Correlational Analysis of Servant Leadership and School Climate

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The purpose of this mixed-method research study was to determine the extent that servant leadership was correlated with perceptions of school climate to identify whether there was a relationship between principals’ and teachers’ perceived practice of servant leadership and of school climate. The study employed a mixed-method approach by first administering two validated quantitative instruments: Laub’s (1998) Organizational Leadership Assessment (OLA) measured the perceived servant leadership in the schools and Hoy, Tarter, & Kottkamp’s (1991) Organizational Climate Description Questionnaire-Revised (OCDQ-RE) measured the school’s climate. These instruments were administered to a randomly selected sample of 231 full-time teachers and 15 principals working in a Catholic school board in Ontario. Upon completion of the quantitative data analysis, focus group interviews were conducted with 10% of the sample. The data revealed a significant positive correlation between servant leadership and school climate.

As the demands of our public educational system have become greater, student motivation and new methods of attaining student academic achievement have become increasingly elusive. A generation of research has provided evidence demonstrating improved academic achievement goals can be attained by effective school leaders attending to the needs of school organizations (Kelley, Thornton, & Daugherty, 2005; Mitchell & Castle, 2005; Mulford, Silins, & Leithwood, 2004; Waters, Marzano, & McNulty, 2004). Visionary, creative, knowledgeable, principled, and inspiring educational leaders are vital to building and fostering a positive school environment to help meet public education goals in the 21st century (Simonson, 2005). Belief in the tenets of servant leadership as a practical operational approach for school communities has gained momentum among scholars and practitioners in the past 20 years (Sendjaya & Sarros, 2002). Servant leadership, a philosophy introduced in 1970 by Greenleaf entitled The Servant as Leader, emphasized the importance of a leader’s motivation to serve or to lead as an identification of servant leadership. Servant leaders put serving...
others before themselves, assuming a non-focal position within teams, providing resources and support without an expectation of acknowledgment. The current research project explored a potential correlation between elementary principals’ and teachers’ perceived practice of servant leadership and school climate.

Twenty-first-century scholars presented the servant leader as one moving beyond being transformational. These servant leaders possess the intent of transforming those served to grow personally and professionally, become more autonomous, and increase the likelihood of becoming servants themselves (Spears & Lawrence, 2004). Studies have shown a relationship between implementing principles of servant leadership and positive organizational climate (Ehrhart, 2004; Hunt, 2002; McCowan, 2004). The current study investigated and extended prior studies of the servant leadership and school climate relationship within the Ontario Catholic elementary school system. The acquired knowledge provided much-needed empirical evidence (Russell & Stone, 2002; Sendjaya & Sarros, 2002) to assist leaders in establishing training programs and other support systems to promote servant leadership. The principles and characteristics of servant leadership are the most appropriate leadership style for leaders in Catholic schools (Schafer, 2005). The vision of Catholic education in Canada is to provide a holistic education inspired by Jesus Christ, Christian teachings, and the Catholic community (Mulligan, 1999). Servant leadership’s tenants of caring and ethical behavior and community building are an essential component to Catholic education.

**Servant Leadership**

Leadership research has evolved considerably over the past century. A leadership evolution does not mean there is a clear, agreed-upon definition of the concept among scholars. Like all constructs in social sciences, the definition of leadership is arbitrary and subjective. Due to the lack of consensus, leaders must choose the most effective leadership theory for their organizations.

Three phases in the study of leadership theories have evolved over the past century (Polleys, 2002). The first phase, spanning 1900 to World War II, included definitions of leadership, emphasized leaders and psychological and trait theories. In the second phase, from the end of World War II until the late 1960s, a behavioral approach toward leadership emerged, with a focus on what leaders did. The third phase began in the 1970s, with a shift from the behavioral approach toward definitions examining leadership environment, and included the development of situational and contingency theories. Late in the 1970s, servant leadership emerged, viewing the leader as a servant.
The servant leadership model formed the main portion of the theoretical framework for the current study. According to servant leadership principles, leaders take care of their followers (Ehrhart, 2004). Followers of a servant leader are only effective when their needs are met; an effective servant leader understands and is sensitive to the followers’ needs (Rowe, 2003). By removing obstacles, a servant leader enables followers to concentrate on their tasks (Polleys, 2002). The surest way for a servant leader to succeed is to put others first (Rowe, 2003).

**Servant Leadership According to Greenleaf**

Greenleaf introduced the term servant leader to the corporate world. Greenleaf’s (1977) concept for servant leadership began to develop during his involvement with universities in the 1960s and 1970s. Lecturing at the Massachusetts Institute of Technology’s Sloan School of Management and at the Harvard Business School, as well as other prestigious universities, Greenleaf developed his program of leadership in the context of his research on organizational management.

The servant leadership philosophy Greenleaf (1970) introduced emphasized the importance of a leader’s motivation to serve or to lead as an identification of servant leadership. His 1977 seminal book entitled *Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness* introduced the term servant leadership and he has been given the title grandfather of servant leadership (Polleys, 2002). Greenleaf (1977) described servant leadership as follows:

> The servant-leader is servant first . . . It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. He or she is sharply different from the person who is leader first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions. For such it will be a later choice to serve—after leadership is established. (p. 52)

There is a significant difference between those choosing leadership before service (Greenleaf, 1977; Russell & Stone, 2002; Sendjaya & Sarros, 2002). According to Greenleaf (1977), one way to identify servant leaders is to test whether their followers grow as people by becoming more autonomous. He hypothesized these leaders become more of a servant.

The attribute to serve others is not serving in the sense of doing things for others. The leaders’ focus is to make the person served more competent
to meet their own needs and be better equipped to serve the organization and society in general. The focus is to help followers become more autonomous, not more reliant on the leader (Greenleaf, 1970). Greenleaf explained individuals could assess how well they were living the life of a servant leader by proposing if those served grow personally, grow professionally, become more autonomous, and themselves become servants (Greenleaf, 1970). The autonomous growth of followers test, recommended by Greenleaf, served as the core rationale behind the development of the Organizational Leadership Assessment (OLA; Laub, 1998) that quantitatively measures the perceived servant leadership in organizations and schools.

**Servant Leadership in Academic and Popular Literature**

Whether in the corporate boardroom, church pew, or school hallways, leaders have embraced servant leadership as a legitimate leadership style for creating a positive and productive environment. In the 1990s, scholars promoted a movement toward a leadership model of putting people first as a necessary step in creating a profitable business (Spears, 2004). Spears noted that

> standard practices are rapidly shifting toward the ideas put forward by Robert Greenleaf, Stephen Covey, Peter Senge, Max DePree, Margaret Wheatley, Ken Blanchard, and many others who suggest that there is a better way to lead and manage our organizations. (p. 10)

Organizations were moving toward a more meaningful leadership model; one based on teamwork, community, morals, involving others in decision-making, and promoting the growth of people (Lubin, 2001; Spears, 2004; Yukl, 2002).

**Servant Leadership Traits**

Spears (1998) tracked the evolution and growing impact of servant leadership over three decades. By reviewing Greenleaf’s writing and researching contemporary literature on servant leadership, Spears detailed 10 characteristics believed to be essential for any servant leader. Although the list is by no means exhaustive, servant leaders should exhibit the qualities to motivate others (Spears, 1998). The traits described by Spears were (a) listening, (b) empathy, (c) healing, (d) awareness, (e) persuasion, (f) conceptualization, (g) foresight, (h) stewardship, (i) commitment to the growth of people, and (j) building community.
Listening is the ability to listen receptively (Spears, 1998). The inclination of the servant leader is to understand the situation before taking action (Lubin, 2001). According to Greenleaf (1977), the servant leader is empathetic and attempts to understand the actions, behaviors, and intentions of others. Healing, in the servant leadership context, is not alleviating physical ill, rather it is addressing emotional and spiritual damage from life experiences (Lubin, 2001). The goal of education is to develop the whole child, including his or her cognitive, physical, emotional, and spiritual self. Educators are healers of the whole child.

The servant leader has a wide perspective on the world. The awareness trait is not only sensory, but includes an understanding of one’s ethics, morals, and values. Greenleaf (1977) observed awareness is not a comforting state, rather leaders increase their sensory perception to gather information for future situations. Servant leaders demonstrate persuasion by showing respect and dignity for others (Greenleaf, 1977). Spears (1998) wrote the use of persuasion, rather than formal sanctions and rewards, to enlist and maintain follower commitment to organizational goals is representative of the servant leader. According to Spears, persuasion is the ability of the servant leader to build consensus within groups. Greenleaf (1977) suggested persuasion is usually a slow, deliberate, and painstaking process. Conceptualization or conceptual leaders traditionally had characteristics of visionaries and were innovators in their institutions. Spears (1998), following a review of Greenleaf’s essays, defined the attribute of conceptualization as the ability to look beyond day-to-day realities to examine an issue. The servant leader conceptualization attribute requires the servant leader to balance looking beyond the short term to the long-term vision of the organization (Spears, 1998).

Foresight, as defined by Greenleaf (1977), is “a better than average guess about what is going to happen in the future” (p. 24). One develops foresight through superior awareness and perception, and as an ability to face the unknown. Stewardship, as defined by Peter Block (1998), is “to hold something in trust for another” (p. 15). Greenleaf (1977) believed it was a leader’s responsibility to “hold institutions in trust for the larger society” (p. 52). From Greenleaf’s perspective, the ultimate test of servant leaders is the extent they contribute to the growth of nominal followers or commitment to the growth of people. The primary concern for servant leaders lies in meeting the higher-order needs of those served. The most admired leaders develop their followers self-worth and self-esteem (Kouzes & Posner, 1995). Servant leaders are committed to doing what is necessary in the work environment so the environment contributes to the professional and personal growth of all people in the institution. The building community attribute illustrates Greenleaf’s
vision of improving a community by actively participating in improving the organization’s growth. According to Greenleaf (1977), “Only community can give the healing love that is essential for health” (p. 37). Servant leaders do not allow themselves to become isolated from their subordinates by layers of hierarchy. Instead, they are physically present at the actual working site.

**Servant Leadership in Catholic Schools**

Catholic schools are a ministry of the parish. Although Catholic school boards have a significant role in the decision-making of Catholic schools, Catholic school principals are the primary decision-makers within a school. If principals have common role expectations they will likely be more effective leaders in their community. The language and characteristics of servant leadership are the most appropriate leadership style for Catholic school leaders (Schafer, 2005). The doctrines and teachings of the Catholic Church encourage members of the Catholic community to live the principles of servant leadership.

The concept of servant leadership occurs in the Bible through examples from Moses to Jesus. The word servant is in the Bible almost 1,000 times. Scholars, contemporary authors, and researchers have cited biblical references to support servant leadership (Blanchard & Hodges, 2002; Contee-Borders, 2002; Greenleaf, 1970; Jennings, 2002; Sendjaya & Sarros, 2002).

Jesus, considered by some scholars to be the greatest leader to have lived (Carter, 2003; Kubicek, 2005), presented a model of leadership focusing on God, not the leader. Jesus exemplified leadership as care, love, and submission rather than strength, might, and power. Colson once stated during a speech, “All kings in history sent people out to die for them. There is only one king I know who decided to die for his people” (as cited in Blanchard, 1998, p. 26).

In a document from the United States Conference of Catholic Bishops (1972), *To Teach As Jesus Did*, the bishops promoted the concept that it is the responsibility of the Christian community to follow the example of Jesus. The bishops stated,

>This community is based not on force or accident of geographic location or even on deeper ties of ethnic origin, but on the life of the Spirit which unites its members in a unique fellowship so intimate that Paul likens it to a body of which each individual is part and Jesus Himself is the Head. (sec. 22)

Jesus’ life and teachings exemplified the perfect servant leader (Blanchard & Hodges, 2002; Contee-Borders, 2002; Moore, 2005). Jesus did not lead from
behind, but rather he stood out front, even in the face of great adversity. He had a vision of what he had to do, and probably knew there was a short time to complete his tasks. Ultimately, the essence of Jesus’ message was simple; he showed by example (Spears, 1998). “Jesus washing his disciples’ feet is a dramatic example of His service and humility to people” (Woolfe, 2003, p. 84).

The characteristics of servant leaders, as defined by Spears (1998), listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community, are what one would expect in a Catholic school (Schafer, 2005). The Church’s philosophy on education aligns with the principles of servant leadership as noted in a document from the Vatican: the Congregation for Catholic Education (CCE; 1998), stated, “A Catholic school is not simply a place where lessons are taught, it is a center that has an operative educational philosophy, attentive to the needs of today’s youth and illuminated by the Gospel message” (sec. 22). The idea of Catholic schools as Christian communities is embodied in servant leadership and further illustrated in the Vatican document entitled The Catholic School (CCE, 1977). In reference to Catholic schools, the CCE stated, “It is a genuine community bent on imparting, over and above an academic education, all the help it can to its members to adopt a Christian way of life” (sec. 60). Servant leadership’s general attitude to service closely reflects the Church’s teachings and embodies the characteristics one would expect Catholic school principals to follow.

**School Climate**

School leaders investing time and effort in assessing and improving their schools’ climate can increase their school’s overall efficacy. Research supports the relationship between a positive school climate and improved student achievement (Halawah, 2005), teacher retention and satisfaction (de Barona & Barona, 2006), reduced school violence (Khoury-Kassabri, Benbenishty, & Astor, 2005), and sustained school reform (Kelley et al., 2005). The principal has the responsibility to create a positive organizational climate through effective leadership at the school level. According to Halawah (2005), an elementary school principal’s behavior influences students’ academic achievement. By modeling and promoting a positive instructional learning environment, the principal is able to influence positively the school’s climate and student achievement. Research explored the relationship between secondary principals’ servant leadership and school climate (Anderson, 2005; Lambert, 2004; Miears, 2004). There were no empirical data addressing the relationship between elementary school principal servant leaders and school climate.
Interest in the construct of school climate increased when researchers began to show a relationship between positive school climate and academic achievement. Cohen (2006) underscored the significance of a positive school environment in “meeting the academic, emotional, and social needs of students” (p. 201). As a result of these findings, the U.S. Department of Justice and state agencies actively encouraged educators to foster emotionally, socially, and physically safer school communities (Cohen, 2006).

Recent increased media and legislative attention to school violence issues from the public and educators brought attention to safety concerns within the school environment. With the focus on student safety, school climate has been elevated to national attention and is now among top variables school staff and policy-makers constantly evaluate (U.S. Department of Education, 2005). School climate influences not only the day-to-day experiences of the teachers and other on-site professionals, it impacts the quality and effectiveness of the educational experience for students.

**The Appearance of School Climate**

In the 1970s, researchers used the term *school climate* in relation to the environment of a school (Hoy et al., 1991). Under many early definitions, school climate was the atmosphere of the school as teachers and administrators experience it. The atmosphere explanation described a teacher’s or administrator’s “perception of routine behavior that affected the attitudes and behavior in the school” (Hoy & Miskel, 2001, p. 159). Halpin and Croft (1963), pioneers in the study of school climate construct, studied the influence of leaders’ behaviors on organizational climates, specifically elementary schools, and concluded each school had a different feel or personality (Halpin, 1966). In their 1963 study of school climate, Halpin and Croft identified six prototypic climate profiles from 71 elementary schools based on key components of teacher-to-teacher and teacher-to-school administrator interactions. Halpin and Croft used these components to develop the Organizational Climate Description Questionnaire (OCDQ), which provided a measure of school climate in elementary schools (as cited in Hoy & Tarter, 1997).

Halpin and Croft (1963) identified eight dimensions of school climate. Four of the dimensions refer to the characteristics of the group or faculty: (a) disengagement, where teachers are not committed to the task at hand; (b) hindrance, where teachers feel the principal burdens them with unnecessary duties and work; (c) esprit, the morale of the group grows from a sense of satisfaction of social needs and task accomplishment; and (d) intimacy, where teachers perceive the social relations with others in the school as warm and
friendly. The remaining four dimensions pertain to the behavior or characteristics of the leader: (e) aloofness, where the principal shows informal and impersonal behavior and maintains social distance from subordinate faculty; (f) production emphasis, where the principal supervises closely, is highly directive and not sensitive to faculty feedback; (g) thrust, where a dynamic principal personally sets the example to move the organization; and (h) consideration, where the principal is warm, friendly, and tries to be extra helpful to the faculty (Hoy et al., 1991). Hoy et al. (1991) noted that the dimension descriptions “suggest the behavior that each taps” (p. 11).

The eight dimensions defined six climate types arranged along a continuum from open to closed: open, autonomous, controlled, familiar, paternal, and closed (Hoy et al., 1991). The OCDQ provided the basic framework for studying school climate for 25 years (Hoy et al., 1991). The instrument received criticism for neglecting secondary students and focusing only on elementary schools (Rafferty, 2003).

Researchers studied Halpin and Croft’s (1963) work and extended the concept of school climate into high schools to address limitations in the original instrument (Hoy et al., 1991). The Organizational Health Inventory (OHI)-Secondary emerged, seeking to capture the health of interpersonal relationships in schools (Hoy & Tarter, 1997). The OHI had a basis in the theoretical work of Parsons (1951) in the area of organizational social systems. Parsons (as cited in Hoy et al., 1991) stated all organizations, including schools, had four functional imperatives or problems to be solved if they were to grow and survive: (a) acquiring sufficient resources and working cooperatively within the external environment, (b) setting and implementing goals, (c) maintaining a sense of unity, and (d) creating and maintaining a distinctive value system. According to Parsons, each organization had three levels of authority over three basic functions: (a) technical, (b) managerial, and (c) institutional.

The instrument in Hoy and Tarter’s (1997) study focused on the health of the organization. Following Parsons’ organizational levels of authority, school health possessed three levels of conceptualization: (a) institutional, (b) administrative, and (c) teacher. The three levels representing the basic needs of the school were (a) helping others adapt to the environmental demands, (b) achieving goals and satisfying the needs of all parties, and (c) creating cohesiveness in the community.

Hoy and Tarter (1997) found a healthy school was free from outside pressures from parents and the community. The county board protected the school from distinctive forces (high institutional integrity). The healthy school’s principal was a dynamic leader integrating various styles of leadership, focusing
on both tasks and relations with others (high consideration and initiating structure). The healthy school’s principal also influenced decision-makers within the system so his or her school was able to get what it needed to operate effectively (high influence).

The “teachers in a healthy school were committed to the students and the process of learning” (Hoy & Tarter, 1997, p. 52). These teachers set high standards and were encouraged by a serious and orderly environment (high academic emphasis). The principal provided teachers with the classroom supplies and instructional materials needed for their classes (high resource support). Finally, teachers in a healthy school worked well together and trusted one another. They were enthusiastic about teaching and excited about their school (high morale; Hoy & Tarter, 1997).

In a healthy school environment, administrators, teachers, and students had positive relationships with one another (Hoy, Smith, & Sweetland, 2002). The principal was perceived as positive, supportive, and friendly to staff and students and had high expectations for teachers while helping in any way possible. In healthy school environments, teachers worked well with colleagues, and enjoyed their students and jobs. The teachers pushed students to academic excellence and believed students could be successful (Hoy et al., 2002).

Extensive research has identified components of school climate (Halpin, 1966; Hoy & Miskel, 2001; Hoy et al., 2002; Hoy & Tarter, 1997; Hoy et al., 1991; John & Taylor, 1999; McIntyre, 2004; Rogers Gerrish, 2005). School leaders are demarked as the most critical component of an effective learning environment (Kelley et al., 2005; Mitchell & Castle, 2005; Mulford et al., 2004; Waters et al., 2004). Effective leadership behaviors of school principals are critical to the climate of the school, as their choices influence student achievement (Halverson, 2004; Johnson & Uline, 2005; Norton, 2002; Quinn, 2002). There is a significant gap in the literature exploring the relationship between perceived servant leadership behaviors of the elementary school principal and school climate. The current study helps fill the void in the research.

**Method**

To enhance both reliability and validity, the current study employed a mixed-method approach of conducting research. The strength of a mixed-method design is through implementing the best features of both types of data collection. “That is, quantitative data provides for generalizability, whereas qualitative data offers information about the context or setting” (Creswell, 2005, p. 515). The purpose of this mixed-method research study was to determine
the extent that servant leadership was correlated with perceptions of school climate to identify the relationship between the practice of servant leadership and perception of school climate. First, the research study consisted of gathering quantitative survey data from a sample of elementary school principals and teachers. Second, post-survey qualitative data were gathered from 10% of the sample, as determined by implementing a nonprobability sampling technique or until no new theme emerged. For the purpose of the current study, the independent variable was principals’ and teachers’ perceptions of whether and how servant leadership principles were implemented by the principals in the elementary schools in a Catholic school board in Ontario. The dependent variable was the school climate of the same schools. The purpose of using a mixed-method design was to enhance confidence in the findings rather than using a single methodology. When conclusions support data collected from multiple sources, validity is enhanced (Creswell, 2005). The current study addressed the following research questions:

1. What is the correlation, if any, between perceptions of servant leadership practices and perceptions of school climate by elementary principals and full-time teachers of a Catholic school board in Ontario?

2. What types of experiences, if any, do elementary principals and full-time teachers have that indicate the perception of servant leadership practices and perception of school climate?

**Instrumentation**

*Organizational Leadership Assessment.* The OLA (Laub, 1998) was the best suited servant leadership instrument for measuring servant leadership at the school level of analysis. The OLA is comprised of 66 survey questions measured on a 5-point Likert Scale (0 = *No response* or *Undecided*, 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Agree*, 4 = *Strongly Agree*). The OLA is divided into six distinct constructs or subscales of servant leadership: values people, develops people, builds community, displays authenticity, provides leadership, and shares leadership. Each of these constructs includes between 9 and 12 questions. Table 1 provides a sample of response items from the OLA.
The Organizational Climate Description Questionnaire-Revised for Elementary Schools (OCDQ-RE; Hoy et al., 1991) is a 42-item organizational climate instrument based on a 5-point Likert scale (0 = No Response, 1 = Rarely Occurs, 2 = Sometimes Occurs, 3 = Often Occurs, 4 = Very Frequently Occurs). The OCDQ-RE is divided into six dimensions or subscales of school climate: supportive principal behavior, directive principal behavior, restrictive principal behavior, collegial teacher behavior, intimate teacher behavior, and disengaged teacher behavior. Each of these dimensions includes between 4 and 9 questions. Table 2 provides sample items of the OCDQ-RE. The OCDQ-RE survey has been the most widely used elementary school climate assessment tool in the literature for a generation of researchers (Hoy & Tarter, 1997).
Focus group interviews. The focus group interviews concentrated on the perceptions and lived experiences of principals and teachers from the sample elementary schools to understand better the servant leadership constructs and applications that had the greatest impact on creating a school environment that maximized the potential for student achievement. The data were collected by conducting three focus group interviews; each group consisted of between 6 to 10 principals and teachers from the same school. Twenty-four members in all were interviewed.

The semistructured interviews were guided by the statements from the OLA and OCDQ-RE. The responses and information shared in the face-to-face discussions allowed the participants to share their perceptions of their lived servant leadership experiences in the school. A group’s synergy allowed the participants to draw from one another or to brainstorm collectively with other members of the group. The recording and transcription of the focus group interviews allowed participants to review the accuracy of the transcripts.
Reliability and Validity

In past studies (Anderson, 2005; Laub, 1999; Miears, 2004; Thompson, 2002), the OLA demonstrated high levels of reliability, indicating its usefulness for further research in servant leadership. Laub (1999) indicated the OLA had a reliability of .98. The reliability alpha coefficients of the six dimensions for the OCDQ-RE instrument are relatively high: supportive ($\alpha = .94$), directive ($\alpha = .88$), restrictive ($\alpha = .81$), collegial ($\alpha = .87$), intimate ($\alpha = .83$), and disengaged ($\alpha = .78$; Hoy et al., 1991).

Construct validity refers to the nature of the construct, or characteristic being measured, with the measurement established through empirical evidence supporting the instrument. In reference to the construct validity of the OCDQ-RE, Hoy et al. (1991) stated,

the index of teacher openness correlated positively with the original general school openness index ($r = .67$, $p < .01$) as did the index of principal openness ($r = .52$, $p < .01$). Moreover, the factor analysis supports the construct validity of organizational climate. (p. 35)

The focus group interviews add a parallel form of reliability by giving the same group of participants a different form of the same instrument. In this study the two sets of scores, the survey data, and the focus group data, were correlated with each other. The interview protocol was standard for all three groups, further enhancing the reliability. The moderator for all the interviews was the same person. She guided the discussion by using the response items from the OLA and OCDQ-RE. The moderator ensured that the group remained on task for the allotted time, and did not allow any one person to dominate the discussion.

Participants

The target population who served as a source for the sample were the full-time elementary teachers and principals on active assignment in elementary schools in an Ontario English Catholic School Board. The target population included 37 elementary schools with 998 full-time elementary teachers. Of the 37 elementary schools, 375 full-time teachers from 12 schools were randomly selected to participate in the current research study. To be more specific, among the 998 full-time elementary teachers, a sample size of 375 should result in a margin of error level of 4% (0.04) and confidence interval of 95%. Of the 375 full-time teachers randomly selected, 246 teachers from the 12 schools participated.
All 246 participants who completed the Informed Consent Form are included in the summary of demographic statistics in Table 3. The \( n \) varies by item, as some respondents did not complete all items. Two hundred thirty-seven participants were included in the OCDQ-RE analysis. The final number of participants to complete the OLA was 181. Only 155 participants who responded to both the OLA and OCDQ-RE were considered for the canonical correlation analysis. Twenty-four individuals from the sample participated in the focus group surveys.

Table 3

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<td>3.71 (3.31)</td>
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**Data Collection**

The OLA and OCDQ-RE surveys were completed online through the school board’s intranet service. Each school participating in the study had a different PIN number to access the site. Only full-time teachers and principals who completed the Informed Consent Form had access to the survey site. The qualitative data gathering consisted of asking participants to explain, in their own words, the thoughts or feelings contributing to their responses on various statements from the OLA or OCDQ-RE. The sessions were 60 minutes in length. The teachers participated for the entire session and the principals joined the sessions 30 minutes into the interviews. The focus groups consisted of teachers and the principal from the same school. The data were collected 3 months after the participants’ completion of the survey and within the same school year.

**Data Analysis**

The SAS software program was used to analyze the data obtained from the teachers’ demographic data, the OLA instrument, and the OCDQ-RE instrument. Teachers’ demographic data were summarized through descriptive
statistics. Means, ranges, and standard deviations were determined for the variables of age, number of years of teaching experience, and number of years teaching at their current school. The demographic data were summarized for the gender distribution.

Data from the OLA and the OCDQ-RE were summarized with descriptive statistics. The OLA has six unique constructs, and the OCDQ-RE has six dimensions: three principal and three teacher. The teachers’ and principals’ perceptions about servant leadership and school climate were analyzed separately. The two sets of perception data were compared to determine if they differed significantly. Analyses of principal and teacher perceptions at each school and aggregate level (while considering all schools altogether) was an important part of the current research. Each school that participated in the study was provided with an individual analysis of its school’s data to reflect on the strengths and areas of growth within the respective schools. After categorizing individuals per OLA constructs, construct scores (values people, develops people, builds community, displays authenticity, provides leadership, shares leadership), not individual’s raw scores, were used for final analysis.

The purpose of the study was to determine how well individuals within the school have been implementing the principles of servant leadership. Based on the overall score on the OLA, participating schools were classified into one of the six categories established by Laub (2003). Table 4 provides a brief explanation of each of the six organizational categories. A servant-minded organization is represented by the highest power, abbreviated as Org6. A power level is associated with each of the six diagnostic categories. According to Laub, power levels acknowledge the exponential difference between the categories and represent different ways to consider organizational growth and change.

An autocratic mind-set is characterized as organizational inertia (Org1 – Org2), resulting in the inability to change and grow (Laub, 2003). The paternalistic mind-set conceives of the leader as parent, putting the needs of the organization first, yet treating others as children. The organizational health at the paternalistic level advances to limited and moderate levels (Org3 – Org4). Based on OLA research, Laub reports that the majority of organizations are paternalistic. A servant-oriented mind-set (Org5 – Org6) requires a quantum shift, an entirely new way to conceive of organizations and practice leadership. Organizational health advances to excellent and optimal, characterizing a leader as steward of the organization, acknowledging the needs of others, and treating others as partners (Laub, 2003).

Correlational coefficients determined relationships between the six constructs of the OLA and the six dimensions of the OCDQ-RE to identify
relationships between the perceived practice of servant leadership and school climate. The technique of canonical correlation explicates the strength and direction of correlation between the perceptions of servant leadership and the perceptions of school climate for principals and teachers. The process of canonical correlation analysis began with finding a linear combination of the OLA constructs and another linear combination of OCDQ dimensions where values of coefficients are selected in such a way to maximize the correlation. The resulting linear combination produced a canonical variable from each set of variables called the first canonical variable. The square of the first canonical correlation is the first eigenvalue. The residuals are then analyzed in the same fashion to find a second pair of canonical variables, whose weights are chosen to maximize the correlation between the second pair of canonical variables, using only the variance remaining after the variance due to the first pair of canonical variables has been removed from the original variables. The process continued until the maximum number of six pairs was found.

Analysis of the qualitative data obtained through the post-survey qualitative focus group interviews followed established methods using QSR NVivo 7. The focus group interviews were transcribed and evaluated for themes and textual descriptions of lived experiences using the qualitative assessment tool QSR NVivo 7 to find the frequency of data reported by the participants. The QSR NVivo 7 software helped group the focus group interview data into themes, patterns, ideas, and textural descriptions. Coded data allowed for answers to the research questions to be converted into numerical data to reflect the frequency of common terms and themes.
Presentation and Analysis of Data

Canonical Correlation Analysis

The overall canonical correlation analysis, which combined the teachers and principals in the same analysis, suggested a significant positive relationship between the perceptions of servant leadership practices and perceptions of school climate. The cross-correlation analysis revealed the supportive, intimate, and collegial dimensions of the OCDQ-RE (school climate dimensions) and the builds community, values people, and displays authenticity constructs of the OLA (servant leader constructs) were the most important contributors in the association between the OLA and the OCDQ-RE with an overall 92% of variation explained. The greatest degree of association between servant leadership and school climate were values people from the OLA and supportive from the OCDQ-RE, with a canonical correlation of .66. The second strongest degree of association was builds people and collegial, with a canonical correlation of .54. The results suggest that in schools where the traits valuing and developing people are perceived to be demonstrated by teachers and principals, the school climate is more likely to be perceived as supportive and collegial. The strength of the association between the servant leadership traits and a positive school climate suggest that principals who wish to improve their school climate should follow the model of servant leadership. Table 5 displays the top three pairs of canonical variables and the reported canonical correlation.

Table 5

<table>
<thead>
<tr>
<th>Degree of Association</th>
<th>OLA Construct</th>
<th>OCDQ-RE Dimension</th>
<th>Canonical Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Values people</td>
<td>Supportive</td>
<td>0.66</td>
</tr>
<tr>
<td>2</td>
<td>Develops people</td>
<td>Collegial</td>
<td>0.54</td>
</tr>
<tr>
<td>3</td>
<td>Displays authenticity</td>
<td>Intimate</td>
<td>0.36</td>
</tr>
</tbody>
</table>

The data further revealed a variation in the principals’ and teachers’ perceptions. The association or correlation between OLA and OCDQ-RE was around 98% for the principals, whereas the association between teachers’ perceptions was around 65%. Principals and teachers delineated their own organizational leadership profiles through expressing their perceptions of servant leadership in the OLA constructs. Table 6 provides a comparison of the principals’ and teachers’ perception scores on the six OLA constructs. As reflected in the scores, the principals and teachers are not aligned in their perceptions.
of the servant leadership tenants being implemented throughout the school. The results indicated principals outweighed the teachers in all aspects of the OLA constructs. In other words, the principals reported that the members of the school community exhibit excellent levels of servant leadership characteristics within the school community. In contrast, teachers were not as satisfied as the principals in their perceptions of servant leadership within the organization. The teachers reported that the members of the school community exhibit moderate levels of servant leadership characteristics within the school community.

The perception of servant leadership was addressed with the data from the OLA. The results obtained through the OLA demonstrated a rating of 226.71 out of a possible 300, or 75.57% of the potential score. The score placed the participating schools collectively in the study in the category of a positively paternalistic organization, according to Laub’s (2003) interpretation scale. Rating a score of 226.71, or 75.57% of the potential score of the OLA, did not allow for the elementary schools in the Catholic school board in the current study to be classified as servant-oriented organizations. The score placed the schools only 4.43% below the 240 benchmark score, and above most organizations studied for servant leadership practices. The scores derived from these studies are presented in Table 7 for visual comparison. The table includes a thicker line indicating the benchmark score of 240 where organizations cross over from being a “positively paternalistic organization” to being classified as a “servant-oriented organization” (Laub, 2003).

Braye’s (2000) study was conducted among women-led businesses and achieved a rating of 252.60 or 84.20% of the potential OLA score. Braye acknowledged a significant limitation of the study because the response rate was only 2% of those invited to participate in the study. Anderson’s (2005) study of the Church Educational System of The Church of Jesus Christ of Latter-day Saints, with a score of 247.08, placed the organization in the category of a servant-oriented organization according to the interpretation guide given for the OLA. The study examined high school and college teachers and administrators and had an impressive 78% response rate from 550 individuals invited.

<table>
<thead>
<tr>
<th>Values People</th>
<th>Develops People</th>
<th>Builds Community</th>
<th>Displays Authenticity</th>
<th>Provides Leadership</th>
<th>Shares Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>39.88</td>
<td>36.77</td>
<td>43.05</td>
<td>49.61</td>
<td>38.05</td>
</tr>
<tr>
<td>Teacher</td>
<td>38.12</td>
<td>33.39</td>
<td>38.60</td>
<td>43.88</td>
<td>33.63</td>
</tr>
</tbody>
</table>
to participate. Anderson concluded that followers of Christian traditions are more likely to implement principles of servant leadership than people in other organizations. Both the Franciscan-supported university and the church-related college studies reported lower scores, which does not support the notion that all organizations with religious affiliation are more likely to follow a servant leader model. Nevertheless, the Ontario Catholic School District’s score, although not as high as the Church Educational System, lends support to Anderson’s claim. The findings further demonstrate that Christ-centered followers are perhaps more likely to practice the principles of servant leadership because of the doctrines and teachings that promote these behaviors in their everyday living.

**Organizational Climate Description Questionnaire-Revised (OCDQ-RE)**

The climate of all the schools in this study was open, according to the principals’ perceptions. Teachers were “highly open and professional in their interaction with each other” (Hoy et al., 1991, p. 147). Using the OCDQ-RE descriptors, the principals’ characterized the schools’ environments as highly intimate with low disengagement. That is to say, a climate where individuals “demonstrate[d] a strongly cohesive and substantial network of social support, and [were] quite engaged in meaningful professional activities” (Hoy et al., 1991, p. 147). Table 8 summarizes the principals’ perceptions of school climate.

Teachers perceived the school climate as less open than the principals. Data from the OCDQ-RE revealed that the principals perceived their behavior as supportive by showing a genuine concern for the teachers.

<table>
<thead>
<tr>
<th>Studies Conducted Using OLA</th>
<th>OLA Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women-led Businesses (Brayc, 2000)</td>
<td>252.60</td>
</tr>
<tr>
<td>Church Educational System (Anderson, 2005)</td>
<td>247.08</td>
</tr>
<tr>
<td>Ontario Catholic School District (Current Study)</td>
<td>226.71</td>
</tr>
<tr>
<td>Public School District (Anderson, 2006)</td>
<td>223.79</td>
</tr>
<tr>
<td>Community Service Organization (Horsman, 2001)</td>
<td>214.74</td>
</tr>
<tr>
<td>Church-related College (Thompson, 2002)</td>
<td>213.73</td>
</tr>
<tr>
<td>Public School District (Miears, 2004)</td>
<td>211.43</td>
</tr>
<tr>
<td>Law Enforcement Agency (Ledbetter, 2003)</td>
<td>210.52</td>
</tr>
<tr>
<td>Franciscan-sponsored University (Van Tassell, 2006)</td>
<td>195.70</td>
</tr>
</tbody>
</table>
the OCDQ-RE dimension continuum, the teachers perceived the principals’ behavior as more directive rather than supportive; the teachers characterized the principal as “task oriented” and “maintain[ing] close and constant control over all the teacher and school activities” (Hoy et al., 1991, p. 135). Although teachers exhibited average levels of collegial and intimate behavior, they characterized themselves as less engaged in their assigned activities as perceived by the principal. Table 9 summarizes the data for the teachers’ perceptions of school climate.

Table 9

OCDQ-RE: Teachers’ Perceptions

<table>
<thead>
<tr>
<th>OCDQ-RE</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals’ behavior</td>
<td></td>
</tr>
<tr>
<td>Supportive behavior</td>
<td>486.94 (Slightly below average)</td>
</tr>
<tr>
<td>Directive behavior</td>
<td>488.09 (Slightly below average)</td>
</tr>
<tr>
<td>Restrictive behavior</td>
<td>483.33 (Slightly below average)</td>
</tr>
<tr>
<td>Principal openness</td>
<td>505.17 (Average)*</td>
</tr>
<tr>
<td>Teachers’ behavior</td>
<td></td>
</tr>
<tr>
<td>Collegial behavior</td>
<td>487.00 (Slightly below average)</td>
</tr>
<tr>
<td>Intimate behavior</td>
<td>487.67 (Slightly below average)</td>
</tr>
<tr>
<td>Disengaged behavior</td>
<td>516.67 (Slightly below average)</td>
</tr>
<tr>
<td>Teacher openness</td>
<td>486.00 (Slightly below average)**</td>
</tr>
</tbody>
</table>

Note: *{(Sds for S) + (1000 – Sds for D) + (1000 – Sds for R))/3
**{(Sds for C) + (Sds for In) + (1000 – Sds for Dis))/3
The results from the OCDQ-RE data in the current study support the notion that in a healthy, open school environment, administrators, teachers, and students have a positive relationship with one another (Hoy et al., 2002). The principal was perceived as positive, supportive, and friendly to staff. In healthy school environments, teachers work well with colleagues and enjoy their students and jobs (Hoy et al., 2002).

**Focus Group Interviews**

The individual experiences shared during the focus group interviews were significant for addressing the research question about the types of experiences elementary principals and full-time teachers had, indicating the perception of servant leadership practices and perception of school climate. Organizing data into coherent categories is “the crux of qualitative analysis” (Taylor-Powell & Renner, 2003, p. 2). Categorizing data from the current study involved a coding process to break the transcripts into paragraphs, sentences, or phrases and grouping the data into common themes. The servant leadership constructs and the school climate dimensions aided the organization of the focus group interview transcriptions by emergent themes or patterns (Patton, 2002). A pattern refers to the different ways in which people discussed the same construct. The servant leadership constructs with the greatest number of patterns were values people (6 patterns), develops people (6 patterns), and shares leadership (5 patterns). The school climate dimensions with the greatest number of responses were supportive principal behavior (6 patterns), intimate teacher behavior (5 patterns), and collegial teacher behavior (1 pattern). During the focus group interviews, principals and teachers described many of the constructs of servant leadership, including community, team, and sharing, and school climate dimensions such as mentor, welcome, and collaboration.

Aligning with the values people trait, a teacher participant shared her personal experience in a focus group interview. In a school with a large population, she noted she would understand how one might get lost in the shuffle, but at her school she felt appreciated. She stated, “There is always something in your mail—a personal note, a special acknowledgment—and that just makes you feel that someone noticed. Definitely, you feel appreciated.” Examples of develops people experiences included a discussion in one of the interviews that converged on the theme of support in terms of recognition, encouragement, or affirmation. One of the teachers during the interview noted how she was inspired when the principal worked to improve herself. The teacher explained that the principal participated in the same professional development sessions to improve instructional practices as the teachers. The
teacher stated, “You try to get better because of that, because you feel valued and you feel important. We all need that positive reinforcement.” She continued the discussion by sharing her thoughts: “We are human beings, just like children. If you say to a student, ‘I love the way you do that,’ you can see a big smile on their face. We are the same way, we are like children ourselves.”

The principals participating in the focus group interviews agreed shared leadership was essential to the success of the school. One principal shared her experience of shared leadership: “I could not do what I do in this school as far as the goals and progress that we make with our school improvement plan if I did not have shared leadership.” She praised her supportive staff for taking on leadership in areas such as discipline. A principal in another focus group believed that sharing leadership “allows me to do what I believe administration is moving towards and that is curriculum leadership.” She continued by describing her staff as a team and herself as an “open book” because she shared everything with them, including data. In turn, the school community “knows where they are going.”

**Combining Quantitative and Qualitative Data**

According to the cross-correlation analysis of the canonical correlation analysis, the builds community, values people, and displays authenticity constructs of the OLA and the supportive, intimate, and collegial dimensions of the OCDQ-RE were the most important contributors in the association between the OLA and OCDQ-RE. Analysis of the qualitative data revealed in-depth descriptions for the servant leadership constructs, including values people, develops people, and shares leadership. The school climate dimensions reported during the in-depth descriptions were supportive principal behavior, intimate teacher behavior, and collegial teacher behavior. Combining the data revealed four of the six items were the same, with values people and supportive principal behavior as the most dominate characteristics of the organizations. The purpose of the focus group interviews was to add depth to quantitative findings. Results from the qualitative interviews added confidence to the original data proffered by the OLA and OCDQ-RE.

**Discussion**

The overall canonical correlation analysis, which combined the teachers and principals in the same analysis, reported a significant positive relationship between the perceptions of servant leadership practices and perceptions of school climate. The strong relationship suggests that when servant leadership
is perceived to be present, the perceptions of the school climate are positive. The cross-correlation analysis revealed the supportive, intimate, and collegial dimensions of the OCDQ-RE and the builds community, values people, and displays authenticity constructs of the OLA were the most important contributors in the association between the OLA and the OCDQ-RE.

Lambert (2004) conducted the only research identifying a relationship between servant leadership and school climate. Lambert examined the correlation between servant leadership and school climate and the overall academic success of the school. Lambert’s study revealed a significant relationship between servant leadership and school climate. The difference between Lambert’s study and the current research is that Lambert used only the OLA as a means to measure both the teachers’ and principals’ perceptions of servant leadership and school climate. The job satisfaction items from the OLA served as the school climate indicator. The current study measured servant leadership behaviors and the school climate dimensions separately, with two different survey instruments, contributing to both the validity and reliability of the study. Additionally, Lambert’s study focused on secondary schools; the current study used the elementary panel as the sample population.

Research supports the notion that there is a positive correlation between leadership behaviors and organizational climate in schools, as perceived by members of the organization (Fullan, Cuttress, & Kilcher, 2005; Kelley et al., 2005; Mitchell & Castle, 2005; Mulford et al., 2004; Waters et al., 2004). The present study begins to fill the void in empirical evidence supporting the relationship between servant leadership behaviors and school climate.

To date, little research on servant leadership in the context of Catholic elementary schools has been conducted. This study highlights the correlation between servant leadership and school climate. As noted earlier, research supports the correlation between a positive school climate and improved student achievement. Some research has been done on the connection between the principal’s role as spiritual leader and servant leadership in Catholic schools (Dreliszak, 2000; O’Hara, 2000). Schafer (2005) supported the notion of servant leadership as an appropriate leadership model for the role expectations for principals and pastors of Catholic elementary schools. In Schafer’s words, “Because of its thematic unity with the Christian Gospels and its congruence with the life of Jesus, servant leadership merits the attention, consideration, and reflection of leaders in every aspect of Catholic life—parishes, [and] schools” (¶ 24). This study and previous research supports the notion that principals following the tenants of servant leader have the potential to be both curriculum and faith leaders in Catholic schools. Servant leader principals
have the potential to preserve the value and purpose of Catholic schools as faith communities. Servant leader principals can be prophets and leaders of worship and prayer and curriculum leaders improving student achievement in Catholic schools.

The empirical data collected from the present research study contribute to the practical application of a theoretical dialogue regarding servant leadership in several key areas. First, correlational analysis from the current study provides insight into practical implications for how principals might implement servant leadership principles to affect a positive school climate. For example, incorporating the results from the study—noting that the traits values people and develops people were the strongest connection in the correlation between servant leadership and school climate—and using the statements from the OLA may provide a guide to appropriate leadership behavior. A principal wishing to optimize the school climate by improving the culture of the school and the morale and commitment of the teachers could begin by developing relationships using the statements from values people and develops people as a guide for effective servant leadership behavior.

Second and currently in practice, the study provides insight into areas of emphasis for individuals responsible for developing effective leadership programs using servant leadership principles. For example, the teachers’ perceptions of their organization’s servant leadership practices rated the constructs of develops people and provides leadership as the weakest areas. Principals in the current study included the data in their school improvement plan with strategies to address these concerns. Third, the current research contributes to the construction of the concept of servant leadership. Data collected from the focus group interviews provides specific examples of servant leadership behaviors by principals in schools for each servant leadership trait. Fourth, correlational analyses using the OLA assessment instrument may provide greater confidence in the validity of the instrument to strengthen claims the OLA accurately assesses servant leadership principles (Anderson, 2005; Laub, 1998; Miears, 2004; Thompson, 2002).

**Implications**

The current study provides evidence to support the effectiveness of implementing servant leadership principles to create a positive school climate in Catholic schools. Previous research supports the concept that a positive school climate influences student achievement. In a culture of faith-centered education, Catholic school leaders can influence the school’s climate and student achievement by adopting the theory of servant leadership to guide their
behavior. Current and future Catholic school leaders face significant challenges, including high-stakes evaluation programs, reduced fiscal and staffing resources, and increased public expectations for students’ achievement. Catholic school principals implementing the theory of servant leadership is an appropriate combination of faith and curriculum leadership. Principals and teachers using the tenants of servant leadership, which align with the Catholic doctrine and traditions inspired by Jesus Christ, Christian teachings, and the Catholic community, will be able to sculpt a vision of Catholic schools to provide a holistic education for all students. Servant leader principals and teachers working together in Catholic schools will be able to provide an environment for students that nurture the whole child by developing and fostering children’s intellectual, physical, emotional, social, moral, and spiritual growth.

**Recommendations**

The data produced from the present study contributes to the knowledge base in general leadership studies with specific application in the field of servant leadership and school climate. More research needs to be undertaken in the field of servant leadership and education at the elementary, secondary, and postsecondary levels to enhance understanding of the implications servant leadership has on education. Further research will add to the body of knowledge, enabling educators to make informed decisions to improve the education of our children and all learners. Research exploring the specific servant leadership behaviors of principals and teachers in a school community would assist in providing a guide for Catholic principals to follow to improve their schools’ climate. An extension of the specific behaviors research is the development of appropriate professional development and training for current and future principals to improve their servant leadership skills.

Further research is recommended for studies within similar and different populations in order to verify the claim that there is a significant positive correlation between servant leadership practices and school climate. Additional studies are also recommended among populations of differing cultures, national origin, and religious and nonreligious educational institutions to compare the implementation of servant leadership principles among the various populations. These future studies could provide data to demonstrate whether effective servant leadership is limited to religious organizations or by those individuals who can effectively implement the principles of servant leadership within an organization. These additional studies could demonstrate other factors not related to religion that positively affect the implementation of the
principles of servant leadership. A generation of research has provided evidence demonstrating improved academic achievement goals can be attained by effective school leaders attending to the needs of school organizations (Kelley et al., 2005; Mitchell & Castle, 2005; Mulford et al., 2004; Waters et al., 2004). The future growth of the theory of servant leadership is dependent on expanding the research of servant leading in educational and other organizations with a range of culturally diverse populations.

References


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