asian airlines, the Asian pilots reported that, "everything will be okay as long as everyone follows standard operating procedures (SOP)" (Merritt, 2000, p.297). However, the

American pilots reported the Asian pilots' "inflexibility" and inability to deviate from the SOPs when necessary. The ICAO´s experience parallels Hofstede´s findings of high levels of uncertainty avoidance in Asian cultures, and very low levels of uncertainty avoidance in US culture (1980). Similarly, professional training programs exported directly from the US were not well received in other cultures. For example, the indication that junior crew members should be assertive and question decisions and actions by the captain was often met with incredulity in high power distance cultures, where tradition dictates that juniors do not question their superiors (Helmreich & Merritt, 1998).

In the evening of January 25th, 1990, Flight 52 from Bogotá to New York crashed into a small town in Long Island killing 8 crew members and 65 passengers. After extensive review of the tragedy, the National Transportation Safety Board (NTSB) determined the probable causes of this accident to include the failure of the flight crew to adequately manage the airplane´s fuel load, and their failure to communicate an emergency fuel situation to air traffic control, responsible for determining the priority of landings (1993). The NTSB cited a lack of standardized terminology for pilots and controllers for minimum and emergency fuel states. Merritt and Helmreich (1996) are researchers within the field of aviation who have taken a deeper look at the accident and the specific causes of the fatal communication breakdown. After careful review of the communication log between the Colombian first officer and American air traffic controller, the two researchers suggested that national culture played a much larger role than initially considered. Borrowing from cross-cultural psychology, the researchers used the construct of leadership-followership to explain why the terminology used by the Colombian crew was mitigated and lacked the directness and assertiveness necessary to convince the control tower of the urgency of the situation. Other pilots have since come on record to express the

same, albeit uncomfortable conclusion regarding the role of national culture; "Look, no American pilot would put up with that. That´s the thing," Ratwatte said. "They would say, ´Listen, buddy. I have to land.´" (Gladwell, 2008, p.202).

Merritt (2000) collected survey data from 9,400 male commercial airline pilots in 19 countries to perform a replication study of Hofstede's indexes of national culture. His data demonstrated significant replication for all of Hofstede´s indexes, including a correlation of .96 with Hofstede´s dimension of Individualism-Collectivism, and a correlation of .87 with Hofstede´s dimension of Power Distance (Merritt, 2000). Merritt concluded that strong correlation of pilot national culture with indicators of Hofstede´s cultural dimensions confirmed national culture to exert an greater influence on pilot behavior than the professional culture of pilots, and demonstrated "one size fits all" training to be inappropriate (p.299).

The ICAO has now applied social and cognitive psychology to their training and CRM strategies, cognizant of cross-cultural differences which may influence crew behaviors more than the professional culture of aviation (Kanki, Helmreich & Anca, 2010). In much the same way, the current study proposes a deeper understanding of the influences of national and organizational cultural on imported leadership styles in schools. Social, cognitive and cross-cultural psychology have found many examples of predictable differences in perception between people from diverse cultural backgrounds, yet these differences are largely ignored by professional orientation and development efforts within international schools with staff from diverse cultural backgrounds, such as American-accredited schools in Colombia.

Research has demonstrated repeatedly that leadership practices cannot be extracted from their socio-cultural contexts; leadership is situated in cultural, historical, and institutional settings (Spillane, 2005, p.22). Inadequate awareness of international variations in cultural systems,

including values, can only serve to promote failure. The current study has been proposed to help increase awareness of international and organizational variations, and thus facilitate the use of successful leadership practices in international schools.

Structural Framework

A thorough review of literature in the areas of educational leadership and cross-cultural analysis supports the following structural framework for the three research questions examined in the study:

Figure #2: Graphic representation of structural framework for Research Question #1
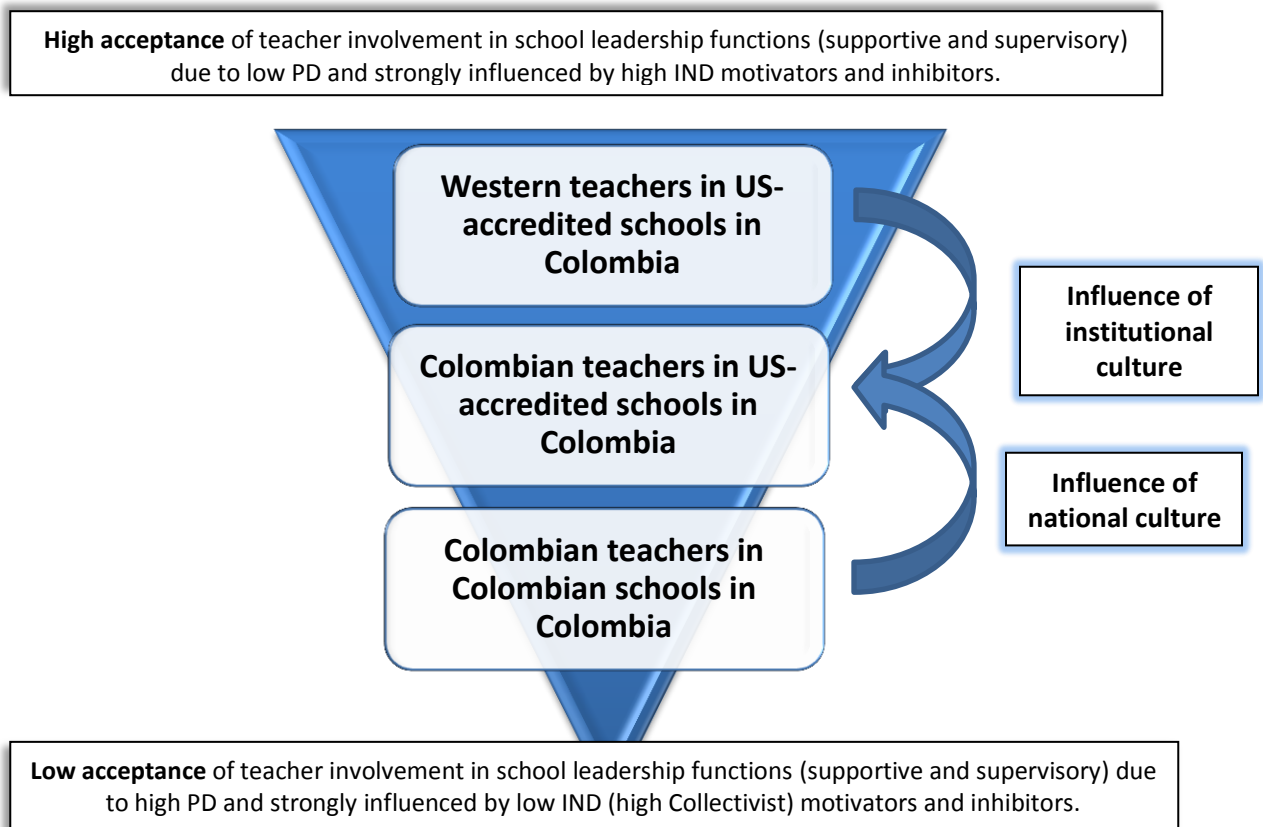
Chapter 3: Methodology

The review of literature revealed commonalities between the perceptions of distributed leadership held by teachers in the US, UK, Canada, and Australia. Teachers in all four countries demonstrate openness to participation in both supportive and supervisory school leadership, and openness to support and supervision which came from other teachers. While many teachers agree in theory with the concept of distributed school leadership, current literature demonstrates that the most successful programs in each of the four countries are those which provide extra time to perform leadership functions, thus incentivizing and enabling lateral collaboration (Fullan, 2007; Hargreaves & Fink, 2008; Seashore Louis, Marks, & Kruse, 1996). The aim of this study was to use the trends found in literature regarding perceptions of distributed leadership held by teachers working in the US, UK, Canada, and Australia to create and test a hypothesis comparing the perceptions of teachers from the same national backgrounds working in American-accredited schools in Colombia, Colombian teachers working in the same schools in Colombia, and Colombian teachers working in Colombian schools with no international ties or predominant influence.

Study Design

In order to permit triangulation of data from multiple sources, the study employed a mixed method (Creswell & Plano, 2007) design. Initially, teachers from each of the three categories located within Colombia completed an online survey based on the Distributed Leadership Inventory created by Hulpia et al. (2009). An online survey represents a cost-effective method for obtaining anonymous data concerning difficult to observe phenomena such as values and perceptions from a large number of respondents (Gall, Gall & Borg, 2007). Quantitative results from the survey were used to satisfy two goals for the survey: (i) confirm if

the two-factor structure discovered by Hulpia et al. (2009) was supported by new data, and (ii) identify quantitative scores for each group in the study regarding acceptance of teachers outside of leadership roles performing specific school leadership functions.

After examining the results of the online survey, I performed three focus group interviews to complement and deepen the quantitative findings. I performed one focus group interview with a self-selected sample of Colombian teachers. I performed a second focus group interview with a self-selected sample of teachers from the US, UK, Canada and Australia. I performed a third focus group interview with a self-selected sample of school leaders. Data from the focus group interviews allowed me to triangulate the overall data collected for the study and obtain a more secure understanding of the issues involved (Maxwell, 2005). Each step of the mixed method study design is further explained below.

Tool for quantitative data collection. I created an electronic survey using Zoomerang, an online, electronic survey service (www.zoomerang.com) to obtain quantitative data from teachers in Colombia identified for the study. The survey implemented an adapted version of the Distributed Leadership Inventory (DLI) (Hulpia et al., 2009), with two additional questions. Hulpia et al. (2009) developed the DLI in order to create a quantitative tool for examining practices of distributed leadership in terms of the core functions of school leadership. Eleven core functions of school leadership were identified in current literature by Hulpia et al. (2009) and supported through confirmatory factor analysis of their data, reducing the functions into two factors: i) school leadership which supports staff, and ii) school leadership which supervises staff. All 11 school leadership functions identified by Hulpia et al. (2009) and used in the present study can be found in Figure 3 below. The modified tool required respondents to use a 5-point Likert scale (0-4) to rate the extent to which certain individuals should perform each of

Figure 3. 11 School leadership functions identified by Hulpia et al. 2009

Leadership Function	Leadership Factor
(a) Debating the school vision	Supportive Leadership Functions
(b) Complimenting teachers	
(c) Supporting teachers pedagogically	
(d) Explaining his/her critical comments to teachers	
(e) Being available after school to help teachers when assistance is needed	
(f) Looking out for personal welfare of teachers	
(g) Encouraging teachers to pursue their own goals for professional learning	
(h) Encouraging teachers to try new practices consistent with their interests	
(i) Providing organizational support for teacher interaction	
(j) Involved in formative evaluation of teachers	Supervisory Leadership Function
(k) Involved in summative evaluation of teachers	

the leadership actions. For the purpose of the current study which specifically aimed to acquire data on perceptions of leadership functions and the degree of openness towards distributed leadership, I modified the tool in the following three ways:

1.   I changed the wording of the initial question from "is involved in" to "should be involved in" to allow for responses which are more judgment-based than observation-based and therefore facilitate greater insight into the role of culturally-generated perceptions of respondents.

2.   Hulpia et al. (2009) identified the narrow focus of individuals possibly practicing school leadership functions as a limitation of their study. They recommended future research to also include informal leadership exercised by individuals who are not in formally designated leadership positions (Hulpia et al., 2009). Based on their recommendations, rather than using the

original categories for individuals possibly involved in leadership functions in a school (Principal, Vice Principal, Teacher Leaders) I broadened the range of possible school leaders by including teachers not currently in a formal leadership role (Principal and Vice Principals, Formal Teacher Leaders, and Other Teachers). My goal was to identify if differences exist in how each group perceives the degree of leadership that should regularly be assumed by teachers compared to that which should only be assumed by individuals in formal roles.

3.   I added two questions which directly ask respondents to identify and evaluate the factors which they feel are most important when considering if teachers would or would not assume a larger leadership role in their schools. The questions regarding motivators and inhibitors to teacher leadership were included to support conclusions which would be useful for school leaders seeking to implement models of distributed leadership in international contexts. The responses collected for these two questions directly answered my second and third research questions, and played a large role in defining the questions in the subsequent focus group interview.

Figure 4 demonstrates a questions and methods matrix (Maxwell, 2005, p.102) explaining the direct links between research questions and items in the survey. I first shared the survey instrument with a panel of teachers, teacher leaders and school leaders to assess the clarity, length and content, incorporating suggestion which improve the instruments validity. Once the panel had reviewed the instrument, I piloted the modified DLI with the complete teaching faculty at a US-accredited international school in Colombia not included in the study. A secondary objective of the initial pilot was to ensure that the online data collection system was satisfactory before administering the survey to a larger group of teachers across the country. Administration of the pilot survey required permission from the school director and support from principals

Figure 4. Relationship between research questions and survey items

Research Question	Survey Items
RQ1: What differences exist in the degree to which each of the following groups of teachers accepts teacher involvement in **(i) supportive** and (ii) supervisory leadership functions within their school? • CASK (US, UK, Canadian, and Australian) teachers in US-accredited schools in Colombia • Colombian teachers in US-accredited school in Colombia • Colombian teachers in Colombian schools in Colombia	Items 9a-i
RQ1: What differences exist in the degree to which each of the following groups of teachers accepts teacher involvement in (i) supportive and **(ii) supervisory** leadership functions within their school? • CASK (US, UK, Canadian, and Australian) teachers in US-accredited schools in Colombia • Colombian teachers in US-accredited school in Colombia • Colombian teachers in Colombian schools in Colombia	Items 9j-k
RQ2: What do each of the above groups perceive as the primary motivators for increasing distributed leadership in schools?	Item 10
RQ3: What do each of the above groups perceive as the primary inhibitors to distributed leadership in schools?	Item 11

within the school, as well as permission from the Lehigh University Institutional Review Board (IRB). After piloting the modified DLI, reviewing the data and online data collection process, and making any necessary changes to the survey, I presented my completed study proposal to a dissertation committee. Once the proposal was accepted, I applied for IRB approval to send the survey to eight other American-accredited schools in Colombia and three Colombian schools not accredited by the US.

Sample. To address the goal of examining organizational influences on teacher perceptions, the US-accredited schools selected for participation in the survey needed to demonstrate a strong cultural identity from the US, UK, Canada, or Australia. Research has not clearly established specific leadership traits, a minimum time period, or specific contextual elements needed to create an organizational culture which differs from that of the geographical

context. Thus, to ensure that the data from this study is clear and replicable, I established the following three criteria when defining US-accredited schools for participation in the study:

1. The school must have been US-accredited for at least 10 years at the date of the study. Of the 13 schools in Colombia with US-accreditation status at the time of the study, four schools had either received accreditation status within the past 10 years or were currently under advisement. To obtain and maintain US-accreditation status, schools must demonstrate consistent adherence to a specific set of standards produced by US-accreditation agencies (AdvanED, 2011). School accreditation is re-visited on a 5-year cycle, requiring schools with at least 10 years of accreditation status to have successful demonstrated adherence to the set of standards at least twice since initial accreditation. For this reason a 10-year minimum for accreditation status was applied as a selection criterion.

2. The school must have a school director originally from the US, UK, Canada, or Australia. Research has demonstrated the important role a school director plays in developing and fostering school culture and transforming teacher perspectives (Lucas, 2001; Tomon, McDowelle, & East Carolina University, 2009).

3. At least 20% of the school´s teachers must be from the US, UK, Canada, or Australia. Until recently, the maximum proportion of expatriate teachers allowed by Colombian law was 25%. Although research does not clearly demonstrate a clear proportion of school faculty needed to influence school culture, the presence of teachers from CASK countries in a school is likely to play an important role.

To obtain perception data from Colombian teachers in schools located in Colombia which are not accredited in the US I also surveyed a convenience sample of three Colombian

independent schools selected from those with students from a matching socio-economic status as the selected US-accredited schools. The three Colombian schools selected for the study were not accredited outside of Colombia, the school directors all had Colombian nationality, and the maximum percentage of teachers from the US, UK, Canada, and Australia was 5%. Once all of the schools were identified, I requested permission from each school head to distribute the electronic survey to all teachers working within each of the schools. I also obtained permission from the Executive Director of the Tri-Association of American schools of Central America, Colombia-Caribbean and Mexico.

Once permission to administer the survey was granted, I sent the electronic survey in English and Spanish to the school heads and principals of all schools participating in the study, and requested that they share the survey with the entire faculty. I included a paragraph which each principal could read to their faculty to introduce and contextualize the survey prior to sharing the survey link. The survey itself included a cover letter for respondents which explained the intent, extent, risks and rewards of the study. The survey links were active for two months. After the first month I sent a follow-up email to all school heads to request that they send an email to all staff, thanking teachers who have cooperated with the study and offering general encouragement to others who may not yet have completed the survey.

Determining acceptable sample size. Multiple guidelines exist for determining minimum sample size for performing factor analysis. Habing (2003) recommended obtaining at least 50 observations, and at least 5 times as many observations as variables (p. 3). Field (2000) suggested obtaining 10-15 subjects per variable (p.443). For studies using factor analysis, Bartlett, Kotrlik, and Higgins (2001) suggested a minimum of 100 observations, noting that higher sample size will decrease the level at which an item loading on a factor is significant.

Ultimately, the sample sizes can be smaller if factor loadings are more frequent and higher (Field, 2000; Habing, 2003). The research questions guiding the current study identified two distinct variables to be examined: (i) national culture and (ii) organization culture. However, the combination of variables yielded a total of four distinct groups, three of which will be examined in the study: (i) CASK teachers working within US-accredited schools, (ii) Colombian teachers working within US-accredited schools, and (iii) Colombian teachers working within Colombian-accredited schools. To satisfy Field´s (2000) more stringent requirement for minimum sample size, this study required between 30 and 45 respondents.

Cochran (1977) offered a now widely accepted formula for calculating sample size (Bartlett, Kotrlik, & Higgins, 2001). To use Cochran´s formula, certain acceptable values must first be determined by the researcher: the Alpha level, the standard deviation in the population, the acceptable margin of error for the study, and the overall population for the study. The alpha level of the study refers to the level of acceptable risk of producing a Type I or Type II error. The most commonly used Alpha level in most educational research studies is .05, which is the level which was used in this study. The assumed standard deviation for responses to questions within the study is calculated by dividing the number of points on the scale by six, which is the number of standard deviations which would include approximately 98% of responses. The acceptable margin of error for the mean being estimated is calculated by multiplying the number of points on the scale by the acceptable margin of error, which will be set at .03. The overall population for the study is approximately 700. Thus, using Cochran´s formula the required sample size for this study is approximately 118. However, Cochran also provides a correction formula to be used in case the initial calculation for sample size exceeded 5% of the overall

population. As 118 exceeds 5% of 700, the correction formula determines a minimum return sample size of 100.

Quantitative data analysis. All survey results were collected using the online polling service Zoomerang. To search for differences in the degree to which each of the demographic groups involved in the study accepted teacher involvement in (i) supportive and (ii) supervisory leadership functions within their school, the data was examined using descriptive and inferential statistical tools. First, the mean, mode, and standard deviations for each set of data were compared to identify initial differences between the descriptive data. The functions of school leadership which each demographic group in the study perceived to be (i) most and (ii) least ideally performed by each set of individuals in schools were reported to check for initial similarities between the survey data and findings by Hulpia et al. (2009). The two sets of functions found by Hulpia et al. (2009) to be classified as (i) supportive leadership functions and (ii) supervisory leadership functions were used to separate and compare the means of survey responses by each demographic group. Exploratory factor analysis (EFA) was used to identify subsets of the data which replicated and which did not replicate the 2-factor model (supportive/supervisory leadership functions) found by Hulpia et al. (2009) (Stevens, 2002). Confirmatory factor analysis (CFA), using the 2-factor model, was used to examine response data from each group to survey questions 9a-k regarding the extent to which teachers not in leadership positions should practice each of the school leadership functions identified by Hulpia et al. (2009). The CFA identified exactly which leadership functions were perceived by each demographic group involved in the study to most strongly group into each of the two identified factors (supportive/supervisory leadership functions.)

To allow for inferential conclusions, multivariate regression analysis was performed using the means of leadership functions with strong factor loadings in (i) supportive and (ii) supervisory leadership functions according to the CFA of data. Multiple regression analysis determined the relationship between (i) national culture and (ii) organizational culture and the extent to which respondents felt teachers should be involved in school leadership. Once relationship models were found, I calculated R-square values to assess the variability and fit within the model. I specifically sought to identify functions of leadership which respondents from each group felt should be performed by teachers who are not formal leaders, either in addition to or instead of being performed by formal leaders themselves.

Definition of terms. As already outlined in the literature review section, researchers have not provided a clear consensus regarding the definition of national culture in such a way that it could be operationalized and thus used in empirical research. However several key arguments enjoy wide-spread acceptance in cross-cultural literature: (a) national culture has a significant influence on the values and choices assumed by individuals (House, Wright, & Aditya, 1997; Schwartz, 1995; Triandis, 1996), (b) while in-country variations do exist, overall data from each country can be generalized and indexed for comparative uses (Hofstede, 1980, 2001; House et al., 2004), and (c) countries can be clustered according to similarities in country-wide statistical outcomes (Hofstede, 1980; House et al., 2004; Triandis, 1995). The literature review demonstrated specific examples of ways in which school systems and individuals in the US, UK, Canada, and Australia have undertaken similar shifts from traditional power hierarchies to distributed leadership models. The current study employed national culture as a categorical grouping variable, and each respondent was assumed to represent the national culture of the country they selected as their nationality. However, if no significant link had been found

between national culture and perceptions regarding distributed leadership, data obtained from

respondents on the number of years spent outside of the country of their nationality would also

have been used to inversely scale the degree to which each respondent was typical of their

national culture. Similarly, the organizational culture of each respondent was defined

categorically as the culture of the school in which they are currently working, regardless of the

length of time each individual had worked in their current school and hence been surrounded by

their school´s culture. If initial analysis had revealed no significant link between the current

school in which respondents were working and their perceptions on distributed leadership, then

data on the number of years each respondent had worked in their current school would have been

used to scale the degree to which they were typical of the organizational culture of their school.

Distributed leadership has received an increasing amount of attention in recent research.

Although a universally-accepted definition does not exist for distributed leadership, this study

will use a definition which has received frequent use by leading researchers in the area. This

study will define distributed leadership as, "decision making and influential practices performed

by personnel at multiple levels in an organization instead of individual leaders at the top of an

organizational hierarchy" (Grant, 2011, p.8; Leithwood, Mascall, Strauss, Sacks, Memon, &

Yashkina, 2006). To compare the acceptance levels of distributed leadership by each group, a

ratio was created indicating (i) the degree to which each group perceived teachers and teacher

leaders to be qualified and responsible for performing key school leadership functions, and (ii)

the degree to which each group felt only principals and vice principals should perform leadership

functions.

Grouping and Outcome Variables

The survey asked teachers to define the extent to which leadership functions in schools should be performed by individuals from each of three different categories in schools: (i) principals and vice principals, (ii) teacher leaders, and (iii) other teachers. Since the study compared the responses of multiple groups but did not use random assignment of treatment, the study follows a relational, non-experimental design. The two grouping variables for this study were (i) the national culture of respondents, and (ii) the organizational culture within which respondents are currently working. The outcome variable for this study was the degrees to which respondents from each group felt that school leadership functions should be performed by teachers outside of formal leadership positions.

Perception data collected from Colombian teachers working in US-accredited schools in Colombia was compared to perception data collected from Colombian teachers working in Colombian schools in Colombia. A multiple regression analysis allowed me to search for and assess the significance of differences in perceptions between the two sets of data. The data also revealed if differences between the two organizational settings influence teacher perceptions of distributed leadership to a greater or lesser extent than the national culture of teacher respondents.

Motivators and inhibitors for distributed leadership in schools. I analyzed the results from survey questions 10 and 11 to identify the predominant motivators and inhibitors of distributed leadership reported by teachers of each cultural group and institutional setting. The data profile created for each group regarding perceptions of distributed leadership was used to redefine the theoretical framework for the study. The revised theoretical framework helped identify gaps in understanding and elements of the research questions which remained unanswered and therefore required greater investigation through qualitative means.

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Qualitative Data Collection. Hulpia et al. (2009) identified a need for qualitative triangulation of the data they compiled using the Distributed Leadership Inventory. Oliva (2000) states that mixed method study design allows researchers to, "identify, learn and make use of multiple discourses and meaning systems so as to resist privileging any one of them" (p.41). After completing the stage of quantitative data collection and analysis I used the modified conceptual framework to create a structured focus group interview schedule (Creswell & Plano, 2007). Kitzinger (1994) specifically explored the methodology and techniques of focus group interviews through her analysis of discussions with research participants in the AIDS Media Research Project. She concluded that, due to the inherent interactions that occur during focus group interviews, data obtained from the interviews is often much richer and honest than data obtained from individual interviews. Focus group interviews offer researchers the advantage of allowing for natural interactions between group members, and may prevent against extreme or falsely reported perceptions (Maxwell, 2005). The focus group interviews deepened the study´s understanding of the influences of national and organizational cultures on teacher perceptions of distributed leadership by explaining and identifying possible causality for the patterns indicated by the quantitative analysis. The structured interview was designed to triangulate the initial data from the survey, as well as to further explore and understand the motivators and inhibitors of distributed leadership reported by each cultural group and institutional setting. After identifying the specific limitations of the data from the survey and research which prevented me from fully answering the research questions, I included interview questions which allowed me to directly answer the research questions (Creswell & Plano, 2007; Krueger, Casey, 2009).

A secondary goal of this research study was to further our understanding of cross-cultural borrowing in areas such as education. The study sought to examine differences in perceptions

between teachers from different cultural backgrounds, as well as to identify the ways in which institutions such as schools may positively alter culturally-influenced perceptions of distributed leadership. As stated earlier, cross-cultural research on perceptions of leadership outside of CASK settings often indicates a resistance to shared or democratized decision-making and power (Hofstede, 2001; House, & Global Leadership and Organizational Behavior Effectiveness Research Program, 2004). The setting of the interviews, therefore, was as important to my data collection process as was the selection of the individual teachers within the setting (Miles & Huberman, 1984). For this reason, the setting in which I conducted interviews to triangulate and illustrate the initial data from the survey was selected purposefully (Maxwell, 2005) to obtain clear insight into ways in which culturally-influenced perceptions have been inversely influenced by an organization. In order to better understand the ways in which organizational culture interacts with national culture I performed the interviews in the US-accredited school involved in the initial study in which Colombian respondents demonstrated the strongest overall acceptance of distributed leadership. I did not perform similar interviews in a Colombian school not accredited in the US because I did not wish to further broaden the scope of the study. Future research may choose to use tools such as focus group interviews to obtain data from Colombian teachers teaching in schools in Colombia which do not demonstrate a strong international culture. Data from Colombian teachers working in Colombian schools could be directly compared to data from teachers working in schools which are located in, and considered to be strongly representative of, other countries.

Teachers from throughout the school chosen for the three focus group interviews, representing a large range of educational and professional backgrounds, were asked to volunteer to participate in focus group interviews. Self-selected participants more readily offer perspectives

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and open participation (Maxwell, 2005). Questions for the interviews were selected with the

goal of clarifying data and patterns from the quantitative survey. Four questions were initially

chosen to guide the focus group interviews however question strategies including the use of

direct questions, contextual responses, invitations for open discussion, role playing scenarios and

other interviewing techniques were used to promote maximum interaction between participants

(Maxwell, 2005). Each focus group interview lasted between 30 and 90 minutes. All notes

taken during the interview sessions, as well as transcriptions of the audio recordings of the

sessions, were coded and compared to the modified conceptual framework as steps in the

sequential explanatory framework. A finalized conceptual framework was created once all of the

data was collected and analyzed.

Potential Limitations

This study had several limitations which reduced generalizability. Most limitations were

unavoidable, and did not conflict with the study´s goal of deepening understanding of the central

phenomena. For example, as stated earlier, within-country cultural variance was largely ignored

by the study design. Commonly accepted definitions of culture have included evidence of shared

practices and values that evolve over time and help human communities survive and stay

together (House, 2002; Schein, 1992). The use of the construct of national culture as a grouping

variable for the study implies levels of cultural uniformity within each country which allow for

statistical and conceptual generalizability at a national level. Hofstede (1980), House (2004),

Triandis (1995) and Schwartz (1992) all acknowledged the empirical limitations to their research

which are caused by within-country and even within-region variance, but have not agreed upon

an adequate statistical tool for including variance in their analyses. While within-country

variance undoubtedly plays a role in differences in teacher perceptions, the statistical complexity

of calculating and analyzing the variance exceeded the scope of this study.

The scope of the study was relatively small. A conscious decision was made to only include US-accredited schools in Colombia, as well as only three schools in Colombia which were not US-accredited, due to the manageability of the data and my relationship with each of the schools and school leadership.   Similarly, the qualitative data collection was limited to three focus group discussions to provide data which complimented and deepened the initial survey data, but was also manageable for a single researcher within a limited time frame.

Pilot Study Findings

The pilot study was conducted with the staff of the US-accredited international school in Colombia in which I was working as the Elementary principal. Links for completing versions of the survey in English or in Spanish were sent to all members of the teaching staff. Of a population of 72 teachers, 44 responded to the survey, including 32 Colombian, and 12 American and Canadian teachers. The Colombian responses represented a 56% response rate for Colombian staff, while the 12 American and Canadian responses represented an 80% response rate for CASK staff. Overall, a 61% response rate was recorded for the pilot survey.

The online survey measured teacher perceptions of the degree to which i) principals and vice principals, ii) teacher leaders, and iii) teachers not in official leadership positions should ideally be involved in 11 distinct functions of school leadership. The questions employed a Likert-scale with answers ranging from 0, indicating "not involved", to 4, indicating "fully involved". Aggregate scores were calculated for each function of leadership by multiplying the number of responses in each of the five options by the associated value, and then adding the totals. A mean of all aggregate scores was calculated to demonstrate the degree of overall acceptance of involvement of each group in leadership functions as perceived by i) Colombian

and ii) CASK teachers. The mode of each set of data was also calculated to indicate the most

frequently reported responses. All data can be found in Table 3. Colombian and CASK teachers

Table 3. Mean and mode of reported scores by teacher cultural group for desired involvement of various individuals in school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)

		CASK (N=12)	Colombian (N=32)
Principals and Vice Principals	mean	3.38	3.74
	mode	4	4
Teacher Leaders	mean	2.17	3.51
	mode	2	4
Other Teachers	mean	1.69	2.75
	mode	1	2

agreed that principals and vice principals should be fully involved in all functions of school

leadership, however Colombian teachers indicated a significantly higher acceptance than CASK

teachers in regards to teacher leaders and teachers not in formal leadership positions being

involved in functions of school leadership. Multivariate regression tests intended to examine

causal-comparative relationships between responses from each cultural group and acceptance

levels of teacher involvement in school leadership were not performed due to the small sample

size of the pilot survey.   Hulpia et al. (2009) proposed school leadership to be comprised of 11

individual functions. Differences between the aggregate scores of each of the 11 individual

leadership functions which were perceived by survey respondents to be ideally performed by

each of the three groups were also examined. For the purpose of analyzing and comparing pilot

survey data, scores for each leadership function which were between 10% and one standard

deviation higher than the mean of aggregate scores for each group were considered high scores.

Scores more than one standard deviation higher than the mean of aggregate scores for each group

were considered extremely high. Similarly, scores for each leadership functions which were

between 10% and one standard deviation below the mean of aggregate scores for each group were considered low, and scores more than one standard deviation lower than the mean of aggregate scores for each group were considered extremely low. Leadership functions which obtained scores which were high, extremely high, low, and extremely low are listed in Table 4.

Table 4. Reported Leadership Functions Which are Extremely High, High, Low, or Extremely Low, According to Accepted Involvement by Group

	CASK Respondents (N=12)	Colombian Respondents (N=32)
Principals and Vice Principals		
Extremely High	None	None
High	Supporting teachers pedagogically	Complimenting teachers
Low	None	None
Extremely Low	None	None
Teacher Leaders		
Extremely High	Supporting teachers pedagogically	None
High	Complimenting teachers Encouraging teachers to try new practices consistent with their interests Providing organizational support for teacher interaction	Explaining his/her critical comments to teachers
Low	Explaining his/her critical comments to teachers	Being available after school to help teachers when assistance is needed
Extremely Low	Involved in formative evaluation of teachers Involved in summative evaluation of teachers	None
Teachers Not in Formal Leadership Positions		
Extremely High	Debating the school vision Supporting teachers pedagogically	None
High	Complimenting teachers Looking out for personal welfare of teachers	Complimenting teachers Explaining his/her critical comments to teachers Looking out for personal welfare of teachers
Low	Explaining his/her critical comments to teachers Providing organizational support for teacher interaction	Being available after school to help teachers when assistance is needed Involved in formative evaluation of teachers Involved in summative evaluation of teachers
Extremely Low	Involved in formative evaluation of teachers Involved in summative evaluation of teachers	None

Parallel to findings by Hulpia et. al (2009), most supportive leadership functions were perceived to be ideally practiced by all groups within the school setting. In contrast, supervisory leadership functions, such as formative and summative teacher evaluation, were not perceived to be ideally performed by teachers not in formal leadership positions. CASK teachers appeared to

be particularly against the idea of being evaluated by teachers not in positions of school leadership. Data from the pilot study survey did not match the study´s hypothesis. The review of literature demonstrated increasing acceptance in the US, UK, Canada, and Australia of distributed leadership in schools, however, data from the pilot study indicated that Colombian teachers actually demonstrate greater acceptance of teacher involvement in school leadership. The pilot study acted as a clear test for the data collection system for the larger online survey used to collect quantitative data for the study. In addition, the results from the pilot study questioned the study´s hypothesis and further demonstrate a strong need for collecting more robust quantitative data to answer the study´s central research questions.

Chapter 4: Findings

Descriptive Findings from Online Survey

A total of 385 people from 11 different schools throughout Colombia responded to the online survey. Of the 115 teachers from CASK countries who responded to the online survey, 87 were from the US, 20 were from Canada, 4 were from the UK, and 3 were from Australia. The overall response rate was 32.5%, with individual school response rates ranging from 19.4% to 73.4%. Response rates for each participating school can be found in Table 5.

Table 5. Response rate of participating schools

School	# Responses in English	# Responses in Spanish	Total	Total # of Teaching Staff	Response Rate
A	47	10	57	294	19.4%
B	44	36	80	144	56.7%
C	11	16	27	122	22.1%
D	12	9	21	88	23.9%
E	16	20	36	64	56.3%
F	13	22	35	118	30.7%
G	9	15	24	62	38.7%
H	18	29	47	64	73.4%
I	7	18	25	100	25.0%
J	1	14	15	45	33.3%
K	1	17	18	85	21.2%
Total	**179**	**206**	**385**	**1186**	**32.5%**

Demographic profile of sample. Information which may have facilitated the identification of individual respondents, such as names or teaching responsibilities, was not required for completion of the online survey. Data regarding gender, teaching experience, years at the current school, and years spent abroad were collected to provide a demographic profile of each sample of teachers, and to examine each continuous variable as a possible predictor variable for teacher perceptions of distributed leadership. All demographic information collected by the survey is presented in Table 6, separated into data from each of the groups identified in the study.

Table 6. Demographic indicators for samples of respondents to online survey

		Total	CASK Teachers in US-Accredited Schools	Colombian Teachers in US-Accredited School	Colombian Teachers in Colombian Schools
Number		385	115	213	57
Gender	Female	266 (69%)	75 (65%)	148 (69%)	43 (75%)
	Male	119 (31%)	40 (35%)	65 (31%)	14 (25%)
Teaching Experience (years)		11.57	8.24	14.00	9.26
Years at School		6.21	2.49	9.01	3.26
Years Abroad		3.35	6.29	2.53	.53

Assumptions. Data produced by the online survey was analyzed for reliability using

Cronbach´s Alpha (α) measure of unidimensionality. Cronbach´s Alpha scores greater than .70

are generally considered reliable in social science research (Cohen, 1988). Overall Cronbach´s

alpha scores regarding the extent to which the 11 leadership functions were practiced by each

school group were all within acceptable rates, ranging from .819 (extent to which principals and

vice principals should be involved in school leadership functions) to .905 (extent to which

teachers not in formal leadership positions should be involved in school leadership). All three

subsets of respondents also produced Cronbach´s Alpha scores between .786 (principal / vice

principal involvement in leadership, as reported by Colombian teachers in US-accredited

schools), and .912 (teachers not in formal leadership positions, as reported by Colombians

working in Colombian schools). All scores for Cronbach´s Alpha are given in Table 7.

Table 7: Cronbach´s Alpha (α) Values for Test Items

Items Regarding Involvement in Distributed Leadership in Schools	All data (N=385)	CASK Teachers in US-Accredited Schools (N=115)	Colombian Teachers in US-Accredited School (N=213)	Colombian Teachers in Colombian Schools (N=57)
Principals and Vice Principals	.819	.816	.786	.835
Teacher Leaders	.889	.837	.890	.881
Teachers Not in Formal Leadership Roles	.905	.839	.902	.912

Univariate normality. Skewness values indicate the degree of asymmetry in the

distribution for a set of data (Glass & Hopkins, 2008). Kurtosis values compare the frequency of

extreme scores within the data set to those found within a normally distributed set of data (Glass & Hopkins, 2008). Schumacker and Lomax (2004) suggested that skewness and kurtosis values between -1 and 1 would adequately meet the multivariate normality assumption. Many of the survey items demonstrated skewness and kurtosis values well outside of the range of acceptable values offered by Schumacker and Lomax (2004). Most of the skewness values were negative, indicative of a curve of frequency data in which many responses are within the higher possible scores, with a tail extending down into the lower scores. The only data which demonstrated a positive skewness value, indicating a larger number of low responses than high responses, was data regarding the involvement of teachers in summative evaluation (skewness=.159). A wide range of kurtosis scores were found, suggesting responses which ranged from distributions grouped tightly around a mean, in the case of kurtosis values above 1.0, or distributions spread out evenly across the range of possible responses. Most kurtosis values were very high, which is typical of data from a 5-point likert scale which does not allow for a broad range of responses. All values for skewness and kurtosis of response data for questions evaluating the involvement of principals and vice principals (questions 7a-k), teacher leaders (questions 8a-k), and other teachers (questions 9a-k) can be found in Table 8.

Findings from Online Survey Regarding Research Question #1

The first research question which guided this study was:

RQ1: What differences exist in the degree to which each of the following groups of teachers accepts teacher involvement in (i) supportive and (ii) supervisory leadership functions within their school?

- CASK (US, UK, Canada, and Australia) teachers in US-accredited schools in Colombia
- Colombian teachers in US-accredited schools in Colombia
- Colombian teachers in Colombian schools in Colombia

Table 8. Distribution values for response data regarding the extent to which principals and vice principals, teacher leaders, and other teachers should be involved in school leadership functions
(5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)

		Principals and Vice Principals	Teacher Leaders	Other Teachers
	Valid scores	N=385	N=385	N=385
(a)	Mean (Mode)	3.33 (4)	2.80 (4)	2.71 (4)
	SD	.880	1.096	1.176
	Skewness	-1.140	-.645	-.613
	Kurtosis	.436	-.282	-.516
(b)	Mean (Mode)	3.57 (4)	3.29 (4)	2.93 (4)
	SD	.768	.961	1.148
	Skewness	-1.853	-1.342	-.905
	Kurtosis	3.003	1.352	-.003
(c)	Mean (Mode)	3.47 (4)	3.42 (4)	2.91 (4)
	SD	.753	.822	1.052
	Skewness	-1.468	-1.438	-.727
	Kurtosis	2.214	1.916	-.134
(d)	Mean (Mode)	3.68 (4)	3.32 (4)	2.75 (4)
	SD	.629	.941	1.283
	Skewness	-2.288	-1.507	-.738
	Kurtosis	6.073	2.125	-.558
(e)	Mean (Mode)	3.13 (4)	2.88 (4)	2.18 (2)
	SD	.919	1.115	1.351
	Skewness	-.812	-.857	-.124
	Kurtosis	.020	.084	-1.140
(f)	Mean (Mode)	3.56 (4)	3.14 (4)	3.00 (4)
	SD	.772	1.084	1.158
	Skewness	-1.974	-1.175	-.966
	Kurtosis	3.851	.537	-.016
(g)	Mean (Mode)	3.56 (4)	3.18 (4)	2.77 (4)
	SD	.694	.965	1.159
	Skewness	-1.655	-1.159	-.615
	Kurtosis	2.828	1.009	-.469
(h)	Mean (Mode)	3.49 (4)	3.32 (4)	2.82 (4)
	SD	.757	.871	1.089
	Skewness	-1.652	-1.399	-.631
	Kurtosis	3.205	2.097	-.391
(i)	Mean (Mode)	3.53 (4)	3.16 (4)	2.52 (4)
	SD	.681	.964	1.327
	Skewness	-1.478	-1.176	-.447
	Kurtosis	2.416	1.099	-.945
(j)	Mean (Mode)	3.56 (4)	2.82 (4)	2.13 (4)
	SD	.709	1.260	1.505
	Skewness	-1.784	-.865	-.103
	Kurtosis	3.397	-.257	-1.147
(k)	Mean (Mode)	3.46 (4)	2.66 (4)	1.84 (0)
	SD	.810	1.331	1.526
	Skewness	-1.594	-.756	.159
	Kurtosis	2.316	-.543	-1.423

In many instances, survey respondents perceived major differences in the extent to which principals and vice principals, teacher leaders, and other teachers should practice each of the 11 identified functions of school leadership. Figures #5 to #13 demonstrate the frequency of each response for each of the three groups included in the study regarding the extent to which they perceived each group of individuals in schools to be ideally involved in school leadership.

Figure 5. Ratings for extent to which CASK teachers in US-accredited schools reported they felt principals and vice principals should be involved in performing 11 functions of school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)
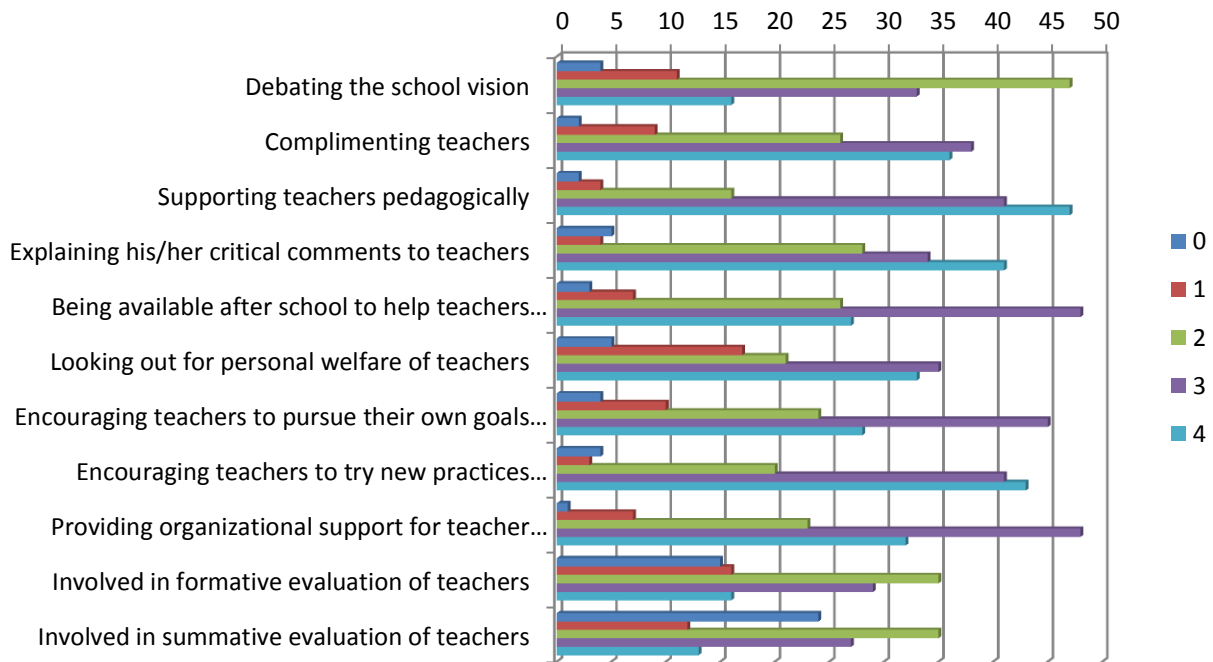
Figure 6. Ratings for extent to which CASK teachers in US-accredited schools reported they felt teacher leaders should be involved in performing 11 functions of school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)
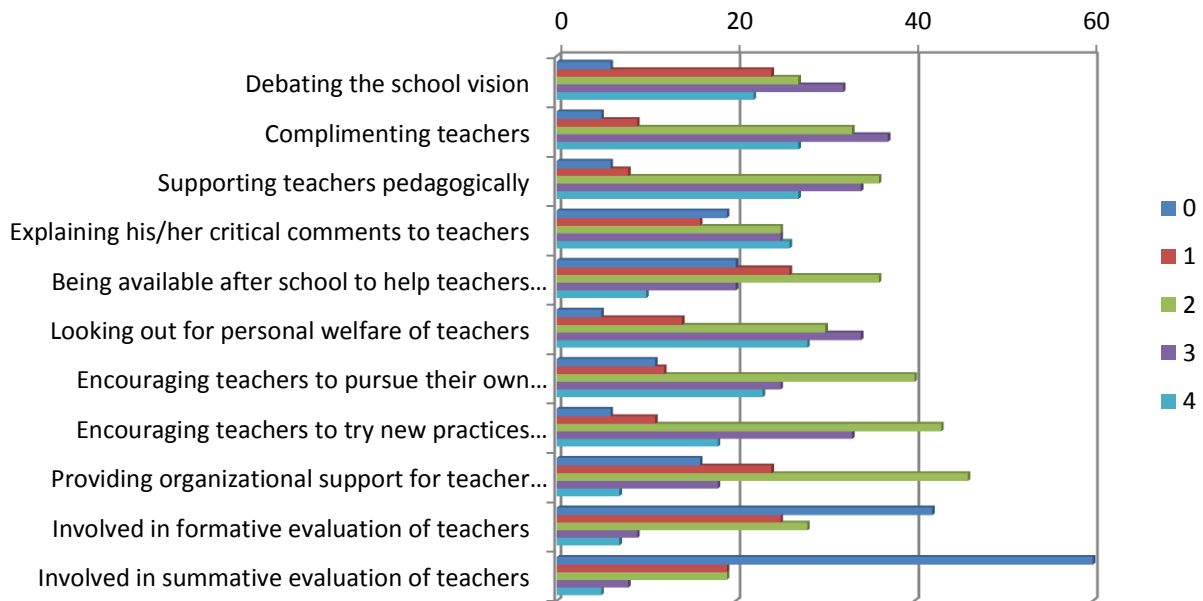
Figure 7. Ratings for extent to which CASK teachers in US-accredited schools reported they felt other teachers should be involved in performing 11 functions of school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)
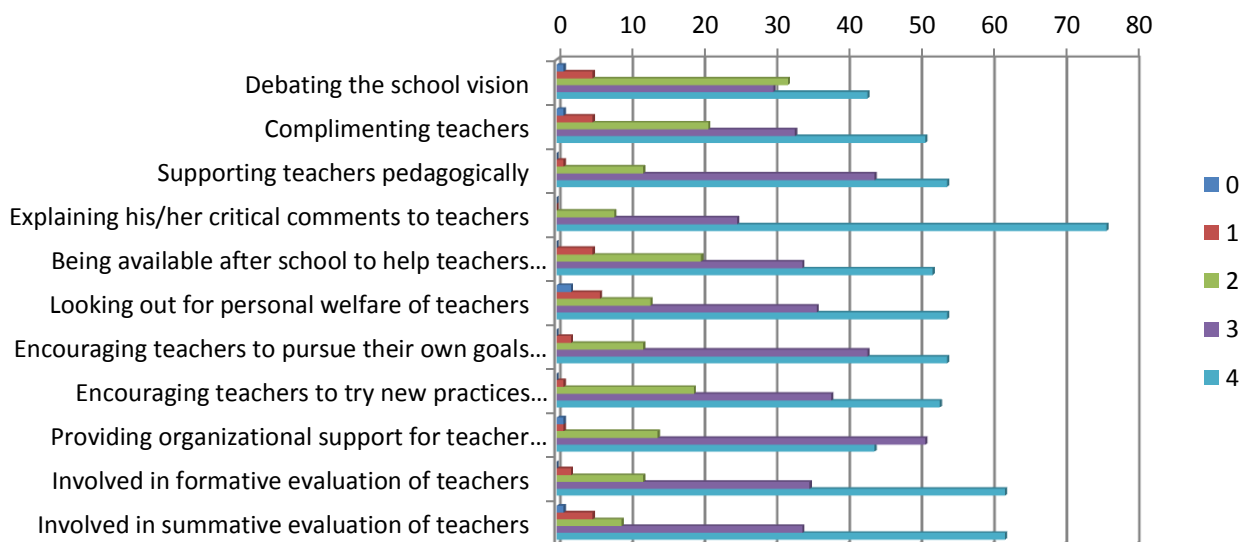
Figure 8. Ratings for extent to which Colombian teachers in US-accredited schools reported they felt principals and vice principals should be involved in performing 11 functions of school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)
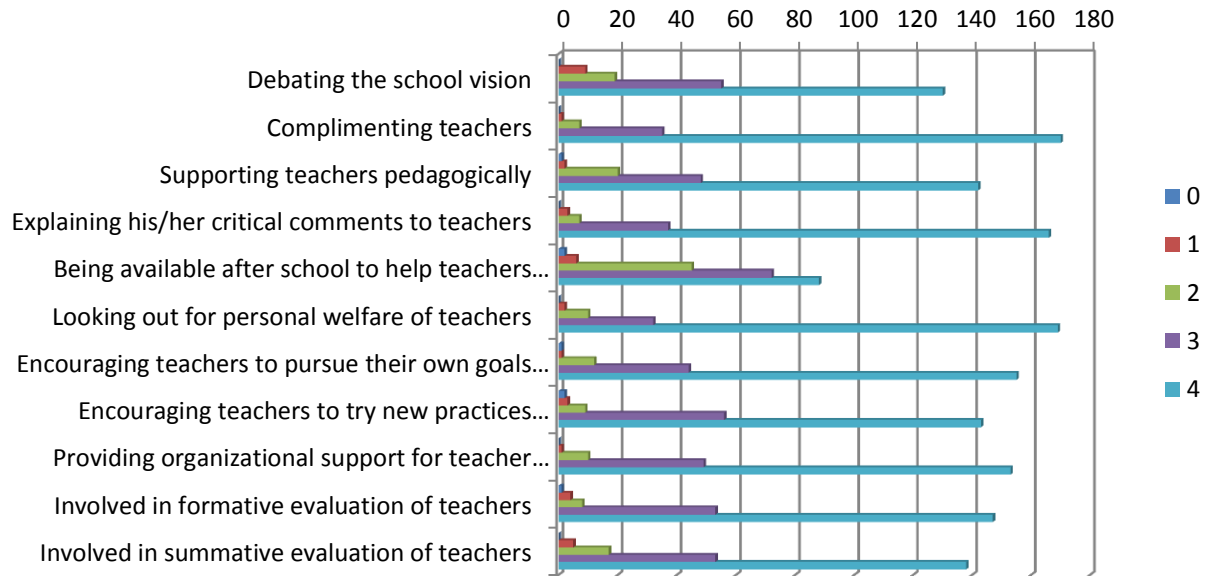
Figure 9. Ratings for extent to which Colombian teachers in US-accredited schools reported they felt teacher leaders should be involved in performing 11 functions of school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)
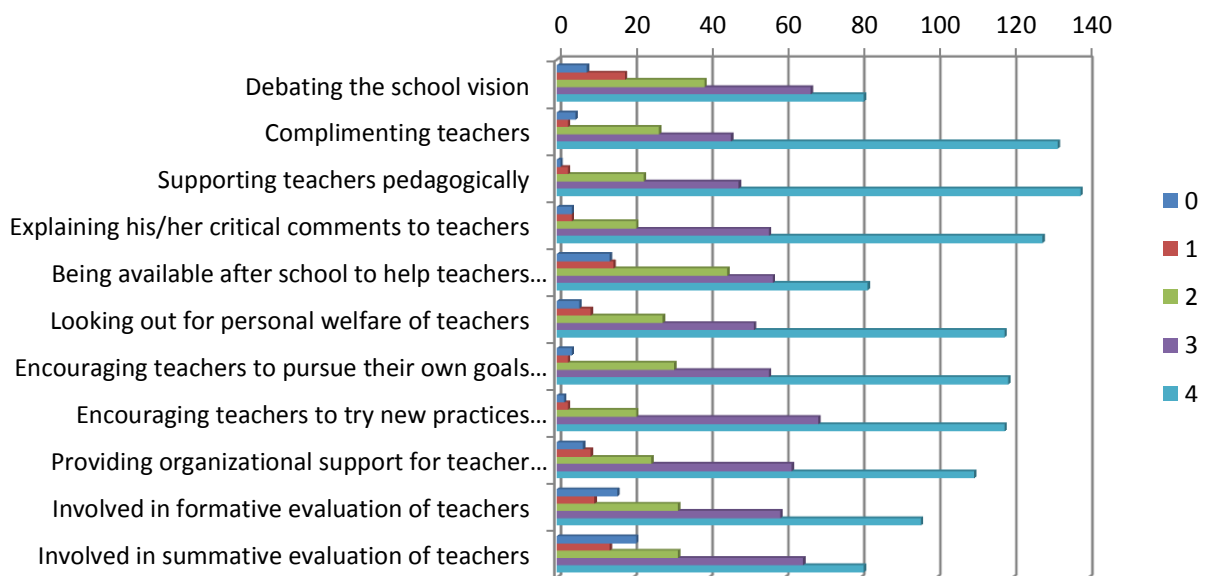
Figure 10. Ratings for extent to which Colombian teachers in US-accredited schools reported they felt other teachers should be involved in performing 11 functions of school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)
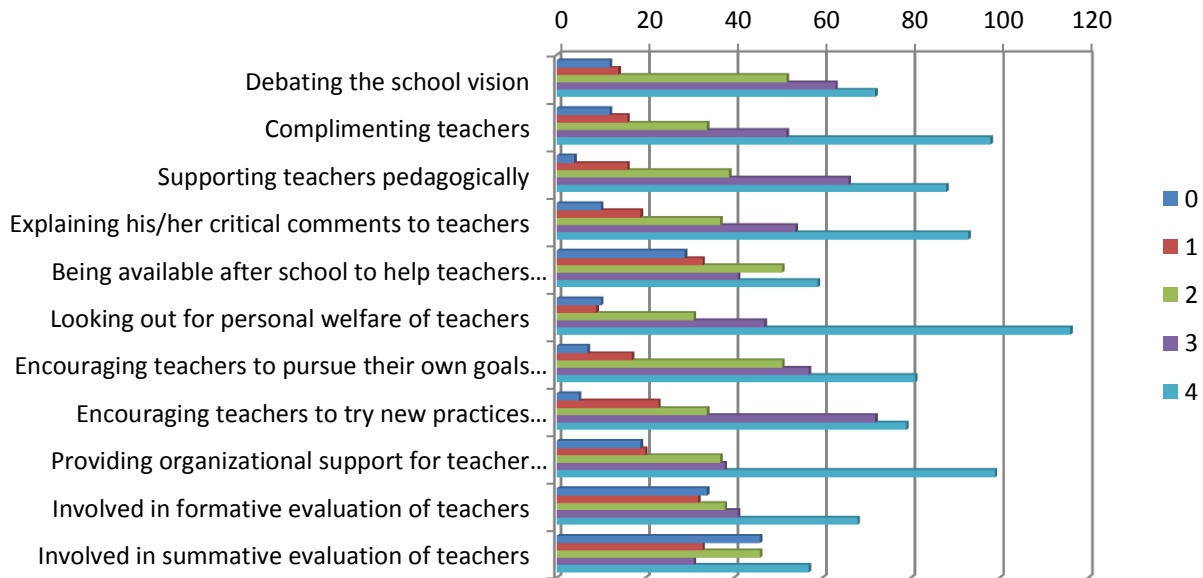
Figure 11. Ratings for extent to which Colombian teachers in Colombian schools reported they felt principals and vice principals should be involved in performing 11 functions of school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)
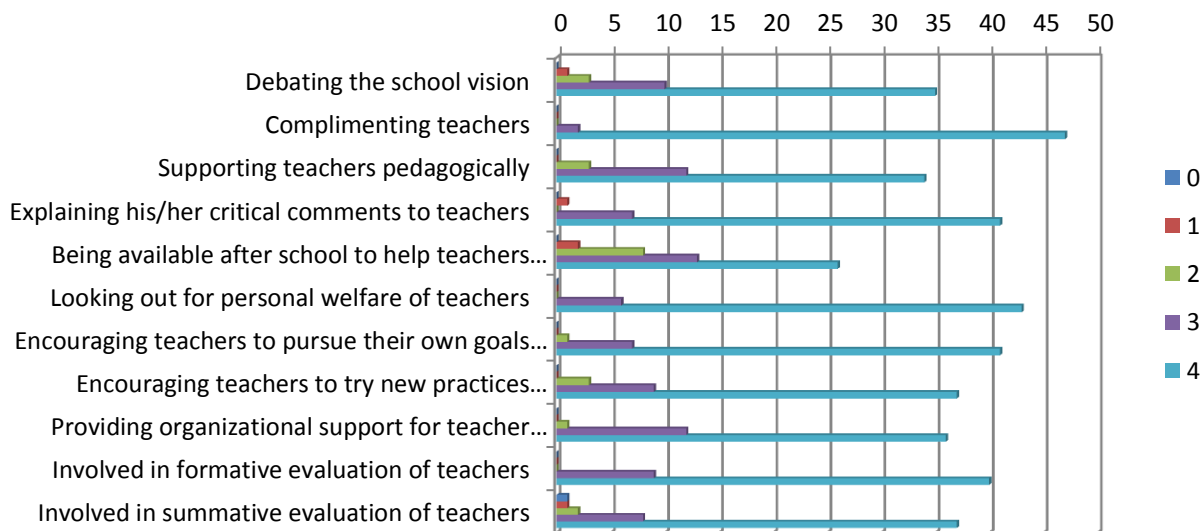
Figure 12. Ratings for extent to which Colombian teachers in Colombian schools reported they felt teacher leaders should be involved in performing 11 functions of school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)
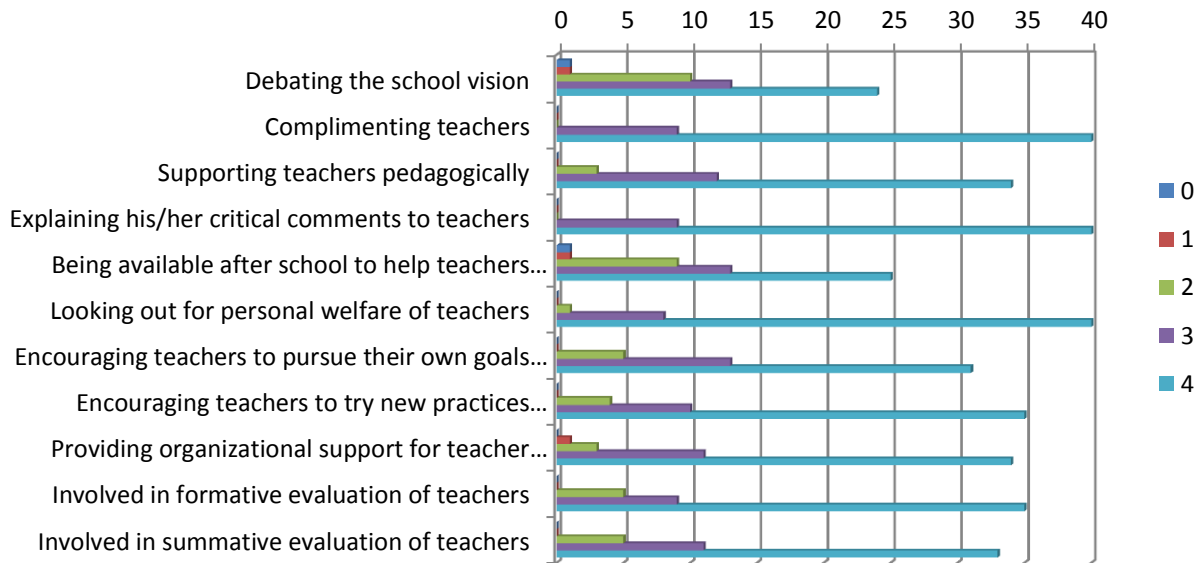
Figure 13. Ratings for extent to which Colombian teachers in Colombian schools reported they felt other teachers should be involved in performing 11 functions of school leadership (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)

Initial comparative analysis of the means reported by each group indicates several clear

trends. Comparative data from each of the respondent groups can be found in Table 9.

Table 9. Extent to which teachers reported they felt each group of individuals should be involved in performing 11 functions of school leadership, with highest and lowest rated functions given (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)

		All data	CASK teachers in US-accredited schools in Colombia	Colombian teachers in US-accredited school in Colombia	Colombian teachers in Colombian schools in Colombia
	N	385	115	213	57
Principals and Vice Principals	Mean Mode SD t-value sig. (2-tailed)	3.49 4 .46 149.716 .000	3.28 4 .49 71.172 .000	3.57 4 .39 132.298 .000	3.71 4 .46 58.905 .000
	Highest rated function (mean)	Explaining his or her critical comments to teachers (3.68)	Explaining his or her critical comments to teachers (3.62)	Complimenting teachers (3.76)	Complimenting teachers (3.74) Looking out for personal welfare of teachers (3.74)
	Lowest rated function (mean)	Being available after school to help teachers when assistance is needed (3.13)	Debating the school vision (3.00)	Being available after school to help teachers when assistance is needed (3.12)	Being available after school to help teachers when assistance is needed (3.07)
Teacher Leaders	Mean Mode SD t-value sig. (2-tailed)	3.12 4 .72 84.034 .000	2.72 3 .66 43.711 .000	3.18 4 .71 65.536 .000	3.58 4 .50 53.126 .000
	Highest rated function (mean)	Supporting teachers pedagogically (3.41)	Supporting teachers pedagogically (3.18)	Supporting teachers pedagogically (3.50)	Explaining his or her critical comments to teachers (3.74)
	Lowest rated function (mean)	Involved in summative evaluation of teachers (2.66)	Involved in summative evaluation of teachers (1.95)	Involved in summative evaluation of teachers (2.80)	Debating the school vision (3.16) Being available after school to help teachers when assistance is needed (3.16)
Other Teachers	Mean Mode SD t-value sig. (2-tailed)	2.66 4 .90 56.495 .000	2.08 2 .72 30.664 .000	2.76 4 .88 45.614 .000	3.28 4 .82 28.436 .000
	Highest rated function (mean)	Looking out for personal welfare of teachers (3.01)	Complimenting teachers (2.63)	Looking out for personal welfare of teachers (3.17)	Complimenting teachers (3.39)
	Lowest rated function (mean)	Involved in summative evaluation of teachers (1.85)	Involved in summative evaluation of teachers (0.91)	Involved in summative evaluation of teachers (2.09)	Being available after school to help teachers when assistance is needed (2.51)

Predictably, all three groups of respondents indicated that the individuals who should most

perform leadership functions in schools are principals and vice principals (mean of total data =

3.49). Conversely, all three groups indicated that teachers not in formal leadership roles should

be least involved in performing school leadership functions (mean of total data = 2.66). Contrary

to the study´s hypothesis, and parallel to findings in the pilot study, CASK teachers demonstrated

the lowest overall acceptance of teachers not in leadership roles performing leadership functions

(mean = 2.08). Colombian teachers working in Colombian schools reported the highest overall

acceptance of teachers not in leadership roles performing leadership functions (mean = 3.28).

The strongest levels of within-sample agreement for each demographic subset of respondents

were found in the data from CASK (SD=.49) and Colombian (SD=.39) teachers working in

US-accredited schools, and Colombian teachers working in Colombian schools (SD=.46) in

responses related to the involvement of principals and vice principals in school leadership

functions. The lowest levels of within-sample agreement for each demographic subset of

respondents were found in the data from CASK (SD=.72) and Colombian (SD=.88) teachers

working in US-accredited schools, and Colombian teachers working in Colombian schools

(SD=.82) in responses related to the involvement of teachers outside of formal leadership

positions in school leadership functions.

Data from Colombian and CASK teachers working in US-accredited schools in Colombia

were compared to evaluate significance levels for the equality of variance and the equality of

means between the two groups. When determining variance among response data regarding

principal and vice-principal involvement in school leadership functions, Lavene´s Test for

Equality of Variance demonstrated unequal variance between data from Colombian and CASK

teachers (F=9.034; sig.=.003). The same analysis performed using response data regarding the

involvement of teacher leaders in school leadership functions demonstrated equal variation

(F=1.120; sig. =.291). Using response data regarding the involvement of all teachers in school

leadership functions, Lavene´s Test for Equality of Variance demonstrated unequal variation (F=10.326; sig. =.001). Using t-tests for independent means to examine the equality of means, the null hypothesis was rejected for all three sets of responses. Rejection of the null hypothesis indicated significant differences between the data from each demographic group in regard to all three sets of questions, and suggested national culture to act as a possible predictor variable for perceptions regarding involvement in school leadership. As explained in the Methodology chapter of this study, the role of national culture as a possible predictor variable was later analyzed and discussed using multiple regression analysis. Table 10 lists all findings for equality of variance and equality of means between data from the two demographic groups regarding the involvement of principals and vice-principals, teacher leaders, and other teachers in school leadership functions.

Similar statistical analysis comparing data from Colombian teachers working in US-accredited schools in Colombia to that of Colombian teachers working in Colombian schools in Colombia was performed to evaluate significance levels for the equality of variance and the equality of means between the two groups. When determining variance among response data regarding principal and vice-principal involvement in school leadership functions, Lavene´s Test for Equality of Variance demonstrated unequal variance between data from Colombian teachers in the two different organizational settings (F=.018; sig.=.893). The same analysis performed using response data regarding the involvement of teacher leaders in school leadership functions demonstrated equal variation (F=9.732; sig. =.002). Using response data regarding the involvement of all teachers in school leadership functions, Lavene´s Test for Equality of Variance demonstrated unequal variation (F=1.712; sig. =.192). Using a t-test to examine the equality of means from teachers in each organizational setting in response to questions

Table 10. Results of independent samples tests comparing the means of data from CASK and Colombian teachers in US-accredited schools in Colombia (5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)

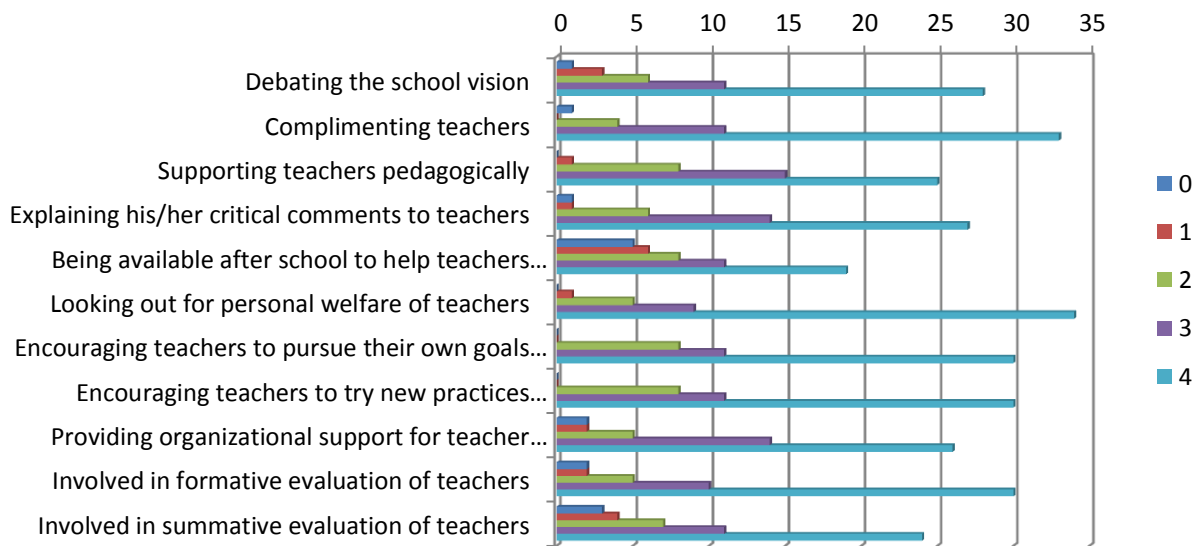|		CASK teachers in US-accredited schools in Colombia	Colombian teachers in US-accredited school in Colombia
	N	115	213
Principals and Vice Principals	Mean Mode SD	3.28 4 .493	3.57 4 .394
	Lavene´s Test for Equality of Variance (alpha=.005)	F=9.034 Sig.=.003 (Unequal variance)	
	T-test for Equality of Means (alpha=.005)	T=5.791 Sig.=.000 (Null hypothesis rejected)	
Teacher Leaders	Mean Mode SD	2.70 3 .661	3.18 4 .708
	Lavene´s Test for Equality of Variance (alpha=.005)	F=1.120 Sig.=.291 (Equal variance)	
	T-test for Equality of Means (alpha=.005)	T=5.890 Sig.=.000 (Null hypothesis rejected)	
Other Teachers	Mean Mode SD	2.08 2 .724	2.75 4 .881
	Lavene´s Test for Equality of Variance (alpha=.005)	F=10.326 Sig.=.001 (Unequal variance)	
	T-test for Equality of Means (alpha=.005)	T=6.995 Sig.=.000 (Null hypothesis rejected)	

evaluating the involvement of teacher leaders in school leadership, the null hypothesis was

rejected (T=4.439; sig.=.000), indicating that mean data from the two groups differed

significantly. However, similar analysis of mean data from the samples of Colombian teachers

in each organizational setting did not reject the null hypothesis in response data regarding the

involvement of principals and vice-principals in school leadership functions (T=.873; sig.=.383).

The null hypothesis was also not rejected when comparing the means of response data regarding

the involvement of all teachers in school leadership functions (T=2.858; sig.=.005), although the null hypothesis was very close to being rejected at an alpha level of .005. A small sample size of Colombian teachers working in schools with a predominantly Colombian organizational culture (N=54), as well as large ranges of responses within the sample of Colombian respondents in US-accredited schools (SD=.881) and in Colombian schools (SD=.795) may explain why the null hypothesis was not rejected at a significant level. As the null hypothesis was very close to being rejected when examining differences in perceptions between Colombian teachers in each organizational setting regarding the role of teachers in school leadership, organizational setting was included in subsequent examination using multiple regression analysis as a possible predictor variable for teacher perception regarding the involvement of teachers in school leadership. Table 11 lists all findings for equality of variance and equality of means between data from Colombian teachers in each of the two organizational settings regarding the involvement of principals and vice-principals, teacher leaders, and other teachers in school leadership functions.

Supportive vs. Supervisory Leadership Functions

As indicated in the analysis of mean data between teachers from each national culture and organizational culture, high standard deviation values indicated high within-group differences in response data. Hulpia et al. (2009) supported a 2-factor model for leadership functions, suggesting an important distinction between leadership functions which are considered supportive of teachers, and leadership functions which are considered supervisory of teachers. When data was divided according to specific functions of leadership which Hulpia et al. (2009) identified as supportive (9) and those considered supervisory (2), the findings demonstrate a clear trend. Values for supportive and supervisory leadership functions are reported in Table 12,

Table 11. Results of independent samples test comparing the means of Colombian teachers in US-accredited schools in Colombia to the means of Colombian teachers in Colombian schools in Colombia *(5-point Likert scale: 0 = Not at all involved; 4 = Fully involved)*

		Colombian teachers in Colombian schools in Colombia	Colombian teachers in US-accredited school in Colombia
	N	54	213
Principals and Vice Principals	Mean	3.63	3.57
	Mode	4	4
	SD	.432	.394
	Lavene´s Test for Equality of Variance (alpha=.005)	F=.018 Sig.=.893 (Equal variance)	
	T-test for Equality of Means (alpha=.005)	T=.873 Sig.=.383 (Null hypothesis not rejected)	
Teacher Leaders	Mean	3.54	3.18
	Mode	4	4
	SD	.484	.708
	Lavene´s Test for Equality of Variance (alpha=.005)	F=9.732 Sig.=.002 (Unequal variance)	
	T-test for Equality of Means (alpha=.005)	T=4.439 Sig.=.000 (Null hypothesis rejected)	
Other Teachers	Mean	3.13	2.75
	Mode	4	4
	SD	.795	.881
	Lavene´s Test for Equality of Variance (alpha=.005)	F=1.712 Sig.=.192 (Equal variance)	
	T-test for Equality of Means (alpha=.005)	T=2.858 Sig.=.005 (Null hypothesis not rejected)	

organized by respondent group. All three groups studied demonstrated high acceptance of

principal and vice principal involvement in supportive and supervisory functions of school

leadership. Contrary to the study´s hypothesis, Colombian teachers working in Colombian

schools also demonstrated high acceptance of all teachers performing leadership functions, while

CASK teachers clearly did not accept the idea of all teachers performing supervisory leadership

Table 12. Ratings for extent to which teachers reported each group of individuals should be involved in performing 11 functions of school leadership organized into supportive and supervisory functions (Rating based on 5-point Likert scale in which 0 = Not at all involved; 4 = Fully involved)

		All data	CASK teachers in US-accredited schools in Colombia	Colombian teachers in US-accredited school in Colombia	Colombian teachers in Colombian schools in Colombia
	N	385	115	213	57
Principals and Vice Principals	Mean of all functions	3.51 (SD=.58)	3.28 (SD=.49)	3.57 (SD=.39)	3.71 (SD=.46)
	Mean of 9 Supportive Leadership Functions	3.51	3.26	3.58	3.71
	Mean of 2 Supervisory Leadership Functions	3.51	3.29	3.56	3.71
Teacher Leaders	Mean of functions	3.12 (SD=.72)	2.72 (SD=.66)	3.18 (SD=.71)	3.58 (SD=.50)
	Mean of 9 Supportive Leadership Functions	3.19	2.84	3.25	3.58
	Mean of 2 Supervisory Leadership Functions	2.77	2.04	2.89	3.59
Other Teachers	Mean of functions	2.66 (SD=.90)	2.08 (SD=.72)	2.76 (SD=.88)	3.28 (SD=.82)
	Mean of 9 Supportive Leadership Functions	2.79	2.30	2.87	3.31
	Mean of 2 Supervisory Leadership Functions	2.06	1.07	2.23	3.15

functions. CASK teachers reported the lowest acceptance levels of teachers not in leadership roles performing supervisory leadership functions in schools, such as formative and summative evaluation of other teachers (mean = 1.07). Colombian teachers working in US-accredited schools reported scores which seemed to indicate influences from their national as well as their institutional cultures. Of the two influences, national culture was a more dominant factor. Analysis of scores from each of the groups indicated that 10% to 41% of the variance in the collective responses given by Colombian teachers working in US-accredited schools is attributed to their nationality, rather than their institutional setting. In response to all three sets of questions, Colombian teachers working in US-accredited schools reported perceptions which less

closely resembled those of the CASK teachers working in the same schools than they did those of Colombian teachers working in Colombian schools. Therefore, while the data from this survey supports the conclusion that institutional culture influences teacher perception, national culture is statistically a much stronger influence.

Factor structure for leadership functions. As previously explained in the review of literature, when creating and using the Distributed Leadership Inventory (DLI) to study the perceptions of 2,198 secondary teachers in Belgium toward distribution of leadership functions, Hulpia et al. (2009) used confirmatory factor analysis (CFA) to support a two-factor structure. The two factors identified by Hulpia et al. were (i) supportive leadership functions, and (ii) supervisory leadership functions. Using CFA, Hulpia et al. (2009) were able to demonstrate a satisfactory model fit for the two factor structure. A one-factor structure was also evaluated due to statistically significant correlation between the two factors, however the one-factor structure demonstrated a poor model fit.

Exploratory factor analysis. Data from the present study was examined using exploratory factor analysis (EFA) to check for a factor structure similar to the two-factor structure found by Hulpia et al. (2009). To perform EFA of data, Hulpia et al. (2009) adopted principal axis factoring with promax rotation (k = 4), which is common when assuming no orthogonality across components and when analyzing large datasets. The current study also assumes no orthogonality across components: Data from questions concerning supportive leadership functions are not considered to be correlated to data from questions concerning supervisory leadership functions. However, the smaller dataset allows for use of varimax rotation, which is more commonly used and yields results which facilitate identification of each variable with a single factor. Hulpia et al. employed parallel analysis in R, with the 95th

percentile as the comparison baseline and 10,000 random data sets, due to the likeliness of the Kaiser-Guttman criterion (K1) to over or underestimate the number of factors in a data set (Bandalos, Boehm-Kaufman, 2009; Henson & Roberts, 2006; Horn, 1965; Pohlmann, 2004; Thompson & Daniel, 1996). The K1 criterion was used in the current study due to its wide-spread acceptance in social science research. To interpret the factors, this study chose factor loadings larger than .50, due to the large number of items contained in the initial tool (Hulpia et al., 2009).

EFA was performed using data from all survey respondents to check for strong factor loadings in their responses. EFA was performed three different times, using survey data regarding the extent to which (i) principals and vice principals, (ii) teacher leaders, or (iii) other teacher should be involved in each of the 11 school leadership functions. Data from the three sets of responses could not be combined due to the very different nature of the questions. To help answer Research Question #1, EFA was then also performed using data from each group identified in the study: (i) CASK teachers working in US-accredited schools in Colombia, (ii) Colombian teachers working in US-accredited schools in Colombia, and (iii) Colombian teachers working in Colombian schools in Colombia. The EFA revealed factor structures ranging from one to three factors. The numbers of factors revealed by performing EFA on each subset of response data is demonstrated in Table 13. While the two-factor structure proposed by Hulpia et al (2009) was paralleled by some of the data subsets, others revealed distinct factor structures. The complete set of data from the current study also revealed a two-factor structure in regards to the leadership functions which should be practiced by principals and vice principals. The two-factor structure was not replicated by response data regarding the ideal role of teacher leaders, and teachers not in formal leadership positions. EFA of data from each demographic subgroup

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Table 13. Number of Factors Extracted Using Exploratory Factor Analysis with a Promax Rotation of 4

	N	Principals / Vice Principals	Teacher Leaders	Teachers
All data	385	2	1	1
CASK teachers	115	2	2	3
Colombian teachers in US schools	213	3	1	1
Colombian teachers in Colombian schools	57	3	2	2

of the current study regarding the ideal involvement of each identified set of individuals within schools did not consistently replicate the two-factor model found by Hulpia et al. (2009).

Differences between the two-factor model found by Hulpia et al. (2009) and the factor models identified in the current study most likely were the results of differences in sample size, differences in sample characteristics, and differences in the phrasing of the question. The study performed by Hulpia et al. (2009) involved 2,198 respondents, while only 446 people responded to the survey used in the current study. Respondents to the survey distributed by Hulpia et al. (2009) were all secondary teachers working in schools in Belgium, while respondents to the current study included teachers from Colombian, the US, UK, and Canada, teaching kindergarten to Grade 12 in schools in Colombia. Additionally, the current study asked teachers to rate the extent to which they felt that teachers should ideally practice each of 11 different school leadership functions, rather than asking them the extent to which they felt that members of the school leadership team actually practiced the 11 school leadership functions.

Confirmatory factor analysis. After performing EFA on data from all demographic subgroups identified in Research Question #1, confirmatory factor analysis (CFA) was performed on the data from each of the groups using a two-factor model to identify leadership functions which loaded most heavily into each factor. The decision was made to employ a two-factor model for CFA for two reasons: (i) observed patterns in response data indicated strong differences between

perceived levels of ideal teacher involvement in the "supportive" versus "supervisory" leadership

functions proposed by Hulpia et al. (2009), and (ii) Research Question #1 of the current study

sought to identify differences between the three demographic groups identified in the study

regarding teacher involvement in "supportive" versus "supervisory" leadership functions. CFA,

using a two-factor model, was performed on survey data which indicated the extent to which

each of the demographic subgroups identified in the study felt that teachers should ideally be

involved in school leadership (survey questions 9a-k). The results of the CFA of survey data

from all respondents can be found in Table 14. The CFA demonstrated non-orthogonality

Table 14. *Confirmatory Factor Analysis of school leadership functions practiced by all CASK and Colombian teachers in US-accredited and Colombian accredited schools in Colombia (N=446), with Promax Rotation of 4, and Kaiser Normalization*

	Factor #1	Factor #2
9(f)	.883	-.156
9(c)	.831	-.082
9(b)	.775	-.061
9(i)	.673	.126
9(h)	.648	.197
9(g)	.596	.224
9(e)	.560	.190
9(j)	-.051	.924
9(k)	.048	.846
9(a)	-.113	.719
9(d)	.196	.583

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .917
Bartlett´s Test of Sphericity Sig. = .000

between the two factors represented in the data. The Kaiser-Meyer-Olkin measure of sampling

adequacy demonstrated a level of .917, which is well above the minimum accepted level of .400

(Salkind, 2010). Bartlett´s test of sphericity demonstrated significance, indicating the presence

of multiple factors in the set of data and confirming the need for factor analysis (Salkind, 2010).

An initial examination of findings from the CFA of all survey data supports the

supportive/supervisory two-factor model identified by Hulpia et al. (2009). School leadership

functions such as looking out for the personal welfare of teachers demonstrate strong factor

loading for factor #1, while the two school leadership functions which directly concern

involvement in teacher evaluation load strongly in factor #2. Contrary to finding by Hulpia et al.

(2009), "debating the school vision" and "explaining his/her criticism to teachers" were also

identified as school leadership functions which fit more closely with supervisory leadership

functions than with supportive leadership functions.

To directly answer Research Question #1, further CFA was performed using the data

from each demographic subgroup involved in the study. Findings from the CFA of data reported

by CASK teachers in US-accredited schools in Colombia can be found in Table 15. Largely

parallel to findings from the entire set of data, the data from CASK teachers replicated the

supportive/supervisory model proposed by Hulpia et al. (2009), grouping the leadership function

"explaining his/her criticism to teachers" with the two primarily supervisory leadership

functions, but grouping "debating the school vision" with supportive leadership functions. To

compare response data between CASK and Colombian teachers working within the same

organizational culture, a CFA was performed using data from Colombian teachers working in the

same US-accredited schools in Colombia. Findings from the CFA of Colombian teachers

working in the same US-accredited schools in Colombia can be found in Table 16. Data from

Table 15. Confirmatory Factor Analysis of school leadership functions practiced by all CASK teachers in US-accredited schools in Colombia (N=124), with Promax Rotation of 4, and Kaiser Normalization

	Factor #1	Factor #2
9(b)	.804	-.222
9(c)	.799	-.112
9(f)	.763	-.099
9(h)	.735	.153
9(g)	.647	.172
9(i)	.529	.265
9(e)	.484	.265
9(a)	.352	.197
9(j)	-.195	.980
9(k)	.052	.857
9(d)	.080	.505

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .819
Bartlett´s Test of Sphericity Sig. = .000

Colombian teachers differed from that of CASK teachers working in the same organizational culture. While the supportive/supervisory two-factor model was still supported, Colombian teachers grouped several other leadership functions into the supervisory factor. The two leadership functions primarily aimed at teacher evaluation most strongly loaded into the factor, as did the leadership functions regarding debating the school vision and explaining criticism, however data from Colombian teachers demonstrated their perception of two additional leadership functions as supervisory functions, differing from their CASK counterparts:

Table 16. *Confirmatory Factor Analysis of school leadership functions practiced by all Colombian teachers in US-accredited schools in Colombia (N=249), with Promax Rotation of 4, and Kaiser Normalization*

	Factor #1	Factor #2
9(i)	.958	-.162
9(f)	.864	-.130
9(c)	.646	.123
9(e)	.612	.167
9(g)	.413	.411
9(j)	-.093	.931
9(k)	-.036	.871
9(a)	-.176	.757
9(h)	.222	.609
9(d)	.303	.530
9(b)	.246	.512

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .889
Bartlett´s Test of Sphericity Sig. = .000

"encourages me to try new practices consistent with my own interests," and "compliments teachers".

Data from Colombian teachers working outside of a US-accredited school context was examined using CFA to identify if the data paralleled that of Colombian teachers working in US-accredited schools in Colombia. Findings from the CFA of Colombian teachers working in Colombian schools can be found in Table 17. The resulting factors identified by the CFA of Colombian teachers working in Colombian schools differed greatly from the set of leadership functions grouped into supportive and supervisory leadership functions using the data of other groups in the study.

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Table 17. *Confirmatory Factor Analysis of school leadership functions practiced by all Colombian teachers in Colombian schools in Colombia (N=75), with Promax Rotation of 4, and Kaiser Normalization*

	Factor #1	Factor #2
9(a)	.931	-.459
9(b)	.594	.233
9(h)	.445	.466
9(g)	.427	.493
9(d)	.374	.564
9(c)	.328	.676
9(k)	-.235	.995
9(j)	-.107	.908
9(i)	-.149	.871
9(e)	-.134	.799
9(f)	.143	.737

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .865
Bartlett´s Test of Sphericity Sig. = .000

Regression Analysis of Data from the Online Survey

A regression analysis of all data was performed to allow for statistical inferences from the data collected from the sample of survey respondents to the larger population of Colombian and CASK teachers included in the study. Statistical analysis which employs multiple linear regressions in a causal comparative study attempts to determine relationships between predictor variables (X) and outcome variable (Y), as well as identifying any regression coefficient (β), following the equation $Y=X+\beta$, (Glass & Hopkins, 2008). The regression coefficient represents the amount the outcome variable changes when a specific predictor variable changes by one unit.

The adjusted R^2 value calculated for multiple regression equations is the percent of variance in the outcome variable that is explained by all of the predictor variables.

Mean data from all respondents to questions regarding the extent to which they felt teachers not in leadership positions should ideally practice each of the (i) supportive and (ii) supervisory school leadership functions was used at the outcome variable for regression analysis. Specific leadership functions were included in each group according to the results of the CFA which was performed using all survey data. Hulpia et al. (2009) found participation in summative and formative evaluation of teachers to be the only two leadership functions which could be grouped into the factor "supervisory" leadership functions. Data from the present study supported the inclusion of two other supervisory factors of school leadership functions: Debating the school vision, and explaining his/her criticism to teachers.

To perform the regression analysis, Colombian teachers in Colombian schools were used as the reference group. Values for respondent nationality were coded as 0 (Colombian) or 1 (CASK), and values for school-type were coded as 0 (Colombian) or 1 (US-accredited). In addition to the grouping variables of nationality and school-type identified in Research Question #1, three other continuous predictors variables were included in the regression analysis: (i) number of years teaching at the current school, (ii) total number of years of teaching experience, and (iii) total number of years spent outside of one´s country of birth. The means of data regarding perceptions of teacher involvement in school leadership functions belonging either to supportive or to supervisory factor groups were used as the output variable. Findings from the regression analysis while using all data from the survey can be found in Table 18. For supportive leadership functions, a Pearson correlation coefficient value (R) of .326 indicated respondent nationality was significantly correlated to the outcome variable. The adjusted R-squared value

Table 18. Regression analysis of supportive and supervisory leadership functions for CASK and Colombian teachers in US-accredited and Colombian schools in Colombia (N=385) using hierarchical method

	Descriptive		Variables Entered	Model Summary		ANOVA		Unstandardized Coefficients		
	mean	SD	Predictor(s)	R	Adj R²	F	sig.	β	t	sig
Supportive leadership functions: 9(f), 9(c), 9(b), 9(i), 9(h), 9(g), 9(e)	2.74	.896	1. Nationality	.326	.104	45.109	.000	-.635	-6.716	.000
			2. Nationality, Teaching Experience, Years Abroad, and Years at School	.379	.135	15.852	.000	-.445	-4.053	.000
								.000	-.022	.983
								.010	1.222	.223
								-.034	-4.057	.000
Supervisory leadership functions: 9(j), 9(k), 9(a), 9(d)	2.36	1.10	1. Nationality	.408	.164	75.912	.000	-.976	-8.713	.000
			2. Nationality and School	.437	.191	44.802	.000	-.878	-7.686	.000
								-.508	-3.403	.001
			3. Nationality, School, Years at School Teaching Experience, and Years Abroad	.491	.231	23.928	.000	-.584	-4.372	.000
								-.512	-3.328	.001
								.003	.279	.780
								.017	1.718	.087
								-.047	-4.833	.000

reported respondent nationality alone to account for 10.4 % of variance in scores (*p* < .001). After adding Teaching Experience, Years Abroad, and Years at School, in total 13.5% of variance in scores is explained with an unstandardized slope coefficient of -.45, indicating an inverse relationship with the outcome variable. When all other predictor variables are controlled, CASK teachers, coded as 1, reported scores which were .45 points lower than scores reported by Colombian teachers, coded as 0, when rating the extent to which they felt teachers should be involved in supportive leadership functions. An unstandardized slope coefficient of -.45 within the 5-point Likert scale used to rate ideal teacher involvement in leadership functions, demonstrated respondent nationality to be a significant predictor variable of the outcome variable

($t = 6.72$, $p < .001$). Teaching Experience and Years Abroad were not significantly correlated to reported values of responses regarding teacher involvement in supportive leadership functions. A regression analysis using outcome data from leadership functions which CFA suggested should be grouped in the supervisory category demonstrated both nationality and school to be significantly correlated to respondent data. The adjusted R-squared value for respondent nationality explained 16.4% of variance in scores, while the two variables together accounted for 19.1% of variance ($p < .001$). Nationality, school, years at school, teaching experience, and years abroad accounted for 23.1% of variance ($p < .001$). When all other predictor variables are controlled, CASK teachers, coded as 1, reported scores which were .58 points lower than scores reported by Colombian teachers, coded as 0, when rating the extent to which they felt teachers should be involved in supervisory leadership functions. Nationality again indicated an inverse relationship with the outcome variable, with an unstandardized slope coefficient of -.98. Nationality produced an unstandardized slope coefficient which was significant at a $p < .001$ level and negative, demonstrating Colombian teachers to be significantly more in favor of teacher participation in supervisory leadership than CASK teachers among those involved in the study. The school setting in which respondents were currently teaching also acted as a significant ($p < .001$), negative predictor of scores, with an unstandardized slope coefficient of -.51 when controlling all other predictor variables. Teachers in Colombian schools reported greater acceptance of teacher involvement in supervisory school leadership functions than teachers in US-accredited schools.

Findings from the Online Survey Regarding Research Question #2

The second research question this study proposed in the context of selected schools in Colombia was:

RQ2: What do each of the above groups perceive as the primary motivators for distributed leadership in schools?

To answer the second research question, survey respondents were asked to evaluate the extent to which they felt five different statements expressed why teachers would assume a larger leadership role within their school. The statements were initially proposed by the researcher, and then later modified after reviewing data from the pilot study and receiving feedback from the initial focus panel. As explained in the literature review, Triandis (1998) combined Hofstede´s (1980) dimensions of power distance and individualism to emphasize the important interplay of social relationships and self-concept. Statements were chosen in the current study to examine teacher motivation for involvement in school leadership based on each of Triandis´ four resulting categories. Three of the categories were used to draft statements which were evaluated by respondents, while the fourth category (Horizontal Individualism) was determined to have little to no motivational influence on motivating teacher leadership in schools. Table 19 lists each of the statements which survey respondents were asked to evaluate according to the extent to which the statement expressed why teachers would assume a larger leadership role. Beside each of the statements is the personality category (Triandis, 1998) for which the statement was chosen. Table 20 demonstrates data from each group of survey respondents regarding the extent to which each of the five possible statements reflected a motivation for teachers to assume greater leadership in schools.

Data from the survey demonstrate all three groups of survey respondents to feel teachers to be most highly motivated to get involved in school leadership due to the benefit of teachers sharing their areas of strength. As indicated in Table 14, the act by individuals of sharing their strengths for the benefit of the organization is indicative of the vertical collectivist category

Table 19. Statements which may express why teachers would assume a larger leadership role, and personality category (Triandis, 1998) for which the statement was chosen

Question	Personality Category (Triandis, 1998)
10. (a) Shared leadership is more effective for schools than individual leadership	Vertical Collectivism
10. (b) Teachers have areas of strength they can share	Horizontal Collectivism
10. (c) Teachers may receive time off from teaching responsibilities to help others	Vertical Individualism
10. (d) Assuming more leadership may lead to more money	Vertical Individualism
10. (e) Principals support teachers as leaders	Vertical Collectivism
10. (f) and 10. (g) Other	

Table 20. Highest and lowest reported motivators for assuming greater leadership in schools

Group	Highest Reported Motivator	Lowest Reported Motivator
CASK teachers in US-accredited schools in Colombia (N=124)	Teachers have areas of strength they can share (3.56)	Teachers may receive time off from teaching responsibilities to help others (2.41)
Colombian teachers in US-accredited school in Colombia (N=249)	Teachers have areas of strength they can share (3.86)	Teachers may receive time off from teaching responsibilities to help others (2.11)
Colombian teachers in Colombian schools in Colombia (N=75)	Teachers have areas of strength they can share (3.92)	Teachers may receive time off from teaching responsibilities to help others (1.78)

proposed by Triandis (1998). Inversely, all three groups reported the possibility of time off from teaching to be the lowest reported motivator for teachers. Other statements indicating a tendency towards vertical individualism, such as receiving additional money or support, were scored higher by respondents, adding importance to the low perception of time off from teaching as a strong motivator for teacher leadership. The data suggests a clear response to Research Question #2, and possibly one of the most important conclusions for school administrators who wish to motivate greater teacher leadership in their schools.

Respondents used the undefined opportunities for suggesting and expanding on factors they felt most motivated greater teacher leadership in schools. Each of the statements was coded into one of the four categories proposed by Triandis (1998). Overall results and examples of open responses are listed in Table 21. Statements reflecting vertical individualism and vertical

Table 21. Open responses to question regarding motivating factors for teacher leadership in schools

Category (Triandis, 1998)	Number of Responses	Example
Vertical Collectivism	5	*"Teachers should have more training for being leaders and this issue must be financially supported by the school."*
Horizontal Collectivism	2	*"Teachers feel they have to when asked by principals or it is expected with teaching assignment."*
Vertical Individualism	6	*"Teachers would like to gain experience in leadership roles."*
Horizontal Individualism	3	*"Power over their own work place. Power to make decisions concerning their own work load."*

collectivism were most common, reflecting the motivations for individuals to perform additional work for their own benefit or for the benefit of the organization.

Findings from the Online Survey Regarding Research Question #3

The third research question this study proposed in the context of selected schools in Colombia was:

RQ3: What do each of the above groups perceive as the primary inhibitors for distributed leadership in schools?

Following a similar pattern for review based on the results of the pilot study and revision by a focus panel of teachers, five statements were evaluated by survey respondents to indicate the extent to which they expressed why teachers would not assume a larger leadership role in their

school. Table 22 lists each of the statements which survey respondents were asked to evaluate

according to the extent to which the statement expressed why teachers would not assume a larger

leadership role. Beside each of the statements is the personality category (Triandis, 1998) for

Table 22. Statements which may express why teachers would not assume a larger leadership role, and personality category (Triandis, 1998) for which the statement was chosen

Survey Question	Personality Category (Triandis, 1998)
11. (a) It´s not their job	Horizontal Individualism
11. (b) Assuming more leadership might lead to problems	Horizontal Collectivism
11. (c) Teachers don´t receive extra time for assuming more leadership	Vertical Individualism
11. (d) Teachers don´t receive extra financial incentive for assuming more leadership	Vertical Individualism
11. (e) Principals do not support teachers as leaders	Vertical Collectivism
11. (f) and 10. (g) Other	

which the statement was chosen. Table 23 demonstrates data from each group of survey

respondents regarding the extent to which each of the five possible statements inhibits teacher

leadership in schools. Responses to question 11 indicate a lack of extra time to serve as a strong

Table 23. Highest and lowest reported inhibitors for assuming greater leadership in schools (N=385)

Group	Highest Reported Inhibitor	Lowest Reported Inhibitor
CASK teachers in US-accredited schools in Colombia	Teachers don´t receive extra time for assuming more leadership (3.00)	Principals do not support teachers as leaders (2.07)
Colombian teachers in US-accredited school in Colombia	Teachers don´t receive extra time for assuming more leadership (2.87)	Principals do not support teachers as leaders (2.10)
Colombian teachers in Colombian schools in Colombia	Teachers don´t receive extra time for assuming more leadership (2.59)	Principals do not support teachers as leaders (2.10)

inhibitor for greater teacher leadership, according to all three groups. Comparing responses

between questions 10 and 11, the data suggests that while receiving extra time was not reported

to be a strong motivator for encouraging teacher leadership, lack of extra time does serve as an inhibitor for those teachers who wish to be more involved in school leadership. Data may also have been influenced by the way in which respondents perceived the question. The phrasing of the question included a double negative which may have misled or confused respondents. Triangulation of data, using the subsequent focus group interviews, later helped to clarify the precise perception of teachers regarding the true motivators and inhibitors of teacher involvement in school leadership.

Question 11 also included an opportunity for respondents to suggest another possible inhibitor of teacher involvement in school leadership. Table 24 includes the overall responses and examples of additional inhibitors listed by survey respondents. Most respondents to the

Table 24. Open responses to question regarding motivating factors for teacher leadership in schools

Category (Triandis, 1998)	Number of Responses	Example
Vertical Collectivism	0	None
Horizontal Collectivism	2	*"To avoid playing a losing game - if the administration doesn't care about an area, no amount of work and dedication on the part of the teacher leader is going to make a difference."*
Vertical Individualism	6	*"Too much stress and takes time away from planning for their immediate need to prepare for their own students."*
Horizontal Individualism	3	*"To avoid having to work with other teachers."*

open answer option of question 11 perceived individualist inhibitors to act as the strongest barriers to teacher leadership. The data suggests that teachers who identify strong barriers to involvement in school leadership are focused on direct barriers to their own individual advancement, or prefer organizational structures in which each person is limited to fulfilling their own role.

Findings from Focus Group Interviews

While the data from the online survey is useful for answering each of the study´s three research questions, the focus panel interviews permitted greater depth and clarity of responses (Krueger & Casey, 2009). The specific questions used in focus group interviews often come from the review of literature and research design. Focus group interview questions for the current study are also informed by the pilot study and the online study conducted prior to the focus group interviews. Therefore, all questions included in the focus group interviews either directly answered one of the study´s three research questions or helped clarify gaps or ambiguities in the data collected previously (Krueger & Casey, 2009).

To ensure contextual consistency of answers, the focus group interviews were all conducted with faculty and administrators from the same US-accredited school in Colombia, within a span of 3 days. Three focus group interviews were performed to help deepen and contextualize data from the online survey: (i) a focus group of five Colombian teachers, (ii) a focus group of five CASK teachers, and (iii) a focus group of two school administrators, both of whom were from a CASK cultural background. Four central questions guided each of the focus group interviews. The four questions were complimented by requests for clarification or greater depth of responses, to increase opportunities for spontaneous conversation. All participants were given a printed copy of the online survey which they did not need to fill out, but which could be used to frame their responses. Having a copy of the survey allowed respondents to focus specifically on the 11 functions of leadership proposed by Hulpia et al. (2010), helping participants phrase their answers using similar language to that used in the online survey. Notes were taken during the focus group interviews to indicate responses of each group member, verbal and non-verbal consensus with the responses of others, and minority opinions and examples that

did not fit within the study´s conceptual framework. An audio recording was made of each

interview to allow the responses to be transcribed and coded. The length of time each participant

had spent in the current school and the total number of years spent outside of their home country

was recorded for each participant. Participant names were not recorded to allow for greater

confidentiality and participant trust.

Findings from focus group interview regarding Research Question #1. The first

research question this study proposed in the context of selected schools in Colombia was:

RQ1: What differences exist in the degree to which each of the following groups of teachers
accepts teacher involvement in (i) supportive and (ii) supervisory leadership functions within
their school?

- CASK (US, UK, Canada, and Australia) teachers in US-accredited schools in Colombia
- Colombian teachers in US-accredited schools in Colombia
- Colombian teachers in Colombian schools in Colombia

Table 25 lists each of the questions for the focus group interviews and the strongest responses by

focus group participants. The strength of each response given by focus group participants was

measured by the extent to which other group members agreed, strongly agreed, disagreed, or

strongly disagreed to the initial statement. In addition to verbal indications, nonverbal

communication such as nodding or frowning were recorded in the interview notes and used as

data to indicate support for or disagreement with each statement. Findings from the focus group

interviews regarding perspectives in three emergent areas connected to the focus of the study are

explained below: teacher involvement in the evaluation of other teachers, teacher involvement in

the role of defining the school vision, and teacher involvement in the provision of organizational

support to other teachers.

Table 25. Focus group responses regarding functions of school leadership which should be practiced only by people such as principals or school heads, or which should be practiced by all teachers

Question	CASK Focus Group	Colombian Focus Group	Leadership Team Focus Group
N	5	5	2
What functions of school leadership should <u>only</u> be performed by people such as principals or school heads?	• Formative/summative evaluation of teachers • Debating the vision for the school • Providing teachers with constructive criticism • Providing organizational support for teachers	• Providing organizational support for teachers • Motivating, facilitating, and supervising teacher fulfillment of elements of the school vision • Student discipline decisions	• Summative evaluation of teachers • Providing organizational support for teachers
What functions of school leadership should be practiced by all teachers?	• Implementing new practices • Supporting other teachers in implementing new practices	• Debating the school vision • Formative evaluation of teachers	• All leadership functions except for teacher evaluation, and organizational support

Teacher role in evaluation of other teachers. Data from the focus group interviews of CASK and Colombian teachers supported the findings of the online survey which indicated significantly diverse opinions between CASK and Colombian teachers in respect to teacher involvement in supervisory school leadership functions (Hulpia et al., 2009). The group of CASK teachers interviewed perceived formative and summative evaluation of teachers to be functions of school leadership ideally practiced only by school heads and principals. The group expressed apprehension to being criticized in any way by other teachers, as well as apprehension in being required to criticize their peers. The following comments demonstrated some of the perceptions most strongly supported by the CASK teachers involved in the focus group interview in regards to teacher evaluation:

"In the cultures of some schools some teachers allow for more constructive criticism between teachers, but I think that should be mostly left to [principals and vice principals], it shouldn´t be put on the plate of other teachers…"

"…teachers shouldn´t be required to criticize other teachers, only if the environment is open to that… so it should be I think, for, administrators."

[In response to the question "Which of these school leadership functions would you feel the least comfortable performing as a teacher?"] "Evaluating, definitely. I don´t think that´s my job, whether it´s formative or summative."

"Part of the goal of formative and summative evaluation has to do with hiring and firing… which is not a teacher´s responsibility."

Colombian teachers involved in the focus group interview did not express that principals and school heads should be the only individuals deeply involved in teacher evaluation. The group agreed that formal school leaders needed to be involved in giving teachers critical and formative feedback, with ample time to make changes before they are given their summative evaluation. However, Colombian teachers involved in the focus group perceived formative teacher evaluation to be ideally practiced by all teachers, indicative of a collectivist (Hofstede, 2001) approach to teacher evaluation and school improvement. The following comments demonstrated some of the perceptions most strongly supported by Colombian teachers involved in the focus group interview in regards to teacher evaluation:

"Yo pienso que la participación [de los profesores en la evaluación de otros profesores] debe ser 100%, porque nosotros todos tenemos cada uno unas fortalezas que puede ayudar al otro, obviamente no es una evaluación destructiva, es una evaluación constructiva, es más, en la misma evaluación yo puedo estar aprendiendo también… estoy diciendo qué tan chévere lo que está haciendo esta persona, yo también lo puedo hacer..." (I believe that the participation [of teachers in the evaluation of other teachers] should be 100%, because all of us have strengths that can help others, obviously it is not a destructive evaluation, it´s a constructive evaluation, what´s more, in the same evaluation I can be learning as well… I´m saying, it´s cool what that person is doing, I can do that too…)

"...evaluación significa mejorar, retroalimentar, hacer seguimiento, cambiar… es como una carrera en el cual vamos a ver cómo se hace, por aquí no funcionó, a ver como la hacemos funcionar, entonces hasta que no haya ese cambio es muy difícil involucrarse… primero tenemos que cambiar la concepción que tenemos de evaluación y una vez que cambie el concepto ahí si ya." (…evaluation means to improve, feedback, follow-up, change… it´s like any career in which we say, let´s see how to do it, it didn´t work this way, let´s see how we can make it work, so until you have that change [in attitude] it´s very difficult to get involved… first we have to change the perception we have of evaluation, and once that change is made, it´s starts to work.)

The school administrators involved in the focus group interview, both from a CASK background, expressed their view that teachers should be encouraged to give feedback to each other, but should not be deeply involved in the teacher evaluation process. Both administrators highlighted differences between peer observation which is supportive, and that which is supervisory in nature, indicating control over the latter to be less appropriate for teachers. They also felt that teachers would feel uncomfortable with any role which may influence decisions regarding the remuneration or dismissal of other teachers. The following comments demonstrated some of the perceptions most strongly supported by the leadership team involved in the focus group interview in regards to teacher evaluation:

" I think formative feedback I would say, I don´t know… the word evaluation to me just seems like that´s going to be used for improvement plans and the hiring, firing and renewal and all that."

"…[teachers should] definitely not [be involved in] 11 [summative evaluation of teachers], I wouldn´t want them doing any of that, and if you say heavily involved you´re going back to what [P] was saying because we´re not sure about the word evaluation, you know, if you want them partially involved with formative evaluation, heavily involved in formative support"

"I think if you just look at the two words summative versus formative, for sure summative has to be only principals but depending on, like, I agree, depending on what that is, formative could lead to other things as well…"

"So if that 10 [formative evaluation of teachers] is more of an evaluative type of word versus, you know, end of the year evaluation, and whether they get rehired or not, then I wouldn´t want teacher [cross talk] involved… Exactly"

"Yeah I think, I would say political differences plus they don´t think they have the training necessarily doing it formatively to then say, and based on that you may get a raise, you may not get a raise, you may be dismissed, you know, that goes into your file for years…"

Comments from all three focus group interviews confirmed findings from the online survey regarding the significance of national culture in influencing perspectives concerning

involvement of teachers in supervisory school leadership functions.   These findings are central

to answering Research Question #1 and will be further discussed in the Chapter 5.

Teacher role in defining the school vision. Two other major themes regarding teacher

involvement in school leadership were revealed during the focus group interviews. The topic of

teacher involvement in debating, setting, and fulfilling the school vision was discussed by

teachers in the Colombian and CASK focus groups, and the topic of providing sufficient

organizational support for teachers was discussed by all three focus groups. The two teacher

focus groups demonstrated similar perceptions regarding the individuals in schools who most

ideally should be involved in debating and setting the school´s vision. Both groups of teachers

clearly communicated their perception of principals and school heads as the individuals who

should be most involved in debating and setting the school´s vision. Individuals involved in the

focus group of Colombian teachers expressed that teachers should also be involved in the process

for setting and fulfilling the school vision. Individuals in the CASK focus group agreed that

teachers should develop buy-in for the vision-setting process, but highlighted the important role

of the principal as the person with the ultimate responsibility. The following comments

demonstrated some of the perceptions most strongly supported by the CASK teachers involved

in the focus group interview in regards to teacher involvement in debating and setting the

school´s vision:

"… I think [principals and vice-principals] are seeing they are seeing the bigger picture with the
5-year plan, the 10-year plan, and I think that´s huge with the school vision…"

"…teachers are so just involved in what´s going on in their classroom… and school´s like where
we are now: teachers are here for 2 years, 3 years, generally, principals are thinking more in
terms of the long term vision"

"If the school is restructuring their vision there needs to be buy-in on all levels so we have to
have dialogue with all the different division."

The group of Colombian teachers involved in the focus group interview supported the role of principals and school heads in debating and setting the school´s vision, although they also felt strongly that all employees within a school or company should be familiar with the school vision and should work hard to ensure its fulfillment. Colombian teachers again demonstrated a collectivist approach to school leadership and school improvement initiatives (Hofstede, 2001). The following comments demonstrated some of the perceptions most strongly supported by the Colombian teachers involved in the focus group interview in regards to teacher involvement in debating and setting the school´s vision:

"Todos debemos conocer lo que es la visión de la empresa, la misión, y los reglamentos – o sea, son tres puntos básicos que todo empleado, no solo docentes, debe estar en cualquier momento dispuesto a dar." (All of us should know the company´s vision, the mission and the rules – I mean, they are three basic points that every employee, not just teachers, should be able to provide at any moment.)

"[Los directores deben…] crear un sistema de incentivos para los docentes que se destacan en las metas que se proponga el colegio…" ([Directors should] create a system of incentives for teacher who demonstrate the goals proposed by the school…)

Interviewer: *"Ustedes estaban diciendo que los profesores deben tener un rol bastante grande en lo que es la creación de la visión, análisis obviamente de la realización del día a día?"* (You were saying that teachers should have a fairly big role in the creation of the vision, its analysis, and obviously the daily fulfillment?) Participant: *Todo lo que es la filosofía del colegio* (Everything that has to do with the philosophy of the school.)

In addition to highlighting the strong influence of Hofstede´s (2001) dimension of Individualism/Collectivism, responses from each teacher group confirmed data factor structure of school leadership functions identified in the online survey. The study performed in Belgium by Hulpia et al. (2009) established a factor structure which separated involvement in formative and summative teacher evaluation from 9 other supportive school leadership functions. Online survey data collected in the present study from Colombian teachers and data from CASK teachers working in US-accredited schools in Colombia did not support the inclusion of defining

the school vision as a supportive school leadership function. Data from Colombian teachers actually indicated a closer relationship between their perception of teacher involvement in defining the school vision with their involvement in supervisory leadership functions, such as formative and summative teacher supervision.

Teacher role in providing organizational support for teacher leadership. The topic of providing organizational support for teacher leadership was discussed by all three focus groups. All three groups agreed that school leaders, such as the school head, principals and vice principals, need to play the most important role in providing organizational support to encourage teacher leadership. Structures which promote teacher leadership must be put in place by school administration, and the decisions of the committees and teacher leaders must be respected and supported by school leaders, and not only by other teachers. The following comments demonstrated some of the perceptions most strongly supported by the focus group of CASK teachers involved in the focus group interview in regards to the provision of adequate organizational support for teacher leadership:

"I think principals should make those calls and bring in people so that teachers can meet regularly. I don´t think it´s our job to sort that out, but I think it´s important that we have that time so if administrators can structure the schedule in such a way and they can bring in subs for us I think that´s really important."

"I wouldn´t want to have to do that – We´ve got enough on our plates to be organizing that kind of stuff…"

Colombian teachers involved in the focus group interview felt that positional leaders such as principals, vice-principals, and teacher leaders should fully support daily issues such as student discipline and attendance, to take the burden off of teachers and to standardize practices throughout the school. The following comments demonstrated some of the perceptions most

strongly supported by the focus group of Colombian teachers involved in the focus group

interview in regards to the provision of adequate organizational support for teacher leadership:

"Promover apoyo para interacción entre profesores." (Promote support and interaction between teachers [should only be the responsibility of principals, vice-principals, and teacher leaders].)

"Manejo de presupuestos: materiales, capacitaciones..." (Managing budget: materials, training... [should only be the responsibility of principals, vice-principals, and teacher leaders]*)*

Members of the leadership team were very aware of the need to provide organizational

support for teachers to enable them to take on leadership roles. The leadership team members

offered ideas which paralleled those of Colombian faculty, suggesting that providing

organizational support meant helping teachers with practical assistance for assuming leadership

responsibilities, as well as letting teachers who wished to take on leadership roles know that they

had the full support of the administration. The following comments demonstrated some of the

perceptions most strongly supported by the focus group of leadership team representatives

involved in the focus group interview in regards to the provision of adequate organizational

support for teacher leadership:

"Some teachers just say I don´t want to do that, isn´t someone else supposed to be doing that?"

"…if they said, we need to find a common time to meet, I would say, hey, I can help you with that, let me look at the schedules and find 3 times that work for everyone."

"…to show the lead teacher too, like, you´re not alone, I´m still gonna do a few logistical things to kind of help you out…"

The provision of organizational support was seen by all members of all three focus groups as an

important criterion for encouraging teacher involvement in school leadership. Responses by

focus group participants regarding Research Questions #2 and #3 demonstrate an important

distinction between actions which may be considered motivators for, or inhibitors to,

involvement in school leadership, and actions which serve as basic school-level criteria for distributed leadership.

Findings from focus group interview regarding Research Question #2. The second research question this study proposed in the context of selected schools in Colombia was: RQ2: What do each of the above groups perceive as the primary motivators for distributed leadership in schools?

CASK teachers, Colombian teachers, and the members of the school leadership team who participated in the focus group interviews all agreed that school heads and principals need to create structures which provided teachers with the logistics, time, support, climate, communication, and respect needed for them to perform school leadership roles. Findings from focus group question #3 regarding the ways in which schools motivate teacher leadership can be found in Table 26.

Table 26. Focus group responses regarding ways in which schools may motivate teachers to get more involved in school leadership

Question	CASK Focus Group	Colombian Focus Group	Leadership Team Focus Group
N	5	5	2
What is the best way to motivate teachers to be more involved in school leadership?	• Provide additional time • Manage logistics appropriately • Supporting teachers as leaders • Providing additional money	• Provide a positive school climate • Create a sense of belonging/ownership • Manage logistics appropriately • Provide additional time	• Empower teachers • Manage logistics appropriately • Support teacher professional growth • Respect teacher expertise • Effective communication between teachers and administrators

Providing logistical support. As indicated in the previous section, all three focus groups agreed that school leadership needs to provide sufficient organizational support to encourage teacher leadership. By properly managing logistics, schools put in place the structures and support

necessary for organized and spontaneous teacher leadership. The following comments are examples of ways in which focus group interview participants felt school leaders could motivate teacher involvement in school leadership by providing logistical support:

"Setting up the organization is key because I think we can take that same amount of time and fill it, doing other individual things, but the fact that they´re already set up for us helps us to organize better." (CASK teacher focus group participant)

"Crear espacios [para reunirse], porque cada quien se mete en su cuento y no hay tiempo, porque dentro de nuestro horario tenemos horas disponibles, pero mi hora libre no coincide con la de nuestro compañero, y nunca nos vamos a ver, pero tenemos tantas cosas que socializar que hablar, pero no tenemos cómo, que tenemos que quedarnos después de las cuatro [pm], pero si el colegio nos podría crear un espacio para socializar, para interactuar, facilita más y uno siente que no "hay que quedarse" (Identifying appropriate times [to meet], because everybody gets into their own thing and there´s no time, because in our schedules we have available times, but my free hour doesn´t coincide with the free time of my peer, and we´ll never meet, but we have so many things to talk about, but we don´t have a way to do it, we have to stay after 4 [pm], but if the school could find a time for us to discuss, to interact, it would make it easier and you wouldn´t feel like you have to stay…) (Colombian teacher focus group participant)

"…if they [teachers] said, we need to find a common time to meet, I would say, hey, I can help you with that, let me look at the schedules and find 3 times that work for everyone." (school leadership team focus group participant)

"…to show the lead teacher too, like, you´re not alone, I´m still gonna do a few logistical things to kind of help you out…" (school leadership team focus group participant)

"[A teacher] who has been given a title or a certain responsibility and are going to take initiative, like we´ve had happening now, lead teachers taking responsibility, we´ll meet at this time, at this place, here´s the agenda, here are the things…" (school leadership team focus group participant)

"I think it works a lot because they know what the needs are, and they know what a reasonable profile might be, and so when you´re involving teachers in what is possibly administration that this job is going to consist of all of these things…" (school leadership team focus group participant)

"…creating positions, creating a team leader, creating department heads, creating, um, coaches, instructional coaches, I know in [city] when we went to Math coaches and instructional coaches and literacy coaches that was huge because it was strictly instructional, it was strictly collaborative, their offices were not in the administrative buildings, they were off in another area, you know, so when we put those structures in place, I think you have to do that…" (school leadership team focus group)

School climate and support for teacher leadership. Participants involved in each of

the three focus group interviews expressed the importance of positive school climate, a sense of

belonging, clear communication, and support for teachers as leaders. However, an important

distinction existed between answers from CASK teachers and answers from Colombian teachers.

Teachers from CASK countries offered comments which highlighted a desire that their

immediate supervisor respect their personal time and the effort required to perform school

leadership functions. Colombian teachers focused more on the human side of positive school

culture and support for teachers, and the importance of a personal connection between school

leadership and teachers. Members of the school administration demonstrated sensitivity to the

importance of creating connections with teachers, but gave greater importance to professional

support and respect required when motivating teachers to become more involved in school

leadership functions. The following comments are examples of ways in which focus group

interview participants felt school leaders could motivate teacher involvement in school

leadership by ensuring a positive school climate and strong support for teacher leadership:

"Not only the setting it up, but the follow through… You meet, you take notes, you send it off, and then if you never hear about it again it just gets forgotten, but if that person´s coming back and saying thank you for this and it´s looking great or it needs improvement here or there, but follow through and feedback is important." (CASK teacher focus group interview participant)

"Standing behind us with those decisions, if you selected us to do that particular job, then stand up for us and the decisions we make…" (CASK teacher focus group interview participant)

"Procurar el bienestar, no solo de los profesores, sino de todo la planta de personal al nivel general." (Lookout for the wellbeing, not just of teachers, but of the entire staff on a general level.) (Colombian teacher focus group interview participant)

"A veces existen directores que se preocupen por la producción de los profesores pero se les olvida la parte del bienestar de los profesores – Se le olvida la parte humana que tiene – Que no pierdan la visión que son seres humanos y que necesitan estar bien para que hagan bien su trabajo." (Sometimes there are directors who worry about the production level of teacher but they forget about teachers´ wellbeing – They forget the human side – They should not lose sight

of the fact that they are human beings and that they need to be well so that they can do their job well.) (Colombian teacher focus group interview participant)

"...in certain moments like, [I] we´re making a decision that, you know, all teachers need to make common assessments, so that teacher doesn´t have to make that, like, press release statement... I make the press release statement, knowing that this is coming from administration, through the collaborative work with the lead teacher and the team, or the committee... It has more weight I think." (school leadership team focus group participant)

"I think the growth, personal growth, professional growth [serves as a motivator]." (school leadership team focus group participant)

"Never underestimate the power of one-on-one conversations, the individual conversations. We have this idea for this new position, and you start talking, and involving teachers [creating] in the profile for the position." (school leadership team focus group participant)

"I used to always say, Guys, you know, you´re the experts here, it´s been 20 years practically since I was in a classroom consistently teaching... really for me to do what we´re going to do at the school back then and now I need teachers, and you need to tell us and guide us down that road... that message to them was not a lie, I mean, I wasn´t just filling them with a lot of hot air and then do whatever the hell I want, which is another piece to it, I think it kinda goes back to what I said earlier, I can´t say that, create that, and then make decisions behind their back, or over their thoughts... I mean, they´re the experts." (school leadership team focus group participant)

Providing financial incentives for teacher leadership. Neither group of teachers involved in focus group interviews suggested the use of financial motivators to act as primary incentives for teacher involvement in school leadership. However, both groups agreed that the provision of additional financial incentive could act to motivate some teachers and could serve to counter-act barriers to teacher leadership such as a lack of time or interest. The following comments are examples of ways in which focus group participants felt schools could motivate teacher involvement in school leadership by providing additional financial incentive to teachers:

"I think some time the money compensation will compensate for not having enough time. You can justify it as, okay, I am getting paid a bit more, so I´m gonna use some of my own time to do my other stuff so I can get this done." (CASK teacher focus group participant)

"I think if there´s money people take it more seriously, you know, if we said we´re staying after school for this because in the end we´re making $40 for the hour I feel like we´d be productive… If we needed to turn in minutes we´d turn in the minutes – there´s not that excuse of we didn´t have time, or we got side-tracked…" (CASK teacher focus group participant)

"Yo pienso que deben crear un programa de incentivos para los docentes, tipo empresa multinacional…donde los docentes que se vayan destacando tengan ciertos incentivos al año, destacando en qué, las metas que se ponga el colegio anualmente" (I think there should be an incentive program for teachers, like in multinational companies… in which teachers who stand out get certain incentives each year, for standing out in the annual goals put forth by the school…) (Colombian teacher focus group participant)

Findings from focus group interview regarding Research Question #3. The third

research question this study proposed in the context of selected schools in Colombia was:

RQ3: What do each of the above groups perceive as the primary inhibitors for distributed

leadership in schools?

The major inhibitors discussed by each focus group can be found in Table 27.

Table 27. Focus group responses regarding ways in which schools may inhibit teachers from getting more involved in school leadership

Question	CASK Focus Group	Colombian Focus Group	Leadership Team Focus Group
N	5	5	2
What may serve to inhibit teachers from getting involved in school leadership?	• Insufficient support for ideas • Different agenda Insufficient provision of extra time • Insufficient provision of extra money	• Difficult personalities • Resistance to change • Insufficient provision of extra time • Insufficient provision of extra money	• Micro-management • Insufficient support for teachers and teacher leaders

Complementing the discussion of motivators which encourage greater teacher involvement in

school leadership, CASK teachers and Colombian teachers involved in the focus group

interviews generally agreed on factors which would inhibit greater teacher leadership.

Participants in each of the teacher focus groups offered examples of the three teacher leadership

barriers suggested by Lortie (1975): conservatism, individualism, and presentism. The groups

also explained the importance of transformational leadership in breaking the barriers suggested

by Lortie (1975). One participant in the focus group of Colombian teachers offered the

following statements when indirectly addressing the trend of conservatism, which Lortie (1975)

defined as teacher preference for "tried and true" practices, as well as mistrust of new

educational initiatives, regardless of data which support the proposed change.

"Yo pienso que es la resistencia al cambio, hay muchos que se resisten a innovar porque innovar implica prepararse, implica estudiar, implica investigar y hay muchos docentes que nos cuesta esta parte, o sea estudiar, empezar de cero. Si tengo un currículo, yo hice este currículo y para cambiarlo que pereza, no entonces sigo con él y año tras año saca las fotocopias… Me ha ido súper bien con esto todo el año, entonces para qué cambiarlo… y entonces es como un facilismo, entonces más bien una de las cosas [barreras] sería eso, la resistencia al cambio." (I think that it´s resistance to change, many people resist innovation because innovation means preparing oneself, it implies studying, it implying researching, and that is difficult for many teachers, I mean, starting back at zero. If I have a curriculum, I´ve made this curriculum and it would be too much work to change it, so I continue using it and year after year I make the same photocopies… I´ve done well with this all year, so why change it… and then it´s like the easy way out, so then that would be one of the things [inhibitors], the resistance to change.) (Colombian teacher focus group participant)

Participants from both focus groups of teachers demonstrated an awareness of

individualism, which Lortie (1975) defined as teacher avoidance of criticisms and intrusions of

other professionals around them. The following statements suggested a strong awareness of

individualism as an inhibitor of teacher involvement in school leadership functions:

"I think I would be on the defensive if another teacher at my same level came and started doing that [evaluating or criticizing teaching practices]." (CASK teacher focus group participant)

"Uno mismo es el que se encierra, uno mismo es el que se aísla por qué, caigo en lo que había dicho antes: el temor en que de pronto si yo socializo mi conocimiento, lo estoy cediendo y de pronto este me lo coja y él lo desarrolla mejor que yo… ese es muchas veces el temor que nosotros sentimos… como docentes preferimos quedarnos callados, no transmitir el conocimiento" (We are the ones who close ourselves in, we are the ones who isolate ourselves because, we fall into what I was saying before: the fear that maybe if I share my knowledge, I am giving away and maybe someone else will take advantage of it and will do it better than me… that is the fear that we feel… as teachers we prefer to stay quiet, to not transmit the knowledge.) (Colombian teacher focus group participant)

Comments from Colombian teachers indicated an awareness of individualism, but also

focused on efforts to reduce the role of individualism in schools. The following comments made

by participants in the focus group of Colombian teachers suggested a high level of collectivism

(Hofstede, 2001):

"Debe ser receptivo [para aprovechar adecuadamente la evaluación de otros profesores], yo puedo ser receptivo, porque yo quiero aprender, yo quiero mejorar y yo recibo todo lo que me digan, pero aquél profesor si estará dispuesto a recibir, no una crítica destructiva sino constructiva, mira, en vez de hacer esto, haz esto; tal vez esa persona de pronto sentirá que le está cuestionando para mal y que de pronto está haciendo eso para que le despida entonces se crea ese mal ambiente y mejor no, entonces a veces nos quedamos callados para no dañar la amistad pero nos damos cuenta que esa persona puede ser mucho mejor y puede dar más si corrige esta cuestión, saber ser receptivo. Nosotros tenemos que ser receptivos y saber serlo."
(You must be receptive [to properly receive evaluation from peers], I can be receptive, because I want to learn, I want to get better, I accept everything I´m told, but the teacher who is not open to feedback, either destructive or constructive criticism, look, instead of doing this, do this; maybe that person will feel like they´re being questioned in a bad way and maybe that someone is saying this to get them fired so it creates a bad environment, so sometimes we may stay silent to not ruin a friendship, but we realize that the person could be much better and could do more if we helped them correct that perception, and be more receptive.)

"Para lograr ese ideal de evaluación, esa co-evaluación seria lograr la interdisciplinariedad, debería ser, porque es que suele ocurrir que el profesor está en su aula, es dueño de su materia, y es cómo ese celo, incluso cuando se le propone algún cambio de su área, desde otra área, como que choca y como que se resiste al cambio… usted verá cómo lo hace en su clase, eso es en mi clase y se me respeta, yo soy autónomo. O sea hasta que no logremos entender que el conocimiento no es fraccionado, sino que es integrado, no podemos hacer nada." (To achieve the ideal of evaluation, that co-evaluation would be to achieve interdisciplinarity, it must be, because what often happens is the teacher is in their classroom, they are the owner of their subject material, protective, even when something new is proposed for a change in their subject area, coming from another subject area, the teacher may feel uncomfortable and may resist the change… you decide how to do things in your class, this is my class and I should be respected, I am autonomous. So, until we are able to understand that learning is not fractioned, but actually integrated, we won´t be able to do anything.)

Finally, teachers offered the following statements when indirectly addressing presentism, which Lortie (1975) defined as an overwhelming focus on the short term, accompanied by a reduction in teacher motivation and involvement in collaborative efforts directed at long term, systemic change, including the support and supervision of fellow teachers.

"If we had more time we´d be able to do a lot of these things [school leadership functions]." (CASK teacher focus group participant)

"El tiempo es una barrera grande en nuestro colegio muchas veces está todo como tan distribuido, cierto, con unos horarios, cosas como tan precisas que tú no alcanzas a hacer nada, no te queda tiempo para crear nuevas cosas." (Time is often a big constraint en our school, often everything is so distributed, right, like the schedules, things that are so precise that you can´t do anything, and there´s no time for creating new things.)

Providing insufficient time for teacher leadership. Both groups agreed that schools which do not provide sufficient additional time do not properly foster teacher leadership. Quantitative findings from the online survey produced an inconsistent pattern of responses: the provision of additional time scored very low as a motivator for encouraging teacher leadership, however, lack of additional time for teachers involved in school leadership scored very high as an inhibitor for teacher leadership. When results were triangulated with findings from the focus group interviews the pattern was confirmed: provision of additional time is a strong motivator for teacher involvement in school leadership, just as a lack of time serves as a strong inhibitor. The following comments are examples of ways in which each of the teacher focus groups felt schools may inhibit teacher involvement in school leadership by not providing sufficient time for teachers who wish to act as leaders:

"The biggest gift you can give somebody is the gift of time… it´s usually not money…" (CASK teacher focus group participant)

"They could give us pull out time, they could bring in subs and we could do the work at school I think that would make a big difference." (CASK teacher focus group participant)

"Yo pienso que un factor grande es el tiempo; el tiempo es una barrera que nos afecta, mirándolo desde el punto de vista del colegio nos afecta." (I think that time is a big factor; time is a constraint which affects us, seeing it from the point of view of the school it affects us.) (Colombian teacher focus group participant)

These results will be further examined and explained in Chapter 5.

Providing insufficient support for teacher leadership. All three groups also agreed that school leadership which gives teachers the opportunity to act in leadership roles, but does not support them as school leaders, creates a strong inhibitor for future involvement of teachers in school leadership. Findings regarding the negative role played by insufficient support for teacher leaders supported the importance of maintaining a positive school culture and creating school leadership structures which are transparent and sincere, rather than functioning in name

only. Teachers from CASK countries and members of the school leadership team most clearly

expressed the need for true support by school leadership for teacher leaders. The following

comments demonstrate the inhibitors created by school leadership which does not respect or

support teachers who wish to perform leadership functions:

"… if a principal has a particular agenda that they´re pushing… they don´t want the buy-in, they don´t want any of that, they´re just doing it because you´re going through the motions…" (CASK teacher focus group participant)

"It´s a waste of time for teachers. You put all this time into something and it´s not valued, I think that´s a big turn-off for all of us…" (CASK teacher focus group participant)

"...teachers want that, they say, if I´m going to be part of this group, I´m going to be leading, I don´t want to be second-guessed all the time…" (school leadership team)

"I do think that if we put them in these leadership roles, and then are constantly on top of them and checking them…eventually that´s more work for them." (school leadership team)

Additional Findings

Participants in the focus group of Colombian teachers offered many positive examples of

how school leadership could overcome the barriers to distributed leadership, proposed by Lortie

(1975). Many of the suggestions demonstrated collectivism to be a more important influence

than power distance on perception of teacher involvement in school leadership. The focus group

of Colombian teachers did not emphasize the role of power distance, such as referring to a

respected hierarchical structure in schools, instead offering a very positive perspective on how

teachers could be motivated to become more involved in school leadership through

transformative leadership strategies.

"Si es posible [enseñar a todo el equipo a ser líderes]…Pero es que un líder no nace, el líder se hace. El líder se hace es formándose." (Yes it is possible [to teacher the entire team to be leaders]… But a leader is not born, a leader is made. A leader is made through their experiences.)

"Tener sentido de lo adecuado, el sentido de pertenencia, ponerse la camiseta, tener puesta la camiseta… creemos que tenemos la camiseta puesta, pero cuando el colegio requiere que tengamos la camiseta puesta ahí es cuando nos la quitamos, usarla no sólo para las

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integraciones…" (Have a feeling about what´s right, a feeling of ownership, being part of the school team… we believe that we are part of the team, but when the school needs us to be part of the team is when some people take a step back… we need to be part of the team not only during staff integration…)

"Qué podría hacer un director para solucionar ese tipo de problema, y ayudar en ese tipo de evaluaciones [entre pares]? Tiene que implementar estrategias para integrar a todo su personal. Porque cuando hay relaciones de amistad… relaciones donde uno siente esa afinidad con los demás compañeros es mucho más fácil decirle cualquier cosa... A veces cuando hay esa desintegración, entonces, ni me importan cinco, le da a uno lo mismo si mejoran o no, ¿cierto? Pero si hay integración, dentro de un programa de integración entre todo el personal del colegio… pero no integración de irnos a tomar, ¿cierto? (risas), un programa bien montado, con actividades, algo profesional, que en realidad sea integración entre todos, que todos nos conozcamos, que todos desarrollemos esta parte buena que tenemos y eso ayudaría mucho para hacer la evaluación… (What can a director do to solve this type of problem, and facilitate this type of evaluation [peer evaluation]? They have to implement strategies which integrate the entire staff. Because, when there are friendships, relationships in which people feel an affinity with their workmates it is much easier to tell them something… Sometimes when there is disintegration, then I don´t care at all, it doesn´t matter if they improve or not. Right? But if there is true integration, within an integration program for the entire school staff… but not just an integration to drink together (laughter), a well set-up program with activities, something professional, that really integrates all of us, that we all know each other, that we can all develop that good side that we have and that will help us much more to be able to evaluate each other…)

Chapter 5: Discussion and Conclusions

Introduction

  This study was guided by a very ambitious set of objectives. At the heart of the study was the motivation to further understand teachers´ perspectives regarding the distribution of leadership functions in schools. In the context of international education, the study examined the cultural influences of nationality and organizational setting on teachers´ perceptions. To allow for cross-cultural comparison, perception data of teachers from the US, UK, Canada, and Australia (CASK teachers) were compared to data from Colombian teachers. To allow for cross-organizational comparison, perception data of Colombian teachers working in US-accredited schools in Colombia were compared to data from Colombian teachers working in Colombian schools that did not have a strong American or international school culture. The study collected data regarding the specific school leadership functions which respondents from each group felt should be practiced only by school leadership, and functions which should be commonly practiced by all teachers. The study identified key motivators and inhibitors of teacher involvement in school leadership, and used cross-cultural literature to link the motivators and inhibitors to distinct personality types. Data was collected through an online survey to which 385 teachers representing 11 different schools around Colombia responded. Focus group interviews acted as the final step of data collection, and helped to clarify ambiguities and gaps in the quantitative survey data.

  The following central research questions were used to guide the study:

RQ1: What differences exist in the degree to which each of the following groups of teachers accepts teacher involvement in (i) supportive and (ii) supervisory leadership functions within their school?

- CASK (US, UK, Canadian, and Australian) teachers in US-accredited schools in Colombia

- Colombian teachers in US-accredited school in Colombia
- Colombian teachers in Colombian schools in Colombia

RQ2: What do each of the above groups perceive as the primary motivators for distributed leadership in schools?

RQ3: What do each of the above groups perceive as the primary inhibitors to distributed leadership in schools?

In Chapter 2, the study summarized current literature in the areas of teacher perceptions of distributed leadership in the US, UK, Canada, and Australia, as well as cross-cultural research establishing quantifiable differences in basic perceptions held by people of diverse nationality. Data summarized in the review of literature helped to contextualize the research questions, create a conceptual framework for the study, and set up an appropriate methodology for the collection of new data – presented in Chapter 3. Data gained through the online survey and through focus group interviews were analyzed in Chapter 4 using descriptive and inferential statistical tools to allow for comparisons within the demographic groups which participated in the survey, and generalization to the populations for which they served as samples. In Chapter 5, findings from Chapter 4 are analyzed, and conclusions for the study clearly explained. Limitations for the study are discussed, and a final conceptual framework is suggested which may serve educational administrators and researchers interested in cross-cultural borrowing, motivational psychology, and the strengthening of democratic leadership models.

Discussion of Findings Related to Research Question #1

A full, statistical analysis of respondent data to survey questions regarding the involvement of teachers in school leadership can be found in Chapter 4. Findings did not support the study´s initial structural framework regarding the degree to which teachers from each national and organizational setting would demonstrate an acceptance of teacher involvement in school leadership. Results supported an inverse framework of that which was initially proposed

in the study. Colombian teachers working in Colombian schools without a strong US or

international organizational culture demonstrated the highest level of acceptance of teacher

participation in supportive and supervisory school leadership functions. Colombian teachers

working in US-accredited schools in Colombia demonstrated a lower level of acceptance, and

teachers from the US, UK, Canada, and Australia demonstrated the lowest level of acceptance

among the three demographic subgroups identified in the study. Figure 14 demonstrates a

graphic representation of the initial structural framework for the study, and the final structural

framework considering new data provided by the study.

Figure 14. Graphic representation of initial and revised structural frameworks for Research
Questions #1, #2, and #3

Initial structural framework	Final structural framework
High acceptance of teacher involvement in school leadership functions (supportive and supervisory) due to low PD, and strongly influenced by high IND motivators and inhibitors	**Low acceptance** of teacher involvement in school leadership functions (supportive and supervisory) due to high IND, and strongly influenced by high IND motivators and inhibitors

Western teachers in US-accredited schools in Colombia

Colombian teachers in US-accredited schools in Colombia

Colombian teachers in Colombian schools in Colombia

Influence of National Culture

Influence of Institutional Culture

Western teachers in US-accredited schools in Colombia

Colombian teachers in US-accredited schools in Colombia

Colombian teachers in Colombian schools in Colombia

Low acceptance of teacher involvement in school leadership functions (supportive and supervisory) due to high PD, and strongly influenced by low IND (high COL) motivators and inhibitors

High acceptance of teacher involvement in school leadership functions (supportive and supervisory) due to low IND (high COL), and strongly influenced by low IND (high COL) motivators and inhibitors

When analyzed according to the 2-factor model identified by Hulpia et al. (2009) in their

study, differences between each of the groups were even more obvious. Data demonstrated

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significant differences in perception regarding teacher involvement in supervisory school leadership functions. For all quantitative perception data collected regarding involvement of school leaders, teacher leaders, and other teachers in school leadership functions, responses from Colombian teachers working in US-accredited schools resembled responses from CASK teachers teaching in the same schools less than responses from Colombian teachers working in Colombian schools. Using inferential statistical tools, nationality was found to be a stronger predictor variable than organizational setting for teacher perceptions regarding teacher involvement in distributed leadership, specifically regarding supervisory leadership functions. Data from focus group interviews supported differences found in the quantitative data from the survey. Colombian focus group participants demonstrated a higher acceptance of teacher involvement in school leadership functions, including supervisory leadership, than their CASK counterparts.

As demonstrated in the review of literature, cross-cultural research has attempted to operationalize and measure the influences of national culture on many occasions. The enormous study conducted by Hofstede (1980) used employee responses to standardized surveys to propose five dimensions upon which he measured and ranked the data from respondents representing 78 different countries. The two dimensions which may most directly be linked to the concept of distributed leadership are (i) power distance (PD) and (ii) individualism-collectivism (IND). Hulpia et al. (2010) developed and applied the Distributed Leadership Inventory to examine the perceptions of 1,522 teachers in Belgium regarding their involvement in school leadership functions. Data from the survey indicated distribution of supportive leadership functions to have a positive impact on teachers´ organizational commitment, while involvement in supervisory leadership functions had a negative impact on teachers´ organizational commitment. Parallel to

findings by Hulpia et al. (2010), findings from the current study suggested that survey

respondents and focus group participants from CASK countries perceived distribution of

supervisory leadership functions to have a negative impact on teachers´ organizational

commitment. Findings from the current study can be contextualized through a comparison of

data with data from the study performed by Hofstede (2001), as well as data collected by Hulpia

et al. (2010). A graphic representation is used to compare findings from the current study with

findings by Hulpia et al. (2010), and cross-cultural findings by Hofstede (2001). An

Figure 15. Graphic comparison of findings from current study with findings by Hulpia et al.
(2010), and Hofstede (2001)
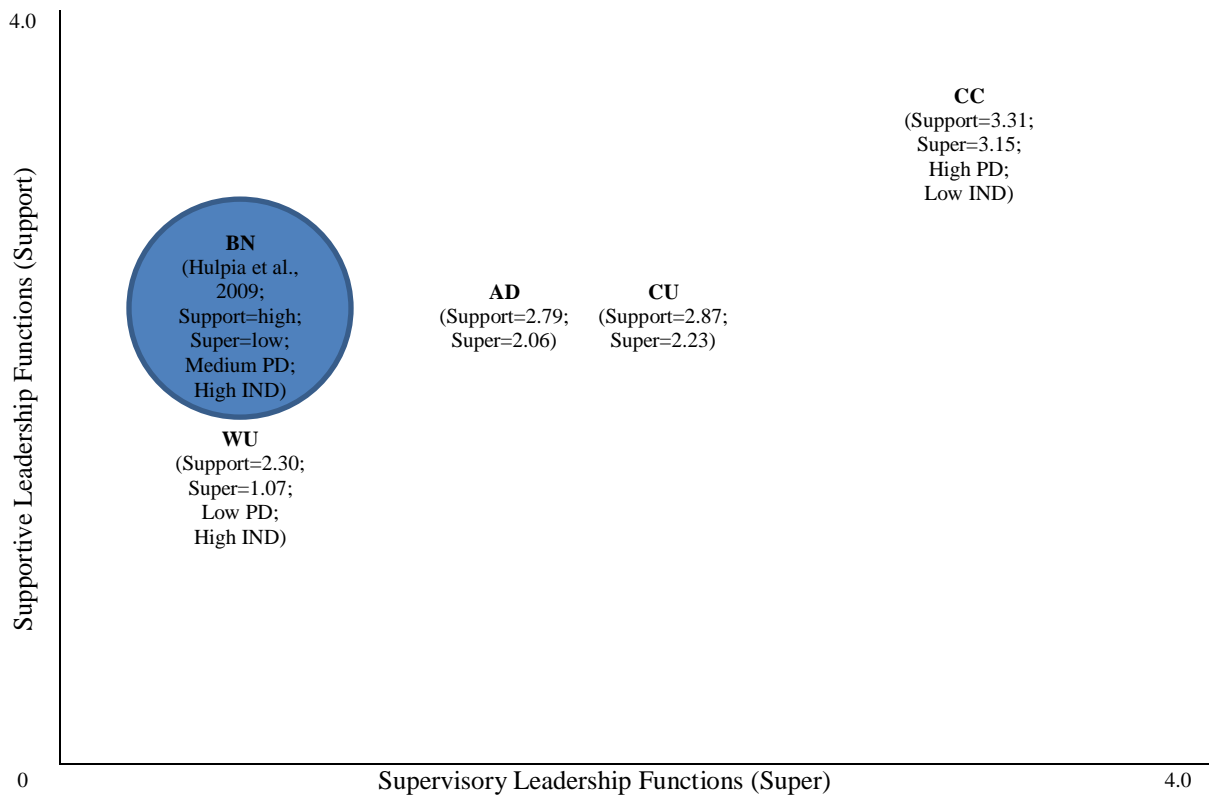
AD=All data from the current study
WU=CASK teachers in US-accredited schools in Colombia
CU=Colombian teachers in US-accredited schools in Colombia
CC=Colombian teachers in Colombian accredited schools in Colombia
BN=Teachers from Belgium-Netherlands

approximation has been made to position the sample of teachers from Belgium-Netherlands surveyed by Hulpia et al. (2010), and mean data is used to position data from the three demographic groups involved in the current study.

Analysis of findings supports the revised structural framework for the current study and further supports the conclusion indicating low acceptance of teachers from CASK backgrounds of teacher involvement in supervisory leadership functions. Comments offered by participants in the focus group of CASK teachers were indicative of a high level of individualism, manifested in anxiety related to evaluation which was perceived as criticizing, or receiving criticism from, peers. Colombian teachers reported a much higher acceptance level of teacher involvement in supervisory leadership functions, supporting the need for openness and honesty when giving or receiving constructive criticism from peers. The initial structural framework for the study proposed Colombian teachers, representing a culture with high levels of power distance (Hofstede, 2001), to demonstrate poor acceptance of distributed models of leadership.   Actual findings from the study were in direct opposition to those proposed in the initial structural framework, highlighting the relationship with low levels of individualism, also referred to as high levels of collectivism (Hofstede, 2001), as a more predominant factor influencing teacher perceptions. Teachers from a Colombian national background were more accepting of the possibly critical supervision of their peers, and felt more comfortable offering criticism to others if the resulting actions benefited the collective mission.

Discussion of Findings Related to Research Question #2

Triandis (1998) furthered Hofstede´s original concept of the dimensions of power distance and individualism (1980) by proposing four unique personality types, which combined the two extremes of each of Hofstede´s dimensions to create four unique motivational categories:

vertical-individualism, vertical-collectivism, horizontal-individualism, and horizontal-collectivism. Data from the online survey demonstrated similarities between the three demographic groups identified in the study in regards to the strongest and weakest motivators for promoting teacher leadership. All three groups indicated that the strongest motivator for teacher involvement in distributed leadership is a desire to share areas of strength, a motivator which is indicative of vertical collectivism. Data from focus group interviews with CASK and Colombian teachers supported the findings from the online survey, suggesting teachers to find distributed leadership to be most practical and necessary when taking advantage of teachers´ strengths and expertise. Participants in the focus group interview of CASK teachers expressed a strong distinction between teacher involvement in supportive leadership functions and teacher involvement in supervisory leadership functions. The CASK teachers suggested teachers to be well-equipped and comfortable with the idea of supporting each other in the implementation of new pedagogical strategies, but poorly-equipped and uncomfortable with the prospect of evaluate other teachers. The weakest motivator rated by all three groups was the promise of time off from teaching responsibilities, which was indicative of vertical individualism. Inconsistencies were found between answers to survey question #10, regarding motivators for teacher involvement in school leadership, and survey question #11, regarding inhibitors for teacher involvement in school leadership, as will be discussed in the next section.

Discussion of Findings Related to Research Question #3

In responses to survey questions #11, all three groups of teachers reported a lack of time to serve as the strongest inhibitor of greater teacher involvement in school leadership functions. However, the possibility of increased time off from teaching responsibilities was reported in response to question #10 as a weak motivator, which created contradictory and confusing

findings between the two sets of response data from the survey. Relying on the mixed-method approach for data collection, data from focus groups was used to clarify the quantitative findings from the survey. In focus group interviews with Colombian and with CASK teachers, both groups clearly identified a lack of time as a strong inhibitor for teacher involvement in school leadership functions. Members of the school leadership team did not place a strong emphasis on the additional time or money required to motivate teacher leadership. In a study conducted by Akert and Martin in 2012 comparing teacher and principal perceptions of teacher involvement in school leadership in Missouri, the researchers found major differences between teachers and principals regarding the perceived need for additional time required by teachers to perform school leadership functions. The majority of principals and teachers involved in the study reported that they wished teachers to be more involved in school leadership, however a lack of structures providing additional time to teachers was found to be a leading justification of the difference between the degree to which teachers were involved in school leadership and the degree to which they wished to be involved (Akert & Martin, 2012). Reponses from focus group participants in the present study support the conclusion that the provision of additional time is not perceived by CASK or Colombian teachers as a motivator for performing school leadership functions, but in fact as a basic criterion. Without sufficient additional time in which teachers may perform school leadership functions, distributed leadership is perceived as undesirable and therefore virtually impossible.

Data from focus group interviews in the current study supported findings from online survey question #11 regarding inhibitors to teacher involvement in leadership functions, and clarified contradictory findings from question #10 regarding motivators for teacher involvement in leadership functions. Data from survey respondents and from focus group interviews with

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teachers suggested inhibitors indicative of vertical-individualism were the largest barrier to

teacher involvement in school leadership functions. Teachers are highly motivated to apply their

strengths in support of other teachers however survey respondents and interview participants

indicated that insufficient provision of time and money acts as a barrier to distributed leadership.

The current study did not attempt to quantify the time or money which would serve as a

sufficient motivator for, or reduce barriers to, greater involvement in school leadership practices.

Recommendations for practices in schools and recommendations for future research are

summarized in the next section.

Recommendations for Future Practice

Given the findings of this study, US-accredited schools in Colombia possess a unique

advantage over schools in the US, UK, Canada, and Australia in the implementation of

distributed leadership practices. Contrary to the initial structural framework for this study based

on cross-cultural literature, Colombian teachers demonstrated a higher acceptance of teacher

involvement in supportive and supervisory school leadership functions than their CASK

counterparts. US-accredited schools in Colombia may be able to take advantage of attitudes held

by Colombian staff to encourage greater participation of all teachers in school leadership

functions. Leadership styles which involve and empower teachers, specifically in collaborative

formative and summative supervision efforts, may benefit from deep conversations between

CASK and Colombian faculty. Attention to the differences between Colombian and CASK

perceptions may allow international schools in Colombia to better align training opportunities

with the specific needs of each group of teachers and support distributed leadership among the

entire faculty of their schools. However, before any conclusions can be made in international

schools with significant proportions of their teaching faculty from other regions of the world,

research must be conducted which can evaluate the extent to which teachers from the region are influenced by Individualism/Collectivism, Power Distance, or other cross-cultural dimensions.

Recommendations for Future Research

This study compared perceptions of three different demographic groups of teachers working in Colombia: CASK and Colombian teachers working in US-accredited schools, and Colombian teachers working in schools not accredited in the US. Data from the online survey and from focus group interviews permitted a comparison of samples from national backgrounds with distinct cultural differences (Hofstede, 2001), as well as distinct organizational cultures. Findings from this study would be enriched if they could be compared with results from the same survey obtained from teachers working in a CASK setting, or results from CASK and local teachers in a country other than Colombia. Data supported teacher nationality as a significant predictor variable for perceptions of teacher involvement in school leadership, while school context was not supported as a significant predictor variable. Two additional variables which may be examined in future research are teacher gender, and the age group of the students taught. Significant differences in perception may exist between male and female teachers (Collard & Reynolds, 2005; Moore, Cope, & East Carolina University, 2012) just as significant differences may exist between teachers working in Kindergarten, Elementary, Middle School, or High School sections (Angelle & DeHart, 2011; Stone, 1997).

Limitations

The statistical testing methodology did not employ random sampling to compare the means of groups for statistical significance. When random sampling is not used, the researcher is not able to accurately identify the degree of error in probabilities (Wallen & Fraenkel, 2011).

Additionally, comparative data was not collected for teachers in US settings, limiting the generalizability of the study to the Colombian context in which data was collected.

Final Reflections

Recent research in the area of teacher perceptions regarding involvement in school leadership has added greatly to the developing body of literature. The quantitative, survey-based study in 2012 by Akert and Martin examined the extent to which teachers in Missouri wished to be involved in school leadership. Supporting findings by Hulpia et al. (2009) and findings in the current study, the study by Akert and Martin (2012) indicated strong teacher interest in involvement in school leadership. The area in which teachers least wished to be involved was that of evaluating the performance of other teachers (Akert & Martin, 2012). The study in Missouri performed by Akert and Martin (2012), and the present study performed in Colombia, may indicate an emerging trend in research to move beyond an examination of why we should encourage distributed leadership in schools around the world to how distributed leadership will be perceived, how it can be supported, and how it can be institutionalized.

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Appendix A: Informed consent form for Distributed Leadership Survey
(survey adapted from Hulpia, Devos & Rosseel, 2009)

Dear Survey Respondent,

As an important part of the dissertation for my doctoral degree in Educational Leadership from Lehigh University, I am conducting a survey on perspectives toward distributed leadership in schools. The central goal of my research is to examine the extent to which national and organizational cultures influence our perception of teacher involvement in school leadership. This survey will be distributed to all teachers currently working in either a US-accredited school or a Colombian-accredited school selected for the study.

I would appreciate if you could take approximately 10 minutes to complete this survey. It is very important that you complete the survey on your own without discussion with other teachers. All responses will remain anonymous and confidential, and your participation is voluntary. The generalized data obtained from this survey will be available to help improve our understanding of perceptions regarding distributed leadership in multi-cultural contexts. By completing this survey based on your perception and opinions, you will be contributing to the growing body of knowledge on leadership and education in US-accredited Colombian schools.

After completing the survey you will be redirected to a website which will allow you to register to be eligible to win one of three $50.00 gift certificates from Amazon.com.

No risks are anticipated in this study beyond those encountered in daily professional life.

Passive Consent

By clicking on the following link and through completion of this electronic survey, you give your consent for the data to be used as part of the study.

Questions or Concerns:
If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact Susan E. Disidore at (610)758-3020 (email: sus5@lehigh.edu) or Troy Boni at (610)758-2985 (email: tdb308@lehigh.edu) of Lehigh University's Office of Research and Sponsored Programs. You may also contact my dissertation advisor, Dr. Jill Sperandio (jis204@lehigh.edu) at Lehigh University. All reports or correspondence will be kept confidential.

Thank you for agreeing to take the time to fill out this survey.
Zeb Johnson
Elementary Principal
Colegio Panamericano – Bucaramanga, Colombia
Ed.D Candidate, Lehigh University

Appendix B: Distributed Leadership Survey
English language version of the electronic survey available at:
http://www.zoomerang.com/Survey/WEB22DYUTAGRPQ
Spanish language version of the electronic survey available at:
http://www.zoomerang.com/Survey/WEB22DYUUCGSCG

Respondent Demographic Data
School of current employment: Years working in current school of employment: Total years of teaching experience: ____ Nationality: Colombian / American / British / Canadian / Australian / Other Years lived outside of country of birth: ____ Gender:

1. **To what extent do you feel that the following people *should* be involved in performing each function of school leadership?** *(0 = not at all; 4 = fully)*

	Principals and Vice Principals	**Formal Teacher Leaders**	**Other Teachers**
a) Debating the school vision	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
b) Complimenting teachers	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
c) Helping teachers	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
d) Explaining his/her reason for criticism to teachers	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
e) Being available after school to help teachers when assistance is needed	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
f) Looking out for personal welfare of teachers	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
g) Encouraging teachers to pursue their own goals for professional learning	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
h) Encouraging teachers to try new practices consistent with their own interests	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
i) Providing organizational support for teacher interaction	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
j) Involved in formative evaluation of teachers	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
k) Involved in summative evaluation of teachers	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4

2. Evaluate the degree to which you feel that the following statements may express why teachers <u>would</u> assume a larger leadership role within their school:

Degree of Importance
(0 = not important; 4 = very important)

Shared leadership is more effective for schools than individual leadership ------ ☐

Teachers have areas of strength they can share ------------------------------------ ☐

Teachers may receive time off from teaching responsibilities to help others----- ☐

Assuming more leadership may lead to more money------------------------------ ☐

Principals support teachers as leaders -- ☐

Other: _____ ☐

Other: _____ ☐

3. Evaluate the degree to which the following statements may express why teachers <u>would not</u> assume a larger leadership role within their school:

Degree of Importance
(0 = not important; 4 = very important)

It´s not their job --- ☐

It might create problems -- ☐

They don´t have enough time --- ☐

They don´t receive any extra money --- ☐

Principals do not support teachers as leaders -------------------------------------- ☐

Other: _____ ☐

Other: _____ ☐

Thank you again for your time and assistance.

Zeb Johnson
Elementary Principal
Colegio Panamericano – Bucaramanga, Colombia
Ed.L Candidate, Lehigh University

Reference
Hulpia, H., Devos, G., & Rosseel, Y. (2009). Development and Validation of Scores on the Distributed Leadership Inventory. *Educational and Psychological Measurement, 69,* 6,1013-1034.

Appendix C: Informed consent form for participation in focus group interviews

LEHIGH UNIVERSITY®

CONSENT FORM
THE INFLUENCES OF NATIONAL AND ORGANIZATIONAL CULTURES ON TEACHER
PERCEPTIONS OF DISTRIBUTED LEADERSHIP

You are invited to be in a research study on distributed leadership in schools. You were selected as a possible participant because you may be able to provide important data on the opinions held by teachers regarding teacher leadership in schools. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Zeb Johnson, under the direction of Dr. Jill Sperandio in Lehigh University´s Educational Leadership department

Purpose of the study
The purpose of this study is to examine the perspectives held by teachers regarding the role of teachers in school leadership.

Procedures
If you agree to be in this study, we would ask you to attend a 90 minute focus group session with 6-8 of your pre-selected colleagues. In the focus group session you will discuss the areas of school leadership in which you believe teachers should or should not be involved, as well as the specific motivators and inhibitors you feel exist in schools regarding teacher involvement in school leadership. The sessions will be audio taped; however none of the recordings or the specific contributions of individuals will be shared outside of the session. All audio recordings will be permanently destroyed after the completion of the dissertation.

Risks **and** *Benefits* **of being in the study**

Possible risks:

We are aware that confidentiality and discretion are important when sharing any information that may be seen as sensitive. For that reason, the collection of answers and opinions expressed during the focus group session will be used to create general findings, which may then be shared as conclusions for the study. Individual-level opinions and responses will not be shared outside of the session itself.

The benefits to participation are:

Teachers have a great amount of insight, specific knowledge and talents that could extend beyond their roles in the classroom. This study will give teachers an opportunity to have their perspectives known, and may lead to greater inclusion of teachers in institutional decision-making.

Compensation
Participants in focus group sessions will be provided with snacks and drinks.

Confidentiality
The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records. Audio recordings will only be used to code and generalize data, and the recordings themselves will be destroyed by the investigator one year after the study is published.

Voluntary Nature of the Study
Participation in this study is voluntary:

Your decision whether or not to participate will not affect your current or future relations with the Lehigh University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions
The researchers conducting this study are Zeb Johnson and Dr. Jill Sperandio. You may ask either of them any questions you have. If you have questions later, **you are encouraged** to contact them at:

Zeb Johnson   Dr. Jill Sperandio
es@panamericano.edu.co   jis204@lehigh.edu
(577) 638-0130   (610) 758-3392

Questions or Concerns:

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact Susan E. Disidore at (610)758-3020 (email: sus5@lehigh.edu) or Troy Boni at (610)758-2985 (email: tdb308@lehigh.edu) of Lehigh University's Office of Research and Sponsored Programs. All reports or correspondence will be kept confidential.

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

Statement of Consent
I have read the above information. I have had the opportunity to ask questions and have my questions answered. I consent to participate in the study, and I consent to be audio taped during my participation.

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

Nine of the schools currently accredited by AdvancED were determined to have met the current study´s limiting criteria for classification indicating a strong CASK organizational culture:

    (i)   **An American, British, Canadian or Australian head of school,**
    (ii)   **At least 10 years since initial US accreditation,**
    (iii)   **At least 20% of teachers are from US, UK, Canada, or Australia**

    1. **Name: Colegio Nueva Granada**
Public/Non-Public: Private
Address: Carrera 2-este, #70-20 AA 51339, Bogotá, Colombia, S.A. 33166-5632
http://www.cng.edu
Head of Institution: Dr. Eric H Habegger (USA)
Grades: PK-Gr.12
Enrollment: 1,810   (170 professional staff in 2005 – approx 10:1)
Organization Status: Accredited
Initial Accreditation Date: 12/31/1960

    2. **Name: Colegio Bolivar**
Public/Non-Public: Private
Address: Calle 5, # 122-21 Via a Pance, Cali, Colombia
http://www.colegiobolivar.edu.co
Head of Institution: Dr. Joseph J Nagy (USA)
Grades: PK-Gr.12
Enrollment: 1,265   (140 professional staff in 2005 – approx. 9:1)
Organization Status: Accredited
Initial Accreditation Date: 12/31/1961

    3. **Name: The Columbus School**
Public/Non-Public: Private
Address: AA 60562, Medellin, Colombia, S.A. Km. 16, Alto de Las Palmas, Envigado, Colombia, S.A.
http://www.columbus.edu.co
Head of Institution: Mrs. Susan Jaramillo (USA)
Grades: PK-Gr.12
Enrollment: 1,460   (135 professional staff in 2005 – approx. 11:1)
Organization Status: Accredited
Initial Accreditation Date: 12/31/1963

    4. **Name: Colegio Karl C. Parrish**
Public/Non-Public: Private
Address: AA 52962 Barranquilla, Colombia, S.A.
http://www.kcparrish.edu.co
Head of Institution: Ms. Laura Horbal (USA)

Grades: PK-Gr.12
Enrollment: 740   (60 professional staff in 2005 – approx. 12:1)
Organization Status: Accredited
Initial Accreditation Date: 12/31/1966

    5. Name: The George Washington School
Public/Non-Public: Private
Address: AA 2899 Cartagena, Colombia, S.A.
http://www.cojowa.edu.co
Head of Institution: Dr. Michael W. Adams (USA)
Grades: PK-Gr.12
Enrollment: 680   (65 professional staff in 2005 – approx. 10:1)
Organization Status: Accredited
Initial Accreditation Date: 12/31/1967

    6. Name: Colegio Albania
Public/Non-Public: Private School
Address: Colegio Albania/Cerrejon P.O. Box 02-5573 Miami, FL 33102 Barranquilla, 33102-
5573
http://www.colegioalbania.edu.co
Head of Institution: Ms. Ruth Allen (UK)
Grades: PK-Gr.12
Enrollment: 535
Organization Status: Accredited
Initial Accreditation Date: 12/31/1985

    7. Name: Colegio Panamericano*
Public/Non-Public: Private
Address: Calle 34 #8-73 Canaveral Alto Floridablanca, Colombia South America
http://www.panamericano.edu.co
Head of Institution: Mr. Steven M Desroches (Canada)
Grades: PK-Gr.12
Enrollment: 650   (64 professional staff in 2005 – approx. 10:1)
Organization Status: Accredited
Initial Accreditation Date: 12/31/1994
 (*Used as pilot for study survey.)

    8. Name: Fundacion Liceo Ingles
Public/Non-Public: Private
Address: Kilometro 5 Via Cerritos Entrada 17 Pereira,
http://www.liceoingles.edu.co
Head of Institution: Mrs. Diane Zauscher (USA)
Grades: PK-Gr.12
Enrollment: 500
Organization Status: Accredited
Initial Accreditation Date: 12/31/1997

9. Name: Colegio Granadino
Public/Non-Public: Private School
Address: AA 2138 Manizales, Caldas, Colombia, S.A.
http://www.granadino.edu.co
Head of Institution: Dr. Robert Sims (Canada)
Grades: PK-Gr.12
Enrollment: 600
Organization Status: Accredited
Initial Accreditation Date: 12/31/2001

Four other schools are either currently accredited or soon to be accredited by AdvancED. The heads of school of all four of the schools are Colombian, and none of the four schools have been accredited for more than ten years.

Name: GI School
Public/Non-Public: Private
Address: Kilometro 3 Via Circasia, AA664 Armenia, Colombia
http://www.gimnasioingles.edu.co
Head of Institution: Mr. Jaime A Urazan
Grades: K-Gr.12
Enrollment: 607
Organization Status: Accredited
Accreditation Date: 12/31/2003

Name: Altamira International School Institution
Public/Non-Public: Private School
Address: Carrera 50 #79-136 Barranquilla,
http://altamira.edu.co
Head of Institution: Mrs. Priscilla R de Vergara
Grades: PK-Gr.12
Enrollment: 650
Organization Status: **Accredited Under Advisement**
Accreditation Date: 06/23/2009

Name: Liceo Taller San Miguel
Public/Non-Public: Private
Address: KM 8 Via Armenia Pereira, Risaralda,
http://www.liceotallersanmiguel.edu.co
Head of Institution: Ms. Ana Isabel Jimenez
Grades: PK-Gr.12
Enrollment: 543
Organization Status: **Accredited Under Advisement**
Accreditation Date: 06/22/2010

Name: Montessori British School
Public/Non-Public: Private
Address: Calle 128 # 72-80 Bogotá, D.C. Bogotá,
http://www.montessorischool.info
Head of Institution: Mrs. Claudia Diaz
Grades: PK-Gr.12
Enrollment: 960
Organization Status: **Accredited Under Advisement**
Accreditation Date: 06/22/2010

Appendix E: Vita

Jonathan Zeb Johnson

<u>Professional Experience</u>

Colegio Panamericano -- Bucaramanga, Colombia:
Elementary School Principal and Curriculum Director (2006 to present)

SACS/AdvancED Quality Assurance Review Team Member:
American School of Recife – Brazil (2013)
Fundación Liceo Inglés – Colombia (2011)
American School of Tegucigalpa – Honduras (2011)
Discovery School – Honduras (2010)

The Columbus School – Medellín, Colombia:
Elementary School Science Coordinator / Team Leader (2001 to 2006)

Colegio Hacienda Los Alcaparros – Bogotá, Colombia
Elementary School Teacher (1999 to 2001)

ESS English Services – Seoul, Korea
ESL Teacher (1997 to 1998)

<u>Education</u>

Lehigh University – Bethlehem, Pennsylvania
Doctorate of Educational Leadership, International Program (2007 to 2013)

State University of New York – Completed while working in The Columbus School
Master´s Degree in Multidisciplinary Studies (2004)

Queen´s University – Kingston, Canada
Bachelor of Education in Concurrent Education (1999)

Trent University – Peterborough, Canada
Honours Bachelor of Arts in Anthropology and Comparative Development (1997)