CHARACTER STRENGTHS IN LEADERSHIP

by
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Character Strengths in Leadership

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Abstract

This dissertation contains three sequential studies that use a mixed-methods approach. The first study involved qualitative interviews with 29 individuals using the critical incident technique (Flanagan, 1949) and Peterson and Seligman's (2004) conceptualization of character strengths to understand what leader-demonstrated character strengths look like in the workplace. The outcome of this study was a 27 item measure of Character Strengths in Leadership.

The second study's purpose was to test the reliability and validity of a newly developed Character Strengths in Leadership scale by comparing character strengths-based leadership against other known measures of leadership (the MLQ, Authentic Leadership, Ethical Leadership, Passive Leadership, and Abusive Supervision). These surveys were administered to a North American snowball sample of 270 individuals. Exploratory factor analysis suggests that character strengths-based leadership is a three-dimensional construct that can be differentiated from other known measures of leadership.

The third study tested a 14 item Character Strengths in Leadership questionnaire against organizational and personal outcome measures (organizational citizenship behaviours, affective commitment, affect, and psychological health). Structural Equation Modeling using confirmatory factor analysis and observed variable path analysis was used to develop and test a model of character strengths in leadership. The resulting structural model provided a strong fit and supported hypotheses regarding both work-based and individual-level outcomes. Implications for the findings and follow-up research are discussed.

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CHARACTER STRENGTHS IN LEADERSHIP

Introduction

Discussions of strengths of character are literally as old as humankind. Their weight and value pervade all record of human development and are transmuted through our historical texts, intellectual discourse, social commentary, political oratory, family histories, and even the stories we tell our children. Myths, fables, and fairy tales are all built around character-based themes that inevitably lead to the 'moral of the story'.

The first written records of character appeared 2300 years ago with the early Greeks (MacIntyre, 1999). 'Character' has been broadly summarized as those qualities of a person that are "morally valued" (Park & Peterson, 2008, p. 87) and that are central to "the concept of the good in life" (Fowers & Tjeltveit, 2003, p. 630). Character is thought to be influenced by a host of factors including a person's "vision, goals, self-concept, strategies, work ethic, attitude, perception, code of ethics, behaviour, and the search for excellence" (Sankar, 2003, p. 45). Character has been variably interpreted as desirable personal qualities, habits that can be chosen, traits, personality strengths, or some combination of these features of interest. More literally, one historical account describes character as an imprinted symbol used by bricklayers to indicate the source of the brick (Calabrese & Roberts, 2002). In essence, the mark indicated the 'character' of the creator and was thus representative of the quality of the product.

A pre–eminent question regards whether character strengths, arguably a subset of virtue, are volitional. In his Nichomachean Ethics, Aristotle identified two kinds of virtue; intellectual virtue and moral virtue (Cahn & Vitrano, 2008). Aristotle described intellectual virtue as a process developed through teaching, while moral virtue is

described as a "result of habit"…"neither by nature, then, nor contrary to nature do the virtues arise in us; rather we are adapted by nature to receive them, and are made perfect by habit" (Cahn & Vitrano, 2008, p. 23). Following this line of reasoning, two powerful precepts come into play: first, that individuals have the personal power to change the way they think and act (Seligman, 1999), and second, that characteristics of virtuousness are both able to be taught and acquired. Thus personal agency and tenets of social learning theory (Bandura, 1977) are also central features of this perspective. This approach supports the possibility that character strengths can be malleable, habitual, and either latent (internal) or manifest (as demonstrated by oneself or perceived by others). As such, the development of character strengths might best be described as the nurturing of virtuous elements of human nature.

In the three studies that comprise this work, I have sought to locate character strengths (1) within the workplace, and (2) at the individual level of analysis. Further, although workplaces contain both hierarchical and lateral relationships, these studies focus on the dyadic structure of the supervisor- supervisee or leader-follower relationship. Consequently, I have chosen to use the broad-based lens of leadership to frame this work. This context has been adopted for several reasons. First, the empirical framework of character strengths in the workplace is intuitively appealing but relatively unexplored. Secondly, while I recognize that leadership is a more dynamic, shared, and holistic process (Avolio, Walumbwa, & Weber, 2009) than merely a two-person exchange, housing the exploration of character strengths within leader-follower dyads provides a bounded frame for the nature and scope of the work and allows for cleaner attributions from which to draw conclusions, construct a foundation for future research, and

potentially add specific knowledge to contribute to more honed and effective leadership training strategies. These choices also provide extensive pre-existing literatures in the areas of employment and leadership from which to draw both structure and guidance. Finally, the inclusion of both work and personal outcomes allows me to add to the nascent literature that is testing assertions regarding the effects of 'good' leadership on people's lives beyond and outside of their workplace (Arnold, Turner, Barling, Kelloway, & McKee, 2007).

Character Strengths Literature

It is an interesting, challenging, and sometimes daunting task to try and parse fields that are as broadly developed as leadership and character. In this case, nearly endless historical and contemporary references can be found that explicate character and closely related constructs such as values, virtues, morality, and ethics. To further complicate matters, these references span many disciplines; philosophy, spirituality, religion, psychology, business, and law are rife with examples and interpretations of these bedrocks of human behaviour. Despite the longevity and centrality of these discussions, however, each of these fields has emphasized a different set, amount, and salience of character strengths (Fry, 2005). Further, the virtue classifications that do exist are primarily intuitive and generally have been subjected to little or no empirical assessment, leaving some scholars to question their validity or generalizability (Chun, 2005).

In an ambitious effort to produce a systematic catalogue, Peterson and Seligman produced an 880 page tome (2004) that summarizes the development and identification of character strengths since Aristotelian, Platonic, and Socratic philosophy, and their efforts have resulted in the advancement of an exhaustive theoretical framework detailing 24

character strengths[1] that they consider to be ubiquitous and irreducible. In turn, this comprehensive theory-driven taxonomy sets the stage for the application of their theoretical model to empirical data collection and model-testing. Summarily, this dissertation takes this challenge as its point of embarkation and draws from both psychological and business literatures to combine character strengths with leadership in organizations.

Empirical links between leadership, work, and one or several character strengths such as courage (Lee, 2006), integrity (O'Toole, 1991; Premeaux, 2004; Storr, 2004; White & Lean, 2008), zest (Peterson, Park, Hall, & Seligman, 2009), and compassion (Barlow, Jordon, & Hendrix, 2003) abound. There are also nearly innumerable anecdotal stories available within the popular press. There is a growing body of related research surrounding the effects of virtuousness with regard to organizational outcomes (Bright, Cameron, & Caza, 2006; Cameron & Caza, 2002; J. Dutton, 2001; Peterson & Park, 2006), and the field of positive psychology has spurred burgeoning literature that demonstrates links between individual and groups of character strengths and well-being (Berman, 2007), happiness and life satisfaction (Peterson, Willibald, Beermann, Park, & Seligman, 2007), life satisfaction, happiness, resiliency, and positive affect (Karris, 2007) as well as developmental differences among populations such as school children (Park & Peterson, 2008) and youth (Steen, Kachorek, & Peterson, 2003). Additionally, there are a variety of diverse but related intellectual streams in which virtue-based theoretical and empirical work is being conducted. Although comprehensive summarization is far

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[1] These are also termed 'virtuous behaviours', virtues, and/or values by some scholars. The terminology of these studies uses "virtues" to describe what are operationalized as character strengths in my studies. I have used a capital letter to denote a virtue category and lower case to indicate individual character strengths throughout this paper.

beyond the parameters of this work, some examples include prosocial behaviour (Kamdar, McAllister, & Turban, 2006), ethics (Bass & Steidlmeier, 1999), socio-moral development (Turner, Barling, Epitropaki, Butcher, & Milner, 2002), citizenship behaviour (Organ, 1988), appreciative inquiry (Cooperrider & Srivastva, 1987), corporate virtue (Gowri, 2007), and corporate social responsibility (Bernstein, 2003).

Although strengths of character have been endlessly debated and leadership has been extensively investigated, the two phenomena have not been assessed simultaneously. Mapping well-studied phenomena such as transformational leadership, affective commitment, and organizational citizenship behaviours onto an intuitively appealing and rigorously developed, albeit untested, catalogue of human behaviour may prove to be a meaningful intersection that provides complimentary illumination to each of these areas.

Blending Character Strengths and Leadership

From a general perspective, we still have much to learn about the mechanisms and processes of leadership (Avolio et al., 2009) and which leader behaviours influence subordinates' perceptions of a leader's character (White & Lean, 2008). From an organizational perspective, character strengths are "largely untapped" and have yet to be tested against indices such as sales or and we lack brief measures to do so (Cameron, Bright, & Caza, 2004, p. 18). Although there is a wealth of data regarding the creation of healthy workplaces (Kelloway & Day, 2005a), there are surprisingly few data that link good leadership to personal wellness in addition to and beyond the context of the workplace. To this end, these studies begin to address these gaps through three broad goals: melding character strengths with leadership by surveying employees regarding exemplars of their leaders' character strengths within the workplace; identifying where

character strengths overlap and diverge from current models of leadership; and subsequently assessing how and which employee-related outcomes are impacted by leader-demonstrated character strengths. Consequently, the goal of my studies is to help establish the empirical potential, utility, and parameters of this exhaustive theoretical catalogue of character strengths and to begin to respond to several challenges that have been issued: (1) the development of a robust measure of character strengths (Cameron et al., 2004); (2) inquiries regarding the impact of character strengths on other people (Peterson & Park, 2006); (3) qualitative attention to construct development and validation (Hackman, 2009); and (4) quantitative factor analysis and structural modeling.

In brief, the first study in this series collects subordinates' interpretations of leader-demonstrated character strengths through qualitative inquiry. The second study tests a character strengths-based leadership questionnaire developed from the qualitative study, and it compares character strengths-based leadership against other known theories of leadership (the MLQ, Authentic Leadership, Ethical Leadership, Passive Leadership, and Abusive Supervision). The third study tests the newly developed Character Strengths in Leadership questionnaire against organizational and personal outcome measures of organizational citizenship behaviors, affective commitment, psychological health, and-affect, the litmus test for well-being (Lyubormirsky, King, & Diener, 2005, p. 803). Both organizational and individual outcomes are included with the hope that the influence of character-based leadership will contribute to, but also extend beyond, workplace outcomes and make a positive impact on people's lives in general. Measures of affective and cognitive trust were also included as hypothesized mediating variables.

These studies seek to provide specific knowledge about the relationship and links between character-based leadership and employee outcomes. In turn, this knowledge can directly benefit organizations by gaining information about which character strengths are regarded as the most meaningful and influential from subordinates' perspectives. Further, if one accepts the notion that character "constitutes an inner-directed and habitual strength of mind and will" and represents a skill set that can be acquired (for example, see Fry, 2005, pp. 59-60), then there is opportunity to teach specific strengths, to elevate leaders' skill repertoires, and to ultimately meaningfully increase the quality of leader/subordinate relationships in what has been termed a 'positive spiral' (Cameron et al., 2004). Perhaps most interestingly, these data have the potential to assess the breadth of influence that leader-demonstrated character strengths can have for individual health and wellness beyond the workplace walls.

<div align="center">Literature Review</div>

This chapter provides an overview of the extant research on character strengths and leadership. Given the voluminous material about leadership that is available, this summary focuses primarily on the leadership model that has received the most attention in the literature; transformational leadership. However, leader-member exchange (LMX), passive leadership, and abusive supervision are also considered to provide texture and contrast among the various models of leadership.

<div align="center">*Research on Virtues and Character Strengths*</div>

As previously noted, the concept of virtue is one of the oldest constructs known and has its roots in moral goodness, flourishing, moral character, and social betterment (Cameron et al., 2004). Virtuousness derives from the Latin *virtus*, or strength (Merriam-

Webster, 1974), and has alternately been translated as "excellence", "moral virtue", or used interchangeably (Peters, 1900, p. 44). Aristotelian virtue theory forms the foundation upon which all other Western conceptualizations have been built (Mintz, 1996; Whetstone, 2003) and is rooted in "character states that dispose us to respond well to the conditions of human life through both wisely chosen actions and appropriate emotions" (Sherman, 1997, p. 5). Virtuousness, therefore (or virtue ethics, as the intellectual community has identified the study and practice of virtue-based behaviour) is a volitional process that "is learned through the observation and adoption of others' behaviours" (Shanahan & Hyman, 2003, p. 198) that creates "a design for living" through the disciplines of will, perception, and action (Aurelius, 2002, p. xix).

Aristotle proposed thirteen virtues that facilitated eudaimonia, "which is variously translated as happiness, fulfillment, or flourishing" (Fowers, 2008, p. 631). These include courage, temperance, liberality, magnificence, pride, good temper, friendliness, trustfulness, witness, shame, justice, honor, and sincerity (Chun, 2005). Scholars, authors, and historians have sought to create typologies, taxonomies, or catalogs of character strengths and of virtues, and several thorough summaries of this work are available (Chun, 2005, p. 273; Fry, 2005). In fact, at least one undertaking even included a full dictionary review to determine and extract descriptors of character traits and virtuous actions (Cawley, Martin, & Johnson, 2000).

Despite the extensive efforts that have been made to further operationalize positive human qualities, there is still substantial "conceptual ambiguity" (Wright & Goodstein, 2007, p. 930) regarding the character strengths and virtues that are perceived as universal among humankind. The most recent effort, and arguably the most methodical and

comprehensive, was undertaken by a team of researchers through the culling and

distillation of multiple historical and contemporary texts (Peterson & Seligman, 2004).

They adjusted their classification structure to encompass both virtues, or collectivities of

characteristics, and individual characteristics, or what they have termed "character

strengths". They sought to create a classification that was not "idiosyncratic, culturally

bound, and laden with tacit values" by identifying "coherent resemblance" between and

among virtues recorded in texts and traditions throughout Chinese, South Asian, and

western history (Dahlsgaard, Peterson, & Seligman, 2005, p. 204). While they concede

the fact that choices were made in terms of what was included or excluded in their

analyses, they sought to provide extensive representation and extrapolated virtues from

texts in Confucianism, Taoism, Buddhism, Hinduism, Athenian accounts, Christianity,

Judaism, and Islamic philosophy (Dahlsgaard et al., 2005, Peterson & Seligman, 2004).

Peterson and Seligman (2004) developed a list of criteria for their identified character

strengths that includes: fulfilling the "deathbed test", being morally valued, not

diminishing others, having a nonfelicitous opposite (in other words, existing in both a

positive and a negative range), being 'traitlike', having distinctiveness, paragons, and

prodigies, having 'selective absence' (or the possibility of identifying a deficiency of a

strength), and being present in the rules, roles, and norms of institutions and rituals.

Definitional Clarity

This classification structure becomes confusing when compared with other theoretical

postulations of virtues because Peterson and Seligman (2004) consider virtues to be a

higher-order encapsulation of character strengths. In comparison, other authors' virtue

and value descriptors are at the same taxonomic level and equivalent to Peterson and

Seligman's (2004) character strengths. As such, Peterson and Seligman (2004) are the only authors who build a conceptual hierarchy that draws a distinction between virtues and character strengths. Additionally, some classificatory systems and studies use alternate descriptors such as traits (Shanahan & Hyman, 2003) or values (Liedtka, 1989) and discuss a broader nomological network that includes ethics, values, prosocial behaviours, and morality. For the purposes of these studies, Peterson and Seligman's (2004) classificatory structure will be retained such that virtues refer to a higher-order distinction as collectivities of individual character strengths, while character strengths are considered to be operational descriptors of virtues.

Given the broad spectra of discussions regarding virtuous behaviours in diverse literatures that include theology, education, psychology, sociology, anthropology, and management, it is important to make a clear declaration of how character strengths are interpreted for the purposes of these studies. Peterson and Seligman assert that character strengths are 'traitlike' yet malleable; as such, these studies take the approach that, since traits are unobservable, character strengths are malleable traits that can only be observed and measured by assessing behaviours. Similarly, as subordinate perceptions of leader behaviour are what employees base some of their own actions and behaviours on, assessing others' behaviours using the Critical Incident Technique (Flanagan, 1949) allows researchers to "collect representative samples of observed behavior" (p. 420) that contain "essential aspects of the behavior being observed" (p. 422).

One additional point is helpful in terms of parsing character strengths. In a study on organizational virtues and downsizing, Cameron, Bright, and Caza (2004) observed that character strengths can be 'tonic' or 'phasic'. Kindness, creativity, or persistence are

considered 'tonic' strengths, or ones that are more likely to be omnipresent, while

'phasic' strengths such as bravery and forgiveness are more contextually-specific

strengths and may thus only be demonstrated as a result of a particular incident, situation,

or circumstance. This distinction helps to explain when and how the chosen at will is

operant, or when particular character strengths are demonstrated and under what

circumstances. It also provides preliminary, exploratory information regarding the role

of context (Borman & Motowidlo, 1993; Deci & Ryan, 1987; J. E. Dutton, Ashford,

Lawrence, & Miner-Rubino, 2002; Mowday & Sutton, 1993; Whetstone, 2003).

Character Strengths

In essence, character strengths represent operationalizations of the more ephemeral

constructs of virtue, and one of the most challenging but important parts of the character

strength classification system clearly rests with the development and evolution of

individual construct definitions. It has been estimated that 95% of historical

psychological literature and research has been borne of pathology, but a resurgence of

attention on positive characteristics not seen since the 1930s (Wright & Quick, 2009a)

has underscored the potentially tedious but imperative process of developing uniform and

commonly accepted operational definitions (Fineman, 2006) and construct validation

(Hackman, 2009). Careful and reasoned development will inform empirical models and

assist in clearer taxonomical differentiation as this area of positive psychology (Seligman,

1999) is further explored and developed.

A few examples can demonstrate both the importance and the complexity of this

differentiation. For instance, forgiveness has been identified as a transformational

experience with both intrapsychic and social dimensions and has been differentiated from

similar, related constructs such as reconciliation, pardoning, condoning, excusing, forgetting, denying harm, and trusting (Cameron & Caza, 2002). Hope has been conceptually differentiated from optimism, goal-setting, and positive affectivity because hope places equal emphasis on both agency (goal-directed determination) and pathways (ways to meet goals) (Luthans, 2002b; Snyder, 2000). For the sake of illustration, competing definitions are provided for a third construct, humility. It has been described as "self-acceptance" and "openness to learning" by some scholars (Bright et al., 2006), while others have viewed humility as empirically distinct from both openness to experience and love of learning (Peterson & Seligman, 2004). These few examples underscore the utility of further theoretical and practical clarity. This parsing is best addressed through ongoing multi-method work that includes qualitative exploration, winnowed conceptualizations, quantitative factor analyses, and ideally, professional agreement that provides common ground from which to build.

Empirical Inquiry into Character Strengths

Under the umbrella of the positive psychology movement, which is a nascent but rapidly expanding line of inquiry, exploration of character strengths is well underway (Hackman, 2009; Peterson & Park, 2006; Wright & Quick, 2009a). Recent character strengths research documents an impressive assessment of people's 'signature strengths' among youth (Steen et al., 2003) and adults collected through the portal of the Values In Action website (Peterson, 2007); signature strengths refer to those character strengths that people endorse as their most preferred and/or utilized strengths through self-reports. There are also interesting results from studies that provide interventions based on specific character strengths (e.g., gratitude) (Seligman, Steen, Park, & Peterson, 2005). Extant

organizational research includes both generalized contexts and company-specific perspectives. Generalized contexts embrace Aristotelian virtue ethics (Chun, 2005), while in other cases, individual companies have explicitly and intentionally invoked particular virtuous practices as part of their business model (O'Toole, 1991).

Although character strengths work has touched on leadership (Pollay, 2006) and the relationships between character-based (cognitive) trust and relationship-based (affective) trust (Dirks & Ferrin, 2002) in workplace settings, it has been much more common for scholars to focus on individual strengths such as zest (Peterson et al., 2009), compassion (Dutton, 2003), integrity (Storr, 2004), optimism (Kluemper, Little, & DeGroot, 2009), or a group of several virtues such as kindness, hope, humility, purpose, and forgiveness (Bright et al., 2006). Some quantitative studies also look at combinations of virtues and their effects on people outside of organizational settings; these have included meaningful life purpose, flourishing, health, happiness and optimism, well-being, resilience, and stamina (Berman, 2007; Diener, Lucas, & Oishi, 2002; Peterson et al., 2007). Although a full discussion and empirical assessment of personality characteristics such as conscientiousness (B. Roberts, Chernyshenko, Stark, & Goldberg, 2005) and agreeableness are beyond the purview of these studies, at least one scholar argues that these two personality characteristics are also useful organizational virtues (Moberg, 1999). For an historical review of this literature, see Cameron, Bright, and Caza (2004).

A Summary of Character Strength and Virtue Studies

Empirical data are beginning to emerge indicating that virtuousness occurs both *by* organizations, where organizational features exist that facilitate virtuousness by individuals within an organizational context, and *in* organizations, where individual

members demonstrate virtuous behaviours (Cameron et al., 2004, p. 3). This thesis

focuses on virtuousness *in* organizations with a focus on leader-demonstrated character

strengths, presented in Table 1:

Table 1
Theoretical Categorization of 6 Virtues and 24 Character Strengths (Peterson & Seligman, 2004)*

Wisdom	Transcendence
Creativity	Beauty
Curiosity	Gratitude
Open-mindedness	Hope
Love of learning	Humor
Perspective	Spirituality
Courage	**Temperance**
Bravery	Forgiveness/mercy
Persistence	Humility/modesty
Integrity	Prudence
Vitality	Self-regulation
Humanity	**Justice**
Love	Citizenship
Kindness	Fairness
Social Intelligence	Leadership

*See Appendix A for full definitions.

Much of the available material regarding leadership and character is anecdotal in

nature, and the popular press is replete with examples of how historical and contemporary

figures rose to the top. However, surprisingly few studies of leadership actually evaluate

a theoretically derived full complement of individual character strengths. Excepting

studies carried out with the Virtues in Action-Inventory of Strengths (VIA-IS), there are

only a handful of virtue-based studies that look at combinations of multiple virtues

simultaneously and that were carried out within the workplace (Bright et al., 2006;

Brown & Treviño, 2006a; Cameron, 2003; Chun, 2005, Liedtka, 1989; Pozner &

Schmidt, 1993; Sarros, Cooper, & Hartican, 2006; Shanahan & Hyman, 2003;

Whetstone, 2003).

For ease of illustration, I have constructed a chart (Figure 1) that summarizes the

results of related studies that employ other catalogues of virtuous behaviours (e.g.,

Aristotle, Hume, and Solomon) at the individual or organizational level. Two relied on

the same data set, although one study (Cameron et al., 2004) was actually published

earlier than the qualitative data on which it is based (Bright et al., 2006). With the

exception of Peterson and Seligman (2004), each of these studies claims to have

developed six-factor models. Interpretively, however, the data seem to indicate that none

of the results are actually more than four factors. Summatively, three studies incorporated

behaviours from the virtue categories of Courage, Humanity, and Temperance (Cameron

et al., 2004; Chun, 2005, Shanahan, 2003), but none identified behaviours in virtue

categories of Justice or Wisdom and Knowledge. Although these studies use both

organizational and individual units of analysis, it is interesting that there are no great

differences among the distribution of strengths despite these very different foci.

Figure 1
Extant Virtue Research

Researchers/ Virtues/Character Strengths	Construct of Interest	Empirical character strengths that correspond to Peterson and Seligman's theoretical classification structure[1]:					
		Courage	Humanity	Temperance	Transcendence	Wisdom	Other[*][4]
Studies with an organizational level of analysis:							
Cameron, Bright, & Caza, 2004[2] 18 org, 29 virtues	Organizational virtues	X	x	X	x		
Chun, 2005[3] 158 org, 34 virtues	Organizational virtues	X	x	x			
Studies with an individual level of analysis:							
Shanahan & Hyman, 2003 (Students), 34 virtues, N=445	Virtues	x	x	X	x		
Sarros, Cooper, & Hartican, 2006 (Australia) 7 virtues, N=238	Virtuous leaders	X	x	X			
Peterson & Seligman, 2004 N=24 virtues, 150,000+	Individual 'signature strengths'		X (termed 'interpersonal')	X (termed 'restraint')	X (termed 'theological')	X (termed 'intellectual')	X (termed 'emotional') (bravery, hope, self-regulation, zest)

Notes:

1. As demonstrated, previous research indicates convergence despite different levels of analysis. A capital "X" indicates an exact character strength within that category as described by Peterson & Seligman, while a lower-case "x" indicates a related virtue/character strength.
2. Chun (2005) provides a thorough review of many lists of posited virtues at the individual level (p. 273).
3. Cameron, Bright, & Caza (2004) and separated into 'tonic' and 'phasic' virtues using 5 virtues from their 2004 study (Bright, Cameron, & Caza, 2006). Their 2004 paper also reviews studies from the 1970s.
4. Character strengths related to the theoretical virtue category of Justice did not factor empirically in any of these studies.

In order to situate my studies within extant literature, related work is discussed in order of relevance with similarities and differences noted in order to identify overlaps and gaps. First, many studies that adhere to Peterson and Seligman's 2004 classification system appear in the Values in Action-Inventory of Strengths series of surveys on their website (VIA, 2008). To date, over 1 million individuals have electronically completed this survey, and an equivalent paper and pencil version is available. The Values in Action-Inventory of Strengths is a long self-report scale that includes 10 items for each character strength (with a total of 240 items). It uses a 5 point Likert scale and requires anywhere from 20 minutes to 1 hour to complete. 4-month test-retest correlations are .70 (Matthews, Eid, Kelly, Bailey, & Peterson, 2006; Peterson & Seligman, 2004). Indicators of internal consistency are >.70, and a five-factor model has emerged that includes strengths of restraint, intellect, interpersonal skills, emotion, and theology (Peterson & Seligman, 2004, p. 632). Structurally, most of the items were author-written, although several other previous questionnaires were vetted and behavioural frequencies were also collected from undergraduate students and incorporated (Peterson & Seligman, 2004, p. 627-634).

Despite the impressive volume of data collected, most results simply generate 'signature strengths', or the strengths that a person employs most frequently based on self-report, and do not assess outcome measures. Peterson has also created a brief, 24-item survey, but the items are not based in any grounded assessment (VIA, 2008). Instead, the items simply use the character strength name and ask people how frequently they have engaged in or used that particular behaviour or character strength "recently" (VIA, 2008). Other measurement cousins of the Virtues in Action-Inventory of Strengths

include Rising to the Occasion Inventory [VIA-RTO], Strengths for Youth [VIA-Youth], and the Structured Inventory [VIA-SI], which provides a character naming task (Peterson & Seligman, 2004).   One other published study used Peterson & Seligman's full 24 character strength complement and was conducted within the specific context of military leadership training. The population was primarily male, 18-21 year olds (Matthews et al., 2006) and no outcome measures were assessed.

Substantively, the virtues employed in each of the extant studies except Peterson and Seligman's (2004) were informed by either multiple or different catalogs than theirs. To my knowledge, the two studies that are most congruent with the goals of my study investigate only 30% of Peterson and Seligman's (2004) 24 character strengths (Bright et al., 2006) and were published two years apart. The first published study (Cameron et al., 2004) explores the relationship between virtuousness and performance in 18 organizations, of which 16 had undertaken downsizing initiatives within the last 5 years (p. 257). They developed a 60-item survey instrument based on 29 virtues based on an intuitive assemblage of virtues from a variety of sources. Although some of the chosen virtues (e.g.: integrity, humility, hope, and love) overlap with Peterson and Seligman's classification of character strengths, the survey did not focus on any one theoretical or empirical classification and was explicitly "not intended to be a comprehensive list of virtuous behaviours" (Cameron et al., 2004, p. 9). They included rigorous data triangulation in terms of inter-industry comparisons in the areas of "innovation, quality, customer retention, and employee turnover" (Cameron et al., 2004, p. 10). Their sample involved 52 organizations based on a convenience sample from 16 industries. They had an overall response rate 36% with regard to organizations willing to participate in their

study, and they received 804 useable surveys, which represented a response rate of 56%.

Their list specifically overlaps Peterson & Seligman's categorizations by only six

virtues; forgiveness, integrity, humility, hope, love, and kindness. Openness is extremely

close to open-mindedness, and many of their other virtues have clear links (e.g.: caring

and compassion with love, kindness, and mercy; optimism and hope; trust and

trustworthiness with integrity and fairness). It is similarly possible to establish correlates

for many of their other virtues (respect, generosity, honesty, apology, encouragement,

commitment, benevolence, courtesy, honoring, and appreciation). However, one of their

identified virtues, Courage, is actually taxonomically higher according to Peterson and

Seligman's (2004) classification system, and subsumes the character strengths of bravery,

persistence, integrity, and vitality. They also include six "virtues" that I would

tentatively identify as either outcome measures (e.g.: meaningfulness, profound

purpose), relational variables (e.g.: sense of calling, taken from Wrzesniewski's [1999]

work on job perceptions), or generalized summations of a more global perspective of

virtuousness that are not readily tied to voluntary behaviours (human strength, doing

good, and positive energy). Purpose and meaningfulness may actually be what results

from virtuous behaviour, and a sense of calling may be similar to organizational

commitment, which has been demonstrated as a mediating variable within the job

satisfaction literature (Kelloway, Barling, & Helleur, 2000). Consequently, it is difficult

to compare results given the different taxonomic levels of positive characteristics that

were measured.

The qualitative process undertaken to validate the constructs of virtue that they

employed at an organizational level is not described until a second publication released

two years later. This second study (Bright et al., 2006) focused on two of the original 18

organizations and only seven of the original 29 virtues; 'tonic' virtues of hope-optimism,

humility, integrity, compassion, and virtuous fulfillment, and 'phasic' virtues of

responsibility and forgiveness. It also reports qualitative semi-structured interviews

conducted with 75 employees who represented a "diagonal slice" (p. 256) from four of

the original organizations: 25 from one hospital, and 50 from three physical plants of the

same engineering/environmental firm.

There are a few other studies that seek to operationalize or use some combination

of character strengths and that shed additional light. Whetstone (2003) identified the

virtues of genuineness, humility, trustworthiness, loyalty, fairness, and courtesy through

the use of content analysis in a sample of 37 grocery store managers, while Shanahan and

Hyman's (2003) study was predicated on Solomon's classification of 45 virtuous

behaviours (Solomon, 1999). Sarros and Cooper (2006) incorporated both virtuous

behaviours and leadership in a study based on a 17 virtue, three-factor model of

transformation, universalism, and benevolence. Self-report data were collected from 238

Australian managers via an online survey that was nationally distributed to members of

the Australian Institute of Management. The authors used one-item measures for each of

five character attributes identified in the Virtuous Leadership Scale (VLS) developed by

Sarros and Barker (2003); humility, courage, humour, passion, and wisdom (Barker &

Coy, 2003). They also integrated two items taken from the Character Assessment Rating

Scale (CARS) (Barlow et al., 2003), integrity and compassion. Demographic differences

were found among factors of age, gender, seniority, and executive experience, and the

analyses identified integrity and humour as the significant elements for Australian

business leaders. However, the authors note that further research is warranted based on shortcomings related to a uni-cultural and convenience sample, self-report biases, and a need for further construct validation of the VLS. They also note that the character measures that they chose to include would benefit from additional evaluation, operationalizations, and psychometric assessment (Sarros et al., 2006). Additionally, although this study sought to link virtuous behaviour with leadership, no measures of type or quality of leadership were provided.

Another study used an alternate construct in the same nomological network, ethical leadership, which shares theoretical underpinnings with virtuous behaviours. Brown, Trevino, and Harrison (2005) included specific traits such as honesty, trustworthiness, integrity, and fairness, which are all subsumed by the virtue categories of Courage and Justice under Peterson and Seligman's (2004) categorization. The authors also invoke social learning theory (Bandura, 1977) and its fundamental tenet of modeling to assert that ethical leadership can be taught and learned, which dovetails with Peterson and Seligman's (2004) assertion that character strengths can also be taught and learned.

Initially, Brown et al. (2005) built a 48-item measure of ethical leadership based on iterative item construction and content analysis of 20 interviews. After a series of seven studies, their Ethical Leadership Scale (ELS) was reduced to a single-factor, 10 item scale that involve aspects of listening, disciplining, fairness, trust, example-setting, and doing the 'right thing'. Overall, support for their model was found in that ethical leadership predicted supervisor effectiveness, which in turn significantly predicted satisfaction with supervisor, extra effort, and willingness to report problems. Ethical leadership also correlated significantly with the idealized influence portion of

transformational leadership (r=.71, p<.01). Under the rubric of authentic leadership, one

study looked at leadership behaviour founder/ entrepreneur and found effects regarding

job satisfaction, organizational commitment, and work happiness (Jensen & Luthans,

2006). [2]* However, the behaviours examined in this study are fewer and more diffuse

than particular character strengths, and no specific scale was employed. One other

researcher used Solomon's classification system as a starting point and then simply relied

on deductive reasoning to extrapolate and assign individual virtuous behaviours to an

organizational context (Chun, 2005). Overall, an informal comparison of the virtue

categories derived from these studies indicate that the same or closely related character

strengths that map into three of Peterson and Seligman's (2004) virtue categories:

Courage, Humanity, and Temperance.

At least one other study provides additional fodder for theoretical and empirical

comparison of important characteristics of leadership. Den Hartog and her colleagues

collected data from 62 countries as part of the Global Leadership and Organizational

Behavior Effectiveness (GLOBE) Research Program (1999). In this particular study, they

blended charismatic leadership and implicit leadership theories to assess culturally

endorsed implicit leadership theories to assess the universality of leadership 'attributes'.

Their results indicate 21 non-orthogonal primary factors that were further distilled to six

second-order factors: charismatic/value-based, self-protective, humane, team-oriented,

participative, and autonomous (Den Hartog et al., 1999).

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[2] There are other related models such as the 4-factor model of authentic leadership (leader self-awareness, relational transparency, internalized moral perspective, balanced processing) (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008) and the 6-factor model of culturally endorsed implicit leadership (charismatic/value-based, self-protective, humane, team-oriented, participative, and autonomous) (Den Hartog et al., 1999) that could be parsed into virtue categories as well.

Unlike quantitative studies that look at more than one particular virtue, the scope and variety of qualitative studies regarding individual character strengths such as forgiveness, compassion, and optimism is immense. As such, a comprehensive review of their methods and results will not be undertaken here. However, to support the assertion that virtuous behaviour has the potential for profound impact within an organizational context, two exemplars of this work will be presented.

Drawing from the action research focus of appreciative inquiry (Cooperrider & Srivastva, 1987), Dutton urges researchers to "breathe life into organizational studies by focusing on the energy and generative possibilities inherent in any organizational system" (2003, p. 10). She and her colleagues entered a 30-person, all-female hospital billing department after being informed of the unusual levels of compassion being demonstrated by this particular unit. Qualitative markers such as vitality, encouragement of personal growth, departmental playfulness, caring, life-giving behaviours, and non-linear, positive dynamics were all observed, and their contributory effectiveness was reflected in the comments, attitudes, and behaviours of the department members. From the perspective of productivity and profit, these attributes translated to "scorecard measure(s)" (J. Dutton, 2003, p. 11) for economic and productivity as well; bill collection time decreased from 180 to 60 days within a three-year period.

It has been postulated that virtues "embody values when the behaviour they organize and direct becomes habitual" (Peterson & Seligman, 2004, p. 74). In order to test the impact of corporate value structures and peer influence on an individual's espoused values within an organizational context, one researcher developed a value congruence model based on a matrix of consonance or contention with regard to individual or

corporate/organizational value systems (Liedtka, 1989, p. 805). She conducted a

qualitative assessment of 18 managers in two very different firms; one was managed

through a uni-dimensional focus on profit maximization, while the other identified at

least six different kinds of values, including non-instrumental factors such as honesty and

integrity, as "highly important".

This study elucidates several interesting findings. Perhaps most importantly, the role

and influence of peers is quite strong when job expectations are in contention with both

personal and organizationally espoused values. Secondly, when expectations are

consonant with both personal and organizationally espoused values, a majority of

managers yielded to expected norms even if the outcome was potentially undesirable for

the manager (e.g.: accepting an unwanted promotion). Thirdly, managers within the

organization that had multiple value structures experienced more conflict, which may be

a result of the inherent variation of possibilities. However, it does appear that "both

understanding and being comfortable with one's personal values seems to mitigate

against the potentially negative consequences of conflicts between personal and

organizational values" (Pozner & Schmidt, 1993, p. 346).

Based on these data, there are a number of similarities in terms of interest, focus, and

content. However, there are also a number of significant differences that exist between

these two studies and the studies that I carried out. First, none of the studies that I was

able to find included any individual-level outcomes of virtuous behaviours demonstrated

in an organizational setting. I consider this to be a significant lacuna with great

exploratory potential. Methodologically, except for Peterson & Seligman's original

conceptualization (2004) that was grounded in extensive qualitative inquiry, only one of

the studies contained a rigorous and broad qualitative piece. However, the questions "asked members to categorize their <u>organizations</u> on the basis of a variety of virtuous concepts" (Cameron et al., 2004, p. 9) rather than asking about behavioural exemplars of virtue enacted by individuals. Another interesting difference involves the fact that sixteen of the 18 organizations in the most similar studies (Bright et al., 2006; Cameron et al., 2004) had experienced downsizing initiatives within the past five years, which strongly influences the culture and dynamics of those organizations (Cascio, Young, & Morris, 1997). In sum, this review convinced me that we still have much to learn about how character strengths are displayed, interpreted, and manifested and piqued my sustained interest.

<div align="center">Research on Leadership</div>

Leadership has been a fertile area of inquiry for organizations and institutions, and extensive data suggest that strong leadership is a critical piece of sound organizational management (Avolio, 1999; Bass, 1985; Sarros & Cooper, 2006). In fact, North American leadership training and development costs have been estimated at 50 billion dollars per year (Collins & Holton III, 2004). Despite this effort and expense, however, comparison of several meta-analyses indicated that only about 200 studies of leadership actually assess leadership interventions and their effects (Avolio et al., 2009)!

Leadership research has also held a series of popular attributional models within the context of time and climate. Initially thought to be a trait-based construct six decades ago, models of leadership have subsequently followed the behavioural attributions of the 1950s and 1960s and then evolved into contingency-based, 'transactional' theories that emerged several decades later (Alimo-Metcalfe, Alban-Metcalfe, Bradley, Mariathasan,

& Samele, 2008). Conceptualizations of transformational leadership (Burns, 1978) and its later formalization in the literature (Bass, 1985) introduced yet another set of descriptors that introduced the ideas of charisma and vision (Alimo-Metcalfe & Alban-Metcalfe, 2008), and we now recognize that leadership is constructed of interactions among a multiplicity of macro and micro characteristics garnered from individual, sociological, and environmental features (Avolio et al., 2009; Bono & Judge, 2004; Brown & Treviño, 2006b; Brown, Trevino, & Harrison, 2005; Cameron & Caza, 2002; Collins & Holton III, 2004; Dansereau, Yammarino, & Markham, 1995; Graen & Uhl-Bien, 1995; Keller, 1999; Michie & Gooty, 2005; Woodruffe, 2004; Yukl & Van Fleet, 1992).

Consequently, despite extensive research, there is no one commonly accepted meta-theory of leadership that incorporates a wholly representative model. In fact, it is often the case that domains identified in one study do not overlap with domains or factors identified in other studies, even when drawing from the same theoretical base. For example, one study that tested Implicit Leadership Theory in applied settings identified factors of sensitivity, intelligence, dedication, and dynamism (Epitropaki & Martin, 2005), while another identified charismatic/value-based, self-protective, humane, team-oriented, participative, and autonomous factors (Den Hartog, House, Hanges, Ruiz-Quintanilla, & Dorfman, 1999).

Blending Leadership and Character Strengths

Leaders are often described as role models (Dirks & Ferrin, 2002; Lee, 2006; Storr, 2004) who have the power to engender increased commitment, loyalty, trust, and performance (Barling, Weber, & Kelloway, 1996), and extensive data have demonstrated that leader-subordinate relationships are a linchpin of one's work experience. In fact, data from one

meta-analysis led the authors to conclude that "the relationship with one's supervisor (is) a lens through which the entire work experience is viewed" (Gerstner & Day, 1997, p. 840).

Given the well-demonstrated links of leader-subordinate interactions as well as an extensive research base in correlate models of leadership such as LMX (Graen & Uhl-Bien, 1995) and Transformational Leadership (Bass & Avolio, 1990), this series of three studies combines qualitative and quantitative data collection and analysis to explore some of the untested but intuitively compelling links between virtuous leader behaviour and subordinates' ratings of individual and organizational outcome measures. To do so, I systematically assess the linkages. First, I assess subordinate perceptions of leader character strengths through qualitative interviews. Secondly, I situate the perception of leadership virtues within the context of leadership theory to articulate the expected relationships between perceived virtuous behaviours (operationalized by character strengths) and perceived leadership style. Finally, I propose and test a model linking the perception of leaders' character strengths to established constructs of interest.

Study One: A Qualitative Inquiry into Character Strengths in Leaders

Qualitative feedback has been demonstrated to be an irreplaceable technique for

illuminating and illustrating constructs, establishing construct validity, and investigating the

uniqueness or redundancy of a construct (Ashman, 2007; Pratt, 2008). Viewing leadership

through the contextual lens of character strengths appears to be an unexplored topic that may

provide meaningful and unique insight into subordinate perceptions and outcomes.

Specifically, this study sought to explore individuals' perceptions of 24 theoretically derived

character strengths in six virtue categories (Peterson & Seligman, 2004). Exploration of

leader-demonstrated character strengths was undertaken with 29 individuals in a diverse

array of positions, industries, ages, and stages within the workplace. These perspectives were

then used to develop a measure rooted in a contextual frame to assess the impact of leader

strengths on subordinate perceptions and behaviours.

Through semi-structured face-to-face interviews and supplementary email sampling, I

collected examples of critical incidents, or what have been termed 'extreme behaviours'

(Flanagan, 1949); these are behavioural demonstrations that serve as exemplars or archetypes

of a particular characteristic. In this case, interview participants were asked to provide

examples that they identified as strong, vivid, and exemplary instances of when a supervisor,

manager or leader (used interchangeably, given this pattern in extant literature) (Yukl & Van

Fleet, 1992) had demonstrated a particular character strength or virtuous behaviour in a work-

based setting. These examples permit operationalization of each character strength as a

construct and serve as the foundation for a measure of leader-demonstrated character

strengths, or character strengths in leadership (CSL).

First, respondents were provided with clear, concise theoretical definitions in an attempt

to provide adequate scaffolding for meaningful examples and to bridge the chasm of

interpretation between vagueness and leading explanations. Secondly, respondents were

asked to describe another person's behaviour, thus sidestepping the thorny issues related to self-report inventories, especially with regard to such issues as social desirability and faking good. It should also be noted that interviews were conducted far outside of the environment on which people were reporting and that none of the data were reported back to any supervisor or agency. Thirdly, respondents were asked to provide examples of specific instances when a person had demonstrated a particular character strength, which ensured that people were reporting on actual incidents of behavioural demonstrations. This was particularly helpful for less common character strengths and speaks to what Peterson and Seligman refer to as phasic strengths, or those that occur only when individuals are "rising to the occasion" (2004, p. 633). Finally, the study was bounded by asking individuals to recall and recount incidents within their workplaces, which is a study factor that begins to assess qualities of ubiquity, applicability, and universality.

Method

Semi-structured interviews were conducted using the Critical Incident Technique (Flanagan, 1949) in order to develop a measure of leader-demonstrated Character Strengths in Leadership (CSL). The study was designed to collect, identify, define, and isolate (McCracken, 1988, p. 16) contextually relevant examples of each character strength, or my 'features of interest' (Silverman, 2000). These examples form the basis of operationalizations for each of Peterson and Seligman's (2004) 24 character strengths at the individual level of analysis that take the context of the workplace into account. This information will permit comparison between Peterson and Seligman's generalized operationalizations and work-based exemplars and serve as the basis for item development and scale construction.

Participants

In sum, within the total respondent pool, 29 individuals provided examples of

between one and 11 character strengths each. The respondents included 16 females and 13 males, and their ages ranged from 27 to 66. At the time of the interviews, they had spent between nine and 45 years in the workforce and had held between four and 22 jobs. The respondent pool included 17 Canadians, 10 Americans, one South African, and one British citizen. All respondents were Caucasian.

Initial participants were individuals who were known to me, and they were solicited by face-to-face conversation or by email. Several of these people provided other individuals for snowball sampling. Additionally, several respondents were solicited through referrals by individuals who were known to me but who were not interviewed. The inclusion criteria were that: (a) respondents needed to have held at least three jobs, and (b) each of these jobs have or have had at least one direct supervisor. Although interviewees were not explicitly required to be currently employed, all were. These criteria were set in to maximize the possibility that, given the fact that some of these behaviours are somewhat rare, individuals had an adequate well of workplace experiences from which to draw.

Without simultaneous immersion in a variety of workplaces, it is impossible to perceive and interpret direct observations of many individuals in different contexts to actually witness specific character strengths being enacted. Additionally, self-reports of this type are likely to engender a social desirability bias. Consequently, semi-structured interviews regarding observer reports were judged to be the most thorough and effective manner of data collection. In keeping with guidelines of the Critical Incidence Technique (Flanagan, 1949), each interviewee was provided with clear, concise, and specific definitions of each character strength for which they were asked to provide observed examples.

Each person was asked to try to provide examples for at least eight of the 24 character strengths. In sum, 18 individuals were interviewed in person and three additional people provided a full complement of eight examples in writing. The 18 individuals who were interviewed provided between five and 11 examples of leader-demonstrated character strengths each. Three of the 18 provided some examples that were generated from interactions with team members, peers, family members, organizations, or their own behaviour, and these examples were not included in the analysis. It is striking to note that at least 13 other individuals initially agreed to be interviewed and then, after reviewing the instructions and the list of character strengths, declined based on what they reported to be an inability to come up with positive behavioural examples of their leaders. In fact, one potential respondent commented, "Geez, I think I've only worked for a bunch of jerks!"

Purposive sampling (Kemper, 2003) was then conducted for the 12 character strengths for which five or less examples had been collected during the interview process. Character strengths such as curiosity, love, and hope were several for which more examples were sought, so individuals involved in professions where these characteristics might be more likely to be evident were targeted (i.e., educators, human services, environmental conservation). Using the same instructions but with a shortened list of character strengths and their definitions, an additional 11 people provided examples for at least one character strength by email or, in two cases, orally (which I manually recorded). Overall, between three (love) and 10 (humour, kindness, and perspective) examples were provided for each character strength.

Materials

The Critical Incident Technique (Flanagan, 1949) is one that closely approximates the ideals of developing "objectively defined, clear behavioural criteria" (Ambady & Rosenthal,

1992, p. 257), and it has been described as an effective tool for examining human attitudes and behaviours (Dean, 1992) in a business environment. This technique was developed to establish "critical requirements of the work in terms of aptitude, training, information, attitudes, habits, skills, and abilities" (Flanagan, 1949, p. 420), and it has been widely used in a number of industries over the last half-century. Critical incidents are considered a key forerunner of a host of contemporary practices; these include behaviourally anchored rating scales, requirements for performance, KSAs, and guidelines for structured interviewing (Fountain, 1999).

The Critical Incident Technique has been described as a subset of content analysis that uses transcriptions and text as its data source, provides "rich—but highly systematic, valid, and reliable—research findings" (Fountain, 1999, p. 3), and is an unobtrusive method of data collection (Fountain, 1999). Critical incidents permit researchers to identify requirements or behaviours that are deemed essential and to subsequently establish criterion measures against which other activities or behaviours may be assessed (Flanagan, 1949). Flanagan (1949) noted that critical incidents provide "the only source of primary data regarding the critical requirements of the job in terms of behaviour" (p. 421), and this is still the case. As such, the critical incidents have been chosen for their unique ability to assist in determining the contextual characteristics of identified concepts; in this case, contextual examples of virtuous behaviours as demonstrated by leaders.

Design and Procedures

Using semi-structured interviews, a wide range of men and women from a variety of work-based organizations were selected to represent contrasts (Wrzesniewski, 1999). Examples of respondents' industries and jobs include an operations manager for a Catholic church, a special education teacher, a conference services director at a large urban university, an environmental conservationist, a manager for a multi-national

insurance provider, a software architect, a chemistry technician, a private school headmaster, a haemetological pediatrician, a roofer, a pharmacological sales representative, an assistant university registrar, and an accountant. Each individual was asked to talk about and describe stories, events, or times when they have experienced or witnessed examples or occasions when specific character strengths (Peterson & Seligman, 2004) were demonstrated by leaders within their workplace. Although at least one set of authors found the idea of 'traits' to be less likely to trigger social desirability effects than that of 'virtues' (Shanahan & Hyman, 2003), this did not appear to be a concern as I was asking people to describe the behaviour of others, not themselves.

The introductory email that was sent to prospective respondents read as follows: *"Given that many people spend approximately one-half of their waking hours at their jobs, work environments can have a strong impact on our lives. I am interested in how character strengths are demonstrated by individuals at work. I would like to ask you about times when your leader and/or supervisor demonstrated 8 specific character strengths. If you are willing to participate, I will provide you with clear definitions about particular strengths and ask you to tell me about times when you have seen these behaviours enacted by leaders within your organization."*

Individuals who agreed to be interviewed were then provided with three documents in advance by email or by hard copy; an informed consent, Peterson and Seligman's (2004) definitions for each of the 24 character strengths (Appendix A), and a set of general instructions (detailed in *Study Script* section below) so that they could have time to think of examples beforehand. Given the relatively rare occurrences of these behaviours, individuals were also instructed that their examples could be from any boss or supervisor in his or her work history. Mutually available dates and times were set primarily by

email, although some phone calls did occur. All interviews took place at the interviewee's convenience and were generally conducted in his/her office or home.

In order to make it equally possible for each person to provide exemplars for each character strength, the following strategy was initially employed. Each of the first three interviewees was asked to describe one character strength by rotating through each of the six virtue categories (Appendix A) (e.g.; the character strength of creativity from the virtue category of Wisdom and Knowledge, the character strength of bravery from the virtue category of Courage, the character strength of love from the virtue category of Humanity, citizenship from Justice, forgiveness and mercy from Temperance, and appreciation of beauty and excellence from Transcendence). After this first round of six, they were then asked to describe examples for the next character strength in each of two more categories (as there are only 6 virtue categories in sum), for a total of eight examples. For example, the first interviewee was asked to describe curiosity from Wisdom and Knowledge and persistence from Courage. If they were unable to provide examples for some number of the eight they were given, the rolling process was continued until, as previously noted, the first interviewee had provided eight examples. The second and third interviewees then received the next eight character strengths, taking one from each virtue category for the first six and then subsequent character strengths for the next two-plus items. However, it was found that this process restricted interviewees from providing their most vivid examples that may or may not have been contained within the eight specific character strengths in this rotational approach. Consequently, this strategy was abandoned and subsequent interviewees were asked to simply provide examples for at least one character strength of their choice per category. Respondents were able to generate examples much more readily using this method and, as would be expected, different people chose different character strengths to elucidate.

Interviewees were asked to provide demographic information regarding their gender, age, years in the workforce, approximate number of jobs held since they began working, current job title, type of industry, and, optionally, the name of the organization for whom they now work. Interviewees were also asked to provide only the role (<u>not</u> the name) of the person that demonstrated each exemplar to ascertain that it was behaviour demonstrated by a leader or manager. Finally, individuals were asked to note whether the person demonstrating the behaviour was a direct or an indirect supervisor, although in the end there did not seem to be differences regarding the salience of direct versus indirect leadership.

Study Script:

Participants were informed that I used an existing list as a basis for my study and, in keeping with the tenets of the Critical Incident Technique, they were provided with an introductory list of specific character strengths to provide time for forethought.

The following instructions were also included with the introductory packet of information:

> *"I'm interested in how integrity (or kindness, curiosity, humour, etc.) is or has been demonstrated by any supervisor, boss, or leader for whom you've worked. Please record* (for those who chose to respond by email) *or tell me about* (for those who were directly interviewed) *the best and most vivid or memorable example of when a supervisor or leader demonstrated integrity (or kindness, or curiosity, etc.)"*.

Study Prompts:

If respondents expressed confusion, I restated the question in the following manner:

Can you share an experience in which you have witnessed (a particular character strength) being demonstrated by your leader and/or supervisor? (J. Dutton, 2003, p. 7)

If their answer was still incomplete, I used one or both of the following prompts to elicit more specific information:

What is it about (the incident) that strikes you as demonstrating (character strength)?

Could you tell me more about what happened when your supervisor demonstrated (character strength)?

In order to assess the source of exemplary behaviours, interviewees were also asked:

What was the role of the person whose behaviour you're describing (e.g.: immediate supervisor, unit supervisor, CEO, etc.)?

As previously noted, several individuals provided examples of instances where their family members, colleagues, or in a few cases, even the respondent him or herself had demonstrated a particular characteristic (as opposed to recounting a time where his or her leader demonstrated a character strength). Although those responses were transcribed in order to compare these examples with leader-demonstrated behaviours, their totals and content are not included in the reported material in order to ensure the most 'pure' and appropriately contextualized data.

<div align="center">Results</div>

The examples that individuals provided demonstrated extensive variations of context. As the interviews were conducted, exemplars for each character strength were transcribed. A graduate assistant and I then extracted between 3 and 10 themes for each character strength from the 30 pages of transcription. Despite the diversity of peoples' professional roles and experiences, overlapping themes began to emerge from the descriptively rich examples participants provided. Some responses that represent the range and depth of character strengths demonstrated by leaders are articulated below, and the extracted themes appear after all of the specific examples.

For the character strength of *curiosity*, one person responded:

"She (my supervisor) is excellent at trying things...taking on challenges that I could never imagine accomplishing...she looks for new opportunities for herself and for others as well".

Another person chose a more specific example of curiosity. He responded, "A supervisor of mine in the Department of Environmental Conservation was working with a group of college age volunteers who had signed up for a volunteer trail maintenance program. The volunteers were required to camp out for most of the program and work full time in the woods. They had been bragging about how a few

of them had licked a particular species of frog and their tongue had gone numb – this was something that they learned in an ecology class. After my supervisor had left the group for the day he found one of these frogs on the hike out of the woods… he told me he licked it and that his tongue had indeed gone numb for a few minutes."

Two examples for the character strength of *creativity* are as follows:

"He would be faced with problems, (and) he could not only apply given what he had experienced to figure out how to solve a problem but notice where it was similar to a previous problem. He'd say, 'If we stop looking at it like this and turn the frame 90 degrees all of a sudden this problem becomes much simpler… or we don't have to solve it because we're going to think of it this way or approach it this way.'

"(My supervisors were) always looking at ways to bring the whole-sales, finance, service departments… together, and have everybody understand… if your team understands the way the finance team runs, by doing that you'll appreciate they way they fit into the company… everybody (every two or three weeks)..would get together and do different exercises, it may be a jeopardy game that gets everybody to learn about balance sheets, real basic stuff, try to understand, 'That's why Jane needs to have this information by the end of the week at a certain time…because this is how that fits into the balance sheet, or the income statement', or whatever they were trying to teach us at the time…they were able to make it fun, make it educational, and make everyone understand why they were doing it." [In this instance, the individual worked for a team of two supervisors.]

Specific examples generated by interviewees for the character strength of *gratitude*

include the following:

"At our annual meeting every year, the director gets up and speaks. The first thing he does is that he addresses all of the accomplishments of what the officers have done in the past year…people take it to heart. First, he comes across very genuine…he's very thankful for the work, hard work that we do within our district…he addresses it in front of everyone, at least once a year, our accomplishments throughout the year…(it) has a pretty big impact on our morale throughout the year on our unit here."
Another interviewee responded, "She demonstrates her gratitude not just to me, (but to) all members of her team. Spoken or written, numerous emails over the years, thanking me for participation. She's quick to give credit with other people. She gives credit to whoever did the work when discussing it with someone else they're not there, even if they aren't there at the moment, but (she) goes on to express wonderful words about what this person does or what they've done for the community…".

Another person said, "He thanked me for doing a job….(it) means a lot when you hear it…at no cost, but it means so much. It costs nothing but means everything."

And a fourth interviewee responded, "Any time after my shift … there would always be a note for me; 'Great job last time', or 'Thank you for doing this', or just, always

with the thank-yous and the appreciation. And whether it was verbally or it was usually with little notes (because we worked different shifts), (there were) big thank-yous."

Several individuals also indicated that experiences that they have had with current or previous supervisors have profoundly influenced their lives, and it was simply amazing to hear them recount their supervisors' behaviours. Although the purpose of these interviews was to collect exemplars for survey development, it was also a tremendous honour and a privilege to sit with people and to listen to their personal-and sometimes painful-stories. As the heart of this work, these responses need no explication, so they are simply reproduced below (character strength in parentheses).

"As a guidance counselor, she made it her goal to see the beauty and excellence in all she encountered. She knew the potential of each of her 400 and she worked with all she could to bring that excellence to fruition. She encouraged every student to see the beauty and acknowledge the awe of the universe. I have a physicist in my family partly because of her help. She elevated the standards that he held for himself." (*Appreciation of beauty and excellence*)

"He had these very important goals in his mind, and he stuck to them...he was goal driven, but not obsessive about it...nothing's going to change (his goals)...He taught me that without goals, if you don't know what you're doing, how're you going to get there?" (*Persistence*)

"I worked in a restaurant that was built around people having fun...my boss was very strong about cohesive units and playing with one another to deflate tension...we would go and play jokes on customers in other people's sections...if you weren't having fun they didn't want you there, they would say, 'you need to take a 'you' break, come back tomorrow when you're better.' ... I've always tried to replicate those in environments where I work, of breaking down borders and just having fun with one another." (*Humour*)

"She is never shy to bring God into a conversation, regardless of who it is she is with-an atheist, a Jew, a Protestant, a Catholic, a Muslim...It's never uncomfortable, and I believe it's that she is totally comfortable with her spirituality....and that's pretty cool.... I wasn't shy to ask her because I knew she would answer (about religious topic/practice). I've never seen that...(it's the) first time I have had numerous conversations about religion outside my home or church... I've gained a certain level of comfort from spending time with a woman like her. She demonstrates it's ok to be comfortable with your religion, your faith, and it's ok to talk about it. You don't have to be shy, or not ashamed, that's not the right word, but leery of letting people know. It's been a huge lesson, great value." (*Spirituality*)

"He gave me a card that said, 'Work hard, dream big, smile always and good things will happen'...it made me motivated to succeed with him, but the fact that I still have it with me now, I agree with it 110% ..." (*Hope*)

"He has always encouraged me to pray when times have been challenging. At one difficult point in my life, my supervisor told me to know that God has a plan for all of us and that if I remain open to his guidance, he will help. Although that was related to a specific personal issue, I have relied on that guidance in many personal and professional situations since then." (*Spirituality*)

"She sends me text messages every day; sending positive thoughts your way...She tells me, '*It is your story, and it will end in any way that you want it to*' ... she has a lot of hope for me and for my future. She'd wait to hear what I was thinking and where I was going...and then she'd say, "I'm going to give you the flip side of that". Working from a negative way and a negative position internally, she says one statement that turns it to a very positive thing, and it makes me feel good about how I'm feeling versus how badly I'm feeling, causing more anxiety....she's always encouraging that way in terms of the future." (*Hope*)

"(Working as a volunteer supervisor in a non-profit organization) was very different for me, in that, all of a sudden, I had to learn that I felt good about what I had done inside, and that the front line centre folks who were getting the credit were the volunteers, but it was me who had worked my buns off behind the scenes. So what you really had to learn to develop, which was not something that I was good at at the time, but I had to learn to intrinsically trust myself, learn to develop my own intuitive nature, which I would be much more concrete as opposed to intuitive, and learning that if I felt good about the job I had done, I should feel good about that, and that I didn't need to have any external recognition. ...You had to learn to just be a wallflower...I think everyone should have to work with a volunteer organization..." (*Humility and modesty*)

In order to provide a sense of how the survey items were extracted from long narratives, the themes for each character strength are included in Table 2. Distilling items from multiple examples proved to an interesting process as some examples that people gave were not as universal as I perceive them to be. For instance, in discussions with colleagues, several people objected to the choice of "like a dog with a bone" for the character strength of persistence as they had never heard the expression. For character strengths with numeric or conceptually more examples, I worked iteratively to retain and highlight the essential element of each character strength.

Table 2

Themes Identified for Each Character Strength

Open-mindedness [judgment, critical thinking]
-being "outside of yourself"; with other people
-actively hear others' ideas and then decide; not just their own ideas
-able to review pros and cons

Curiosity [interest, novelty-seeking, openness to experience]
-able to change/readiness to change
-want to expand outside the box
-not necessarily traditional-find novel things that haven't been looked at or explored; find the 'new stuff'
-willing to try things that are unknown or not known

Creativity [originality and ingenuity]
-finds (and communicates) interesting and novel ways to solve problems
-understanding through unique solutions/approaches
-having vision
-helps you to learn how to do it by being around; serves as a catalyst ("rubs off")
-gives permission to be different

Perspective [wisdom]
-keeps elements of life in scale, from little things to the big picture
-able to see the relative importance of things-what is/isn't important
-doesn't let the small things get to them
-allows/provides time/space to vent; give it back with "it's not that big of a deal"
-reminding of the overall picture
-able to look beyond the hear and now when facing challenging decisions
-level-headed
-person who provides "the wisdom of life"

Love of learning
-participates in/implements training programs
-encourages life-long learning on a variety of topics
-takes it personally, not just a job; what they think is right for everyone else
-help someone else-generosity-impose a love of learning on others
-influence on everyone, not just you

Bravery [valor]
-doesn't shrink from challenges; meets them head on
-fight for what he/she thinks is the right thing/believes in/feels strongly about, and
-confronts danger, risk, or opposition when fighting for what he/she feels is the
 right thing
-takes care of another's needs without regard for/thought for self
-doing something because you need to; goal of improvement or acknowledgement

Persistence [perseverance, industriousness]
- 'like a dog with a bone' (said by two people)
- believe they were going to do it, no matter what…no choice; "gets it done"
- good at direction and follow-through
- top-notch at whatever he/she is working at
- demonstrates discipline and focus

Vitality [zest, enthusiasm, vigor, energy]
- passion; 'can-do' attitude
- way of life, how they are…how they behaved in anything; although it's applied at work, it's just how they lived
- loves what he/she does
- enthusiastic despite adverse circumstances

Integrity [authenticity, honesty]
- taking ownership, even if he/she did something negative
- tries to ensure that he/she is providing the best value, benefit, or solution
- authentic, genuine, and honest
- articulate; will say and point out, but he/she will deal with it in such a way that it isn't going to knock you down…but, you need to know it

Love
- honesty, sincerity, empathy that is unconditional and comes from the heart
- cares for you when the chips are down
- unwavering support
- generous, giving of self
- has a personal interest in your personal life, not just the work aspect
- able to read that you were having problems that affect or conflict with work commitments
- recognizes that you're more than just an employee
- openly expresses immense caring; cherishing

Social Intelligence
- has an ability to read when a person is genuine
- willing to sincerely meet the personal needs of an employee
- understands the motivations of the people around him/her, including groups
- knows it's OK to ask…what motivates you? what are your favorite things/people/places?
- pays attention to other people; learns/accepts different personalities
- actively learns about others (not just their job description); treats as a person, not just an employee
- provides employees time and space to deal with events in their personal lives (e.g. family illness, etc.)
- has a relationship to intuition

Kindness
  -generosity, compassion, 'humaneness'…not forgetting the human side
  -sincerity
  -takes time to listen-time out of day to focus on someone
  -mercy
  -helpfulness; to help and make you feel better
  -understanding
  -giving of time and resources
  -recognizes when you need help and gets it for me, because they know you need it
  -awareness
  -provides guidance

Citizenship [social responsibility, loyalty, teamwork]
  -loyalty and teamwork
  -personal decision to commit
  -moral selflessness
  -taking the "I" out of "we"
    (difficult to clearly differentiate from leadership)

Fairness
  -everyone is on the same level, even if the policy is to divide work
  -unbiased; no injustice
  -consistent application of rules
  -watch individual vs. collective fairness; one person vs. everyone

Leadership
  -motivating; getting people to work together
  -supportive; active members in a project
  -encouraging
  -working with, instead of telling-doing as much as others
  -liked/likeable
  -role of organizing and directing; keeping the overall picture and pushing a group
    to completion

Forgiveness and mercy
  -respectfulness
  - tolerant/accepting
  -despite negative behaviour, supervisor doesn't 'scold'; knew that person knew he/she
    was at fault
  -you're not less of a person because of your mistake
  -accepts your shortcomings
        (themes indicate that forgiveness and mercy are almost opposites of
        intolerance;
        really about acceptance)

Humility/modesty
-doesn't seek/need external recognition or credit
-credit is deferred or deflected to the team, no matter how much he/she does
-personal ego isn't involved

Prudence
-always laying out a plan/thinking ahead.
-being consistent (therefore having <u>control</u> in predicting the future)
-pessimism towards changes...being cautious

Self-regulation [self-control]
-strives to maintain composure and be neutral to a situation; no use of sarcasm or
  bad thoughts
-recognizes other's moods/temperaments and doesn't hold that against them, but
  works at fixing the problem, not the person's temperament
-even-keeled
-self-disciplined

Appreciation of beauty and excellence [awe, wonder, elevation]
-recognizes the value of the employee/idea- to create the appreciation
-identifies the details as important parts of a whole
-they seem to have patience in seeing the smaller, intricate aspects of the job, and
  taking pride in those small things because that is what makes the 'whole' piece
  of work or job
-seeks the highest standard of things (e.g.: product development)

Gratitude
-recognition for a job well done; recognizes and rewards accomplishments; gives
  credit to others
-simple 'thank you' (even just a little note) means a lot, even though it's the
  employees' job, it's still good to say thanks to them for what they do.
-the recognition is very personal, thoughtful, and sincere; may be detailed
-being appreciated at what you do means a lot

Hope [optimism, future-mindedness, future orientation]
-encouragement; inspirational
-makes you look forward to better things, to make things more positive
-setting goals helps motivation
-needs to include the idea of ability to see what (good) could happen in the future

Humor [playfulness]
-the recognition that work doesn't have to be serious all the time, having fun at
  your job makes it better for everyone
-equating humor to relaxed workplace, people feel more comfortable
-makes you want to be/work around them

Spirituality [religiousness, faith, purpose]
    -not shy about religious topics and makes it comfortable
    -gives us more purpose to our job and life; inspirational
    -spirituality is a big part of his/her life (regardless of whether he/she talks about
     it/makes mention of it)
    -live as though there is no afterlife
    -acting from within, not as doctrine; love and be kind to others

The themes were assessed and one item per character strength was constructed for 21 of the 24 strengths. As with any survey development, the goal is both breadth and parsimony, and this is a challenging blend to attain. Two items were written for the strengths of integrity, kindness, and humility/modesty in order to capture the full dimensionality of these constructs. In some cases, items were created by simply adding "my supervisor" in front of a particular theme that emerged from the transcripts; for instance, the item for creativity became, "My supervisor finds interesting and novel ways to solve problems". I felt that this example represents the most broad-based interpretation of creativity and incorporates the other thematic elements such as having vision and contributing to an environment that could conceivably permit flexibility or promote the learning of others.

For other character strengths, meta-themes were identified that were distilled from and captured by the flavour of each individual theme. For instance, the item for gratitude reads, "My supervisor demonstrates sincere appreciation for work that is done well", and this encapsulates interviewee-provided examples such as recognition, sincerity, thoughtfulness, provision of a thank you, and the idea that being appreciated for what you do means a lot.

After the examples were transcribed, themes were extracted, and an initial survey of 27 items was generated (Appendix B), each item was typed on an individual strip of paper and given to a graduate student who had not been previously exposed to any relevant information regarding this research to assess the face validity of each item. A list of the name and sub-

categories of each character strength (see Table 1) as theoretically identified by Peterson and Seligman (2004) was also provided to ensure that the vetting was done with the exact nomology with which examples were generated. Most character strengths also include sub-categories; for example, social responsibility [loyalty, and teamwork in brackets] and creativity [originality, ingenuity], and many of the interviewees spoke to a particular sub-category (i.e., the loyalty piece of social responsibility). To more fully test the representativeness of the items themselves, no further definitions were provided beyond the character strength and its subcategories. The graduate student randomly pulled the character strengths from a hat one at a time and matched them to what he felt to be the appropriate strength. To avoid process of elimination, he was told that several character strengths had multiple items and he did not check off character strengths as he the matched items to various strengths.

Of the 27 items, three were originally classified in character strengths other than those for which they were intended. The item for love was initially identified as the item for kindness, the item for forgiveness and mercy was first classified for leadership and secondly for kindness, and the item for integrity was first classified for fairness and secondly for citizenship. Each of these items was discussed and modified to more closely reflect the themes that had been elicited from the interviewees. For example, the item for love originally read, "My supervisor cares immensely for my personal well-being". The reviewer found "well-being" to be more related to kindness, so we simply changed "my personal well-being" to "me". The original item for forgiveness and mercy read, "My supervisor accepts my shortcomings", which was also interpreted as being related to kindness. As a result, the item was changed to, "When I make a mistake, my supervisor accepts my shortcomings" to link acceptance with fallibility and consequently with forgiveness. The third item that was modified was one of the two constructed to capture integrity. After extensive discussion, I

concluded that the best way to represent this construct was through the use of one of the two

original sub-categories, authenticity, and the item simply reads, "My supervisor is authentic".

This is one of three items where I was unable to generate a more representative description

than the actual sub-category or part of the character strength's name; the other two are Love

of Learning, where the item became "My supervisor demonstrates life-long learning", and

Appreciation of Beauty and Excellence, where the word "excellence" is used in the item.

Discussion

Virtuousness has historically been viewed as either detrimental or unrelated to an

organization's financial performance (Comeau-Kirchner, 1999), and the study of character

and virtue has long been dismissed for being too subjective (Garofalo, 2003; MacIntyre,

1988), morally laden (Cameron et al., 2004), and lacking a "master theory" (Arjoon, 2007, p.

395). Virtuousness has also been criticized as being contextual and instrumental (Dawson &

Bartholomew, 2003). Consequently, there has been a dearth of research on these topics by

scholars (Sarros et al., 2006).

More recently, however, character and virtue have been identified as "the bedrock of the

human condition" (Peterson & Seligman, 2004, p. 4), and they are proving to be worthwhile

topics for both theoretical and empirical exploration and for individuals and organizations

alike (Berman, 2007; Bright et al., 2006; Cameron, 2003; Cameron & Caza, 2002; Caza,

Barker, & Cameron, 2004; Gavin & Mason, 2004; Mintz, 1996; Sarros et al., 2006; Wright &

Goodstein, 2007). Despite concerns of being decontextualized and atheoretical, longitudinal

research conducted with over 15,000 individuals in 60 countries (Den Hartog et al., 1999)

actually provides extensive evidence that supports universally endorsed attributes such as

trustworthiness, honesty, encouragement, justness, and positivity as well as universally

negative attributes such as ruthlessness, irritability, being a loner, and egocentrism.

However, it is also important to comment that these studies have also found evidence for

culturally relative attributes such as autonomy, independence, and conflict avoidance. These findings support the idea that personal attributes such as character strengths have both acontextual and contextual features which, in turn, indicates that context is certainly a factor that shouldn't be overlooked in organizational research.

Coupled with future quantitative studies, a brief, contextually grounded, and robust measure of leader-demonstrated character strengths, or character strengths in leadership (CSL), has the potential to enhance and contribute to further empirical exploration.

Study Two: Quantitative Scale Development and Refinement

Introduction

Character strengths carry an intuitive appeal, but it remains to be seen whether they can establish themselves as robust and meaningful predictors of constructs of interest in the business and psychological literatures. Extant scales that measure character strengths and virtuous behaviours are extremely long (Peterson, 2007), theoretically diffuse (Shanahan & Hyman, 2003), or designed to assess organizational characteristics (Chun, 2005) rather than those at an individual level of analysis. Consequently, the goals of Study Two were (1) to test the empirical factor structure of the Character Strengths in Leadership scale against a pre-established theoretical scaffolding, and (2) to explore the relationships and statistical properties between character strengths and other extant scales of leadership. In this study, I initially proposed that a six-factor model would emerge to correspond with Peterson and Seligman's (2004) six virtue categories that represent composites of their 24 strengths.

This study included the simultaneous administration of correlate measures to provide content comparison and validation by identifying items and factors that share commonality or that are distinct. To this end, measures of other leadership constructs such as transformational leadership (Avolio, Bass, & Jung, 1995), leader-member exchange (Dansereau et al., 1995), and the ethical leadership scale (Brown & Treviño, 2006a) were concurrently administered to begin to establish convergent and discriminant validity. Additionally, measures of less active or more negative leadership characteristics, including passive leadership (Kelloway, Mullen, & Francis, 2006) and abusive supervision (Tepper, 2000), were concurrently administered to test inverse relationships between constructs. In all, six leadership scales were included.

Melding Character Strengths and Leadership

Bass and Steidlemeier (1999) assert that the choices and actions demonstrated by leaders are the "pillars" of leadership (p. 181), and the character of a leader can be "a key source of influence" (Sarros & Cooper, 2006; Sarros et al., 2006, p. 686). Although there are many articles in the popular press about the importance of leader character and at least one theoretical framework that models authentic leadership and the character strength of hope (Avolio, Gardner, Walumbwa, Luthans, & May, 2004), there are few empirical studies that blend character strengths with leadership (Dirks & Ferrin, 2002; Sarros et al., 2006). This near absence of confluence is surprising considering that, according to one popular conceptual approach, leadership is a "moral compass" that has deep roots in virtue and its related constituencies of ethics, morality, and character (Bass & Steidlmeier, 1999, p. 193). However, it also provides an interesting opportunity to empirically blend the two areas.

Hypotheses

This study, the second in a series of three, was based on several broad predictions. Holistically, I predicted that leader-demonstrated character strengths are positively associated with the quality of leader-member exchange and transformational leadership, while leader-demonstrated character strengths are negatively associated with passive leadership and abusive supervision. Additionally, trust has been considered as an important element of many other models such as LMX (Schriesheim, Castro, & Cogliser, 1999) and outcome measures (Barling et al., 1996; Mayer, Davis, & Schoorman, 1995), and results from at least on meta-analysis indicate that trust is an inherent relational variable in leadership (Dirks & Ferrin, 2002) . Consequently, this model posits that a subordinate's ratings of their ability and willingness to get along with their supervisor, as well as their trust in their supervisor, will demonstrate unique variance that incrementally contributes to leadership outcomes.

Leader-Member Exchange (LMX)

The relationship between supervisors and subordinates has been identified as leader-member exchange (LMX) in the literature. LMX is an outgrowth of a model of leadership that was originally called "Vertical Dyad Linkage", or VDL (Dansereau, Graen, & Haga, 1975). VDL was subsequently split into two distinct streams; individualized leadership (IL) (Dansereau et al., 1995), which proposes that each leader-subordinate relationship is unique, independent, and distinct (Schriesheim et al., 1999), and leader-member exchange (LMX), which has been explored more extensively.

In the past three decades, LMX research has been grounded in role and exchange theories and has evolved through four stages (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995). In the first stage, leader-subordinate relationships were found to be differentiated rather than uniform and consistent. In the second stage, which is the most heavily researched area, the construct of LMX was developed through analysis of the quality and outcomes of dyadic relationships (Gerstner & Day, 1997). Stage three focused on the partnerships developed between leaders and subordinates, while the fourth stage "broadens the scope from the dyad to larger collectives, exploring how dyadic relationships are organized within and beyond the organizational system" (Schriesheim et al., 1999, p. 65).

Nearly twenty elements of LMX were explored throughout the 1980s; these include such factors as trust, authority, competence, communication, consideration, expertise, influence, and motivation (Schriesheim et al., 1999). In a review of eighty-two articles on LMX, Schriesheim et al. identified six subdomains; these include "mutual support, trust, liking, latitude, attention, and loyalty" (1999, p. 77). Although two primary models of LMX have been advanced, a consensual understanding of the "conceptual foundations" of LMX has yet to be developed (Zhou, 2003, p. 27).

Multiple empirical studies have demonstrated that the quality of leader-member relationships predicts a variety of outcomes regarding subordinate performance including role conflict and clarity, satisfaction (both overall and with supervisors), career outcomes, commitment, member competence, and longevity (Gerstner & Day, 1997; Schriesheim et al., 1999; Zhou, 2003). However, findings regarding LMX with promotion and pay are mixed (for an extensive review of the LMX literature, see Zhou, 2003). It is interesting to note that data from one meta-analysis indicated that LMX and turnover were not significantly correlated and that "leader and member LMX perceptions were only moderately related"; corrected for measurement error, they reported an overall correlation of .37 (Gerstner & Day, 1997, p. 827). Other reported correlations of leader (supervisor) and member (subordinate) perceptions range from .24 (Scandura, Graen, & Novak, 1986) to .50 (Graen & Cashman, 1975) (for a discussion of these results, see Gerstner & Day, 1997, p. 828). Additionally, there is some evidence that members' LMX ratings are more reliable than leaders' ratings (Gerstner & Day, 1997).

Few studies have looked at the antecedents of LMX (Harris, Harris, & Eplion, 2007; Zhou, 2003). One study assessed leaders' ratings of subordinates' performance and the relationship quality between the leader and the subordinate with regard to decision influence (Scandura et al., 1986). Different patterns were found; from the leaders' perspective, either high LMX or strong performance ratings compensated for weakness in the other area, while subordinate perceptions indicated that both factors needed to be high in order to have strong influence in decision-making. Subordinates who did not have high LMX indicated that, in order to have decision influence, a "compensatory model" of strong performance ratings had to exist (Scandura et al., 1986, p. 583).

Several proposed models of LMX have not yet been fully empirically assessed. The first is comprised of respect, trust, and obligation (Graen & Uhl-Bien, 1995), while another is a

four-factor model that identifies affect, loyalty, contribution, and professional respect (Liden

& Maslyn, 1998). Since discrepancies have been observed among both measures of LMX

and defining features of the construct itself, one study tested these differences by

administering multiple LMX measures simultaneously and by comparing leader versus

subordinate perceptions of LMX (Schriesheim et al., 1999). First, non-equivalent items

within several LMX measures were identified and discarded, but leader-member convergence

still did not occur. Perceptions were then measured, and results indicated that leaders attend

to task-based markers, while subordinates rate social aspects as more pertinent and important.

Qualitative assessment conducted within the same study indicated that communication

contributes to LMX; although we have evidence that leaders serve a distinct central and

communicative function within the organization (Kelloway et al., 2006), it has not, to date,

been defined as part of the LMX construct. Finally, there is some empirical evidence that

LMX has demonstrated congruence with transformational leadership, and researchers have

been encouraged to explore these constructs simultaneously (Gerstner & Day, 1997).

Therefore,

Hypothesis #2-1: *Employees who reported that their supervisors demonstrated higher*

levels of character strengths (or, as composite measures, virtuous behaviours) also reported

that their supervisors demonstrated higher levels of Leader-Member Exchange.

A measure of the multi-dimensional four-factor model will be used for this study (Liden

& Maslyn, 1998).

Transformational Leadership

Transformational leadership is a term that was originally used 30 years ago. In its

conceptualization, it included shared goals, shared values, collective motivation, and a moral

obligation to leadership (Burns, 1978). In fact, transformational leadership has strong links

with moral character, virtuous behaviours (Bass & Steidlmeier, 1999), and transcendence of

personal self-interest (Seltzer & Bass, 1990), which makes it a natural partner for empirical studies with virtuous behaviours.

Although there have been over 15,000 studies conducted on leadership and many other models such as authentic leadership (Avolio et al., 2004), positive leadership, and moral/ethical leadership (Brown et al., 2005) do exist (for a review of these conceptualizations, see Jensen and Luthans, 2006), transformational leadership is by far the most widely studied (Bono & Judge, 2004). In fact, it has generated more research than the combined exploration of all other theories of leadership within the last decade (Judge & Piccolo, 2004). 284 empirical studies have been carried out between 1980 and 2007 (Barling, Christie, & Hoption, 2009), and its effects have been demonstrated to be both powerful and pervasive in a variety of organizational cultures (Bass & Avolio, 1993; Den Hartog et al., 1999). Empirical results have shown a wide array of significant positive relationships with ratings of leader effectiveness and subordinate satisfaction (Seltzer & Bass, 1990), "domino" effects among various layers of management (Bass, Waldman, & Bebb, 1987), personality characteristics such as extroversion (Bono & Judge, 2004), and ratings regarding interpersonal justice, satisfaction with supervision, and motivation (Kelloway, Barling, Kelley, Comtois, & Gatien, 2003). Perhaps most importantly, transformational leadership has been shown to be a skill set that can be both modeled and taught (Kelloway et al., 2000; Zacharatos, Barling, & Kelloway, 2000). If, as predicted, substantial overlaps exist between transformational leadership and character strengths, this evidence carries potentially useful and important implications for the teaching of character strengths, as well.

Transformational leadership is often contrasted with transactional, autocratic, directive, or task-oriented leadership styles that focus on exchange-based, reward-driven, and compliance-focused directives (Bass, 1985; Burns, 1978; Seltzer & Bass, 1990). These two styles have been represented as polar (Burns, 1978) "ends of a continuum", with transactional leadership

being comprised of contingent reward, active management-by-exception, or laissez-faire leadership (Seltzer & Bass, 1990, p. 695). However, this perspective has been questioned by proponents of ethical leadership, who question the "stark polarity" between transformational and transactional leadership styles (Brown et al., 2005, p. 188).

Transformational leadership is comprised of four tenets: providing a vision of the future and a sense of mission (idealized influence), articulating an optimistic and inspiring vision of the future (inspirational motivation), developing employees by providing support, encouragement, and coaching (individual consideration), and facilitating behaviours that increase employees' awareness of problems and encourage them to challenge the status quo (intellectual stimulation) (Avolio, 1999; Bass, 1985). Idealized influence and inspirational motivation are sometimes treated as one dimension and referred to as "charismatic leadership", and some researchers suggest that transformational leadership should be treated as a unidimensional construct based on strong empirical intercorrelations among the dimensions (Kelloway et al., 2006). While others argue that it is a multi-dimensional construct with more than 4 factors, their evidence is presented as a result of confirmatory, rather than exploratory, factor analysis (Rafferty & Griffin, 2004).

The MLQ is a commonly used instrument that has consistently demonstrated significant, positive results regarding transformational leadership (as opposed to transactional leadership) and "effectiveness outcomes" (Seltzer & Bass, 1990, p. 694). Avolio, Bass, & Jung (1999) reported results from 3786 multi-national respondents in 14 independent samples from the Multifactor Leadership Questionnaire (MLQ Form 5X) and determined that the MLQ's factor structure was "best represented by six lower order factors and three correlated higher-order factors" (p. 441). They have encouraged research that seeks to further explore components of leadership and that uses methodologies such as interviews and observations rather than simply administering self-report surveys to better inform leadership assessment, evaluation, and

subsequent training. Despite the extensive research conducted regarding transformational leadership, initiatives to meld and measure the interplay of ethics, transformational leadership, and virtue have been more complex, theoretical, and inconclusive (Garofalo, 2003). Consequently, with the exception of one study that looked at leadership and character (Sarros et al., 2006), transformational leadership has not yet been mapped against any catalog of character strengths or virtuous behaviours at either an individual or organizational level of analysis.

This sequence of studies fulfills that challenge through its use of interviews about observations and will use the 20 items pertaining to transformational leadership from the Multifactor Leadership Questionnaire (MLQ 5X) (Avolio et al., 1999; Bass, 1985). Therefore,

Hypothesis #2-2: *Employees who reported that their supervisors demonstrated high levels of character strengths also reported that their supervisors demonstrated higher levels of transformational leadership.*

Ethical Leadership

Ethical leadership, as its name implies, resides at the intersection of ethics and leadership. In doing so, it incorporates a dimension of morality and represents "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct" (Brown et al., 2005, 120). In other words, leaders within organizations are role models who cue employees through their choice of rewarded or punished behaviour and who set the standard for ethical behaviour (Dickson, Smith, Grojean, & Ehrhart, 2001). Ethical leadership has been shown to be a result of both situational influences (role modeling, ethical conduct) and individual characteristics (personality measures such as agreeableness and conscientiousness, moral reasoning, and locus of control), and it has demonstrated relationships with outcomes such as prosocial behaviour

and positive follower ratings in areas like ethical decision making, satisfaction, motivation, and commitment (Brown & Treviño, 2006a).

Although ethics and character strengths are closely related, ethics are generally viewed as a subset within the general virtue literature. In comparison to ethics, virtues are based on ideals, rather than obligations, while in relation to morality, virtues ask what is best, rather than right. In comparison to values, virtues seek to discover what is good and life-giving rather than what is distilled or cultured from expectations and norms, and in comparison to effectiveness and competence, virtues seek to achieve meaningful purpose and to develop to the highest potential rather than simply meeting goal-driven objectives and out-performing competitors (Cameron, 2003; Cameron & Caza, 2002, p. 34). In essence, virtue-based behaviour removes any hint of instrumentality and "entails the pursuit of morally inclusive excellence" rather than "rules for guidance" (Shanahan & Hyman, 2003, p. 198). As ethical leadership is a related but non-identical construct, it has been chosen as a correlate measure in order to provide both convergent and divergent dimensions. Therefore,

Hypothesis #2-3: *Employees who reported that their supervisors demonstrated high levels of character strengths also reported that their supervisors demonstrated higher levels of ethical behaviour.*

Passive Leadership

Passive leadership is related to a laissez-faire approach that connotes avoidance (Bass, 1985; Bass & Avolio, 1990), and it is considered to be an ineffective management style whereby leaders are not involved with nor interested in their subordinates' lives or jobs (Garman, Davis-Lenane, & Corrigan, 2003). Structurally, results from some studies indicate that passive leadership is one of the three dimensions of transactional leadership (contingent

reward, management by exception-active, and passive leadership) (Bass & Avolio, 1990;

Bono & Judge, 2004) and that passive management by exception is an empirically distinct

construct that correlates negatively with transformational leadership (Garman et al., 2003).

In a Norwegian study that looked at the relationships between supervisees' Big 5 personality

variables and supervisor leadership ratings, significant results were found between a passive-

avoidant leadership style and the personality variables of agreeableness and openness

(Hetland, Sandal, & Johnsen, 2008).

For the purposes of this study, passive leadership is interpreted within the boundaries

defined by a simple, two-factor solution of active and passive leadership styles (Bycio,

Hackett, & Allen, 1995). Whereby active leadership is demonstrated and measured by

transformational and transactional leadership, passive leadership is defined by leaders who

"lack positive leadership skills and do not achieve desired outcomes" (Kelloway et al., 2006,

p. 77). In this case, further gradation is unnecessary as no further comparisons are being

made with laissez-faire or transactional leadership styles. As such, this conceptualization is

chosen for its simplicity and its ability to provide strong contrast with other measures of

transformational and ethical leadership. Therefore,

Hypothesis #2-4: *Employees who reported that their supervisors demonstrated high levels*

of character strengths reported that their supervisors also demonstrated lower levels of

passive supervision.

Abusive Supervision

Abusive supervision is a subset of workplace aggression, and meta-analytic data indicate

that workplace aggression results from an interplay of both interpersonal aggression and

situational factors. From the perspective of interpersonal aggression, workplace aggression

may stem from individual differences such as trait anger, negative affectivity, or sex, while

situational factors include perceptions of distributive injustice, procedural injustice,

interpersonal conflict, situational constraints, or job dissatisfaction. Context and relationships also appear to be important factors, and the authors advocate against combining measures among supervisors, co-workers, and organizations because workplace aggression predictors appear to be target-dependent (Hershcovis et al., 2007).

Abusive supervision is viewed as a counterproductive work behavior (Spector & Fox, 2005) that refers to subjective "subordinates' perceptions of the extent to which supervisors engage in *the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact*" (emphasis in original) (Tepper, 2000, p. 178). As such, it generally refers to behaviours such as intimidation, withholding vital information, blaming, or ridiculing a subordinate in front of others (Tepper, 2000; Tepper, Duffy, Henle, & Lambert, 2006). Although abusive supervision has a low base rate (Aryee, Chen, Sun, & Debrah, 2007), it can be detrimental to an employees' well-being and has demonstrated a variety of negative psychological and work-related outcomes including distress and dissatisfaction as well as job-related factors such as turnover, lack of trust, and deviance (for a review of this literature see Aryee et al., 2007 or Tepper et al., 2006). Recent findings indicate that abusive supervision is, not surprisingly, negatively correlated with psychological well-being and positively correlated with anxiety, although high levels of support from team members can buffer this relationship (Hobman, Restubog, Bordia, & Tang, 2009).

Only a few published articles regarding antecedents of abusive supervision are available (Aryee et al., 2007; Ashforth, 1997; Tepper et al., 2006), and the initial study failed to uncover dispositional, situational, or interactional effects (Ashforth, 1997). More recent results are consistent with models of both counterproductive work behaviours (Spector & Fox, 2005) and retaliation in the workplace (Skarlicki, Ellard, & Kelln, 1998) and indicate an interaction between authoritarian leadership and perceived interactional injustice (Aryee et al., 2007). Tepper et al. (2006) developed a model that integrated the notion of "victim

precipitation" (p. 102) and found a 'trickle-down' effect whereby supervisors who perceived

themselves to be unjustly treated subsequently mistreated their own subordinates. Further,

these effects were attenuated by supervisor depression in cases where subordinates displayed

higher levels of negative affectivity (Aryee et al., 2007). Although further research is

necessary to clarify these interactions, tenets of social exchange theory broadly indicate that

"abusive supervision signals a negative social exchange or poor-quality relationship with the

supervisor" (Aryee et al., 2007, p. 197), while perceptions of interactional justice that result

from positive supervisory experiences engender positive personal and organizational

outcomes. To my knowledge, the potentially mitigating effects of virtuous behaviours on

perceptions of abusive supervision have not been tested. Therefore,

Hypothesis #2-5: *Employees who reported that their supervisors demonstrated high levels*

of character strengths reported that their supervisors also demonstrated lower levels of

abusive supervision.

Trust

Since gaining theoretical (Mayer et al., 1995) and operational clarity in the 1990s (Mayer

& Davis, 1999), the role and contribution of trust has been assessed in a variety of

environments. It has been theoretically and empirically differentiated from cooperation,

confidence and predictability (Mayer et al., 1995). Dirks and Ferrin (2002) assert that trust is

neither a behaviour nor a "property" of the leader or of the interaction in either model;

instead, it is based on subordinate "belief or perception" (p. 612). Trust and leadership have

been tested from both subordinates' perspectives of a leader's trust in him or her, which has

been termed subordinates' 'felt trustworthiness' (Lester & Brower, 2003) and from

subordinates' trust in their leaders (Deluga, 1994).

Meta-analytically, trust in leadership has demonstrated positive significant relationships

with a variety of both behavioural (e.g., each of the OCBs, ranging from correlation

coefficients of .11 [civic virtue] to .22 [conscientiousness and courtesy]) and attitudinal outcomes and correlates (e.g.: job satisfaction [.51], organizational commitment [.49]). Trust has also achieved statistically significant results with a variety of antecedents including transformational leadership (.72), interactional justice (.65), procedural justice (.61), and unmet expectations (-.41), which refers to expectations within psychological contracts. Interestingly, hypothesized antecedents of propensity to trust (.16) and the length of a relationship were unrelated to trust (-.01) (Dirks & Ferrin, 2002).

As trust is a proposed mediating variable in the third study, a more extensive description of the construct of trust, components of affective and cognitive trust, and what we know about the relationship between trust and leadership is included in the third study. Therefore,

Hypothesis #2-6: *Employees who reported that their supervisors demonstrated high levels of character strengths also reported that they trust their supervisors.*

Liking

A related but distinct concept involves the interpersonal relationships of supervisors and subordinates, or their ability to get along. For the purposes of these studies, this variable has been termed "liking". One industry scion comments that, given today's economic climate, individuals should focus more on his or her supervisor's integrity and fairness than on whether they get along (Welch & Welch, 2009). However, interpersonal relationships are clearly an important element within the workplace; at least four of Gallup's Q12 employee engagement questions deal directly with recognition, caring, encouragement, and friendship (Gallup, 2003).

Positive affect, similarity, prosocial behaviour, and attraction are all fundamental tenets of social psychology that impact interpersonal dynamics between and among individuals in organizations. Not surprisingly, extant data demonstrate that identity impacts workplace relationships (Walter & Bruch, 2008) and that supervisor prosocial power use significantly

impacted supervisee liking, although it is interesting to note that gender was not a significant variable (Teven, 2007). Findings also indicate that affective and behavioural attraction are empirically distinct and that affective attraction is mediated by benevolent intentions (Montoya & Insko, 2008). In a study that sought to differentiate between peoples' prototypic, implicit cognitive schema and their affective responses regarding transformational leadership, Brown and Keeping (2005) studied both mood (or 'diffuse affective states') and liking (or 'target-specific affect'). Their findings indicate that, while mood did not produce significant results with regard to ratings of transformational leadership (using the MLQ) or with outcome measures, liking significantly and positively impacted both affective organizational commitment and job satisfaction. In sum, 'getting along' with ones' supervisor appears to be a construct that is subsumed under the nomological nets of liking/interpersonal and reciprocated attraction and that involves an interdependent combination of affect, cognition, and behaviour (Montoya & Insko, 2008). The role of liking with regard to character strengths is an interesting but previously untested link.

Therefore,

Hypothesis #2-7: *Employees who reported that they get along with their supervisors also reported that their supervisors demonstrated high levels of character strengths.*

Method

Sample

Participants were solicited by electronic mail. An introductory email was sent to selected personal and professional contacts listed in my own and my advisor's email address box, and individuals were asked to complete and then forward the request and link to anyone in their network whom they thought would be willing and able to complete the survey. 302 people completed and submitted the survey, and listwise deletion resulted in 270 useable responses.

Although several of the surveys not included in the analysis contained one or a few missing data points, quite a few individuals left large chunks of the surveys empty or simply did not complete the final portions.

Demographically, 205 individuals responded through a snowball sample throughout North America, and 65 individuals responded through an inter-company email from a Northeastern division of a large, multi-national corporation. 45% of the respondents were from the US, 54% were from Canada, and 1 respondent did not indicate his/her locale. 99% of respondents were between the ages of 18 and 65, and nearly 41% were between 36 and 45. Employment information and tabular demographic data are presented in Tables 2 and 3.

Procedure

The final survey consisted of seven content sections (character strengths, leader-member exchange, transformational leadership, ethical leadership, passive leadership, abusive supervision, and negative affectivity), two individual questions regarding whether a person (1) liked and (2) trusted his or her supervisor, and a set of demographic questions that respondents completed at the end of the questionnaire. Six of the leadership scales are pre-established and have demonstrated acceptable psychometric properties in previous research, while the seventh, as previously detailed, was created for this study. Respondents were asked to assess and rate how frequently their direct supervisor demonstrates each behaviour on a Likert scale. The original wording and rating systems of each pre-existing scale were retained for scale integrity. The full survey is in Appendix C.

The introductory text read as follows:

Enclosed is a survey about leadership styles that takes between 10 and 15 minutes to do, and the only criterion is that the respondent needs to be employed and have a direct supervisor (so people who are self-employed can't do it). I would really appreciate it if those of you with bosses would complete it. I would also be grateful if you could pass it along to anyone you know who would be willing and interested. It is totally confidential.

As noted, the first section contained the 27 character strengths items. The second section, Leader-Member Exchange, was assessed by the four subscales of Liden & Maslyn's (1998) Leader-Member Exchange scale (12 items: affect subscale, α=.89; loyalty, α=.87; contribution, α=.78; respect, α=.93). The third section measured transformational leadership, which was assessed by four subscales using the transformational leadership items of the Multi-Factor Leadership Questionnaire 5X (20 items: idealized influence subscale, α= .81; inspirational motivation, α=.88; intellectual stimulation, α=.89; and individualized consideration, α=.87) (Avolio et al., 1995; Avolio et al., 1999; Bass & Avolio, 2002) . Following Kelloway, et al. (2006), three items that measure passive leadership were adapted from the Multi-Factor Leadership Questionnaire 5X and made up the fourth section; (α=.92). The fifth section, ethical leadership, was measured by Brown, Trevino, and Harrison's Ethical Leadership Scale (2006) (10 items, α=.92). Abusive supervision, the sixth section, was measured by Tepper's (2000) abusive supervision scale (15 items, α=.92), and the final set of items was made up of the 10 negative items of the Positive and Negative Affect Scale (10 items, α=.89) (Watson, Clark, & Tellegen, 1988).

The survey was constructed by a professional electronic survey designer to ensure that appropriate and customary guidelines were in place. The survey was operational for five weeks to allow the snowball feature to work. Data collection ceased after no additional respondents had completed the survey for four days. Respondents were advised that only people who were (a) currently employed at the time of the survey and (b) had a direct supervisor should respond to the survey. Respondents were asked to provide a variety of demographic data: his/her employment status (part time/full time/overtime), gender, age, ethnicity, level of education, industry, job title, length of time at his/her job, length of time with his/her supervisor, time in current occupation (at this and other organizations),

and organizational size. For additional confidentiality, many of the demographic questions included bracketed ranges (e.g. age, 26-35, 36-45, etc.) rather than pinpointed numbers. As a result, modes are reported for demographic variables such as age and tenure.

Methods Effects

A control for negative affectivity was included to control for response bias. Negative affectivity is considered to be a third variable in job stress research, or one that is outside of the job and instead is "brought to the job by the person" (Spector, Chen, & O'Connell, 2000, p. 212). It is similar to neuroticism, related to anxiety, and has been demonstrated to overlap factors of both job stress and job strain in multiple cross-sectional studies (Spector et al., 2000). The negative affectivity items of the Positive and Negative Affective Schedule (Watson et al., 1988) were employed for this study.

Results

Data Cleaning

Data were screened for missing values, out-of-range values, outliers, and violations of assumptions of normality. Given the nature of the variables in question, all were negatively skewed. However, since none of the violations of normality were severe, no transformations were conducted. The distributions had relatively high means for several character strengths (e.g., forgiveness=3.96, gratitude =4.04), while the means for others were relatively low (e.g., social intelligence 3.44, spirituality 1.68). The surveys were completed electronically, so they were automatically coded as individuals completed them. Data were analyzed using SPSS version 11.5 (SPSS, 2009).

Demographics

Employment information and descriptive data are presented in Table 3 and Table 4.

Table 3

Employment Information for Study 2 Sample, N=270

Male	29%	Female	71%

Employment Region

Canada (54%)		United States (45%)	
Pacific	.4%	Pacific	2.2%
Praries	.7%	Midwest	2.6%
Ontario	6.3%	Southwest	1.5%
Quebec	1.5%	Southeast	3.7%
Atlantic	44.8%	New England	35.9%

Job Classification

Construction	.7%	Real Estate	1.7%
Health Services	26.7%	IT	2.3%
Finance	2.2%	Leisure/Hospitality	5.7%
Insurance	2.6%	Manufacturing	2.3%
Resources/Mining	1.7%	Wholesale/Retail	3.3%
Business Services	8.7%	Transport/Gas	3.3%
Unreported	9.3%		

Table 4
Demographic Information for Study 2 Sample*, N=270

Age	<18	18-25	26-35	36-45	46-55	56-65	66-75	
		4%	23%	41%	24%	7%	1%	
Race	White	Black	Indian	Multi-race	Asian/ Pacific Islander			
	94%	2%	1%	1%	2%			
Educa-tion	Some HS	HS	Some college	Certi-ficate	Associates' Degree	Bachelor's Degree	Master's Degree	PhD/ MD
	<.5%	1%	13%	8%	4%	40%	31%	4%
Time at Job	<6 m.	6 m.-1 yr.	2-5 years	6-10 years	11-15 years	16-20 years	21-30 years	30+ yrs
	5%	10%	34%	27%	11%	6%	5%	2%
Time with Super-visor	<6 m.	6 m.-1 yr.	2-3 years	4-5 years	6-10 years	11-15 years	16-20	
	9%	20%	40%	13%	12%	6%	1%	
Time in Occu-pation	<6 m.	6 m.-1 yr.	2-3 years	4-5 years	6-10 years	11-15 years	16-20	20+ yrs
	2%	6%	15%	10%	26%	14%	12%	15%
# of Em-ployees	1-5	6-10	11-25	26-49	50-99	100-499	500+	
	4%	4%	14%	11%	16%	19%	31%	
Hours worked per week	<20	21-30	31-40	40+				
	2%	5%	27%	66%				

*Note: Percentage totals are rounded; may not compute to exactly 100%

Factor Analysis

Peterson and Seligman's (2004) virtue categories included a theoretical factor structure of

character strengths, and one of the purposes of this study was to test this theoretical structure

against empirical results. Their original theoretical categorization is presented in the

literature review and so will not be repeated here.

To assess the data-driven structure of the Character Strengths in Leadership scale, a factor

analysis of all 27 items was conducted. Oblique analysis permitted unrestricted loading on non-

orthogonal factors and yielded a multi-factor solution. Results from principal axis factoring

followed by a varimax rotation are presented in Table 5. Factor scores were created through

unweighted summation, and a series of solutions were attempted using SPSS. Forcing factors to a

six-factor model yielded three multi-item factors, two singlets, and one factor comprised solely of

the two reverse-coded items. In a forced three-factor model, the third factor contained only the two

reverse-coded items. Theoretically, the most appropriate factor solution involved an unrestricted

analysis that resulted in four factors with eigenvalues greater than one. This solution accounted for

63 percent of the variance. However, the fourth factor was again comprised only of the two

reverse-coded items and the item of spirituality, so it did not make theoretical or empirical sense.

Consequently, this factor was removed from the solution. Based on the rotated solutions,

eigenvalues (Figure 2 and Table 6) indicate that each of the three factors accounts for at least 15%

of the variance. Overall, the three-factor solution using the fourteen items that loaded above .4 on

one and only one factor (13 character strengths and two items for kindness) was chosen as

representing the most theoretically congruent and empirically appropriate solution.

Table 5

Factor Loadings for the Three-Factor Virtue Categories Model

Variable	Wisdom α=.89	Humanity α=.90	Temperance α=.84
1. seeks unique ways to do things or solve problems [creativity]	.70		
2. enjoys trying new things [curiosity]	.81		
3. willingly considers viewpoints other than his/her own [open-minded]	.52		
4. committed to life-long learning [love of learning]	.61		
5. willing to take a risk for what he/she believes is the right thing [bravery]	.54		
6. cares immensely for me [love]		.71	
7. gives generously of his/her time and/or resources [kindness]		.62	
8. is caring and/or compassionate [kindness]		.70	
9. demonstrates sincere appreciation for work that is done well [gratitude]		.56	
10. follows through no matter what [persistence]			.55
11. good at getting people to work together to accomplish a task [leadership]			.53
12. exercises appropriate levels of caution [prudence]			.74
13. level-headed even when things are difficult or tense [self-regulation]			.61
14. appreciates small details as part of a whole [appreciation of beauty and excellence]			.56

Figure 2

Eigenvalue Scree Plot
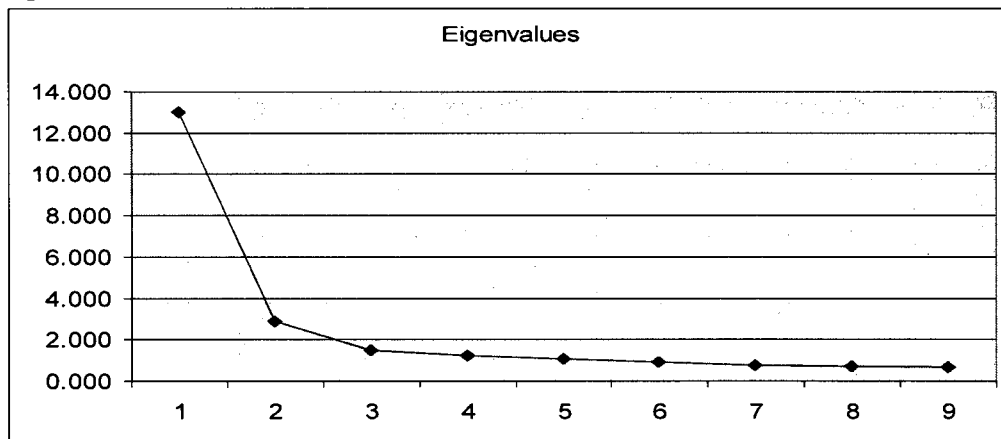
Table 6
Eigenvalues

	Factor 1	Factor 2	Factor 3
	12.87	1.76	1.27
Variance: Initial	47.67%	6.5%	4.72%
Variance: Rotated	17.53%	15.58%	15.44%

In the following description, virtue categories are capitalized (Wisdom, Humanity, Temperance) to differentiate them from the character strengths, which are written in lower-case. I have summarized my results and also provided a comparison with Peterson and Seligman's factor structure. Based on my results, the first empirical factor corresponds with four of the five character strengths that comprise Peterson and Seligman's (2004) virtue category of Wisdom; creativity, curiosity, open-mindedness, and love of learning. The last theoretical character strength in their virtue category of Wisdom is perspective, which did not load on this factor. The fifth item that did load on the first factor is bravery, which is actually associated with the virtue category of Courage in the theoretical model.

The second empirical factor is comprised of two of the three character strengths within the theoretical virtue category of Humanity, love and kindness. Two kindness items were written to incorporate two features of kindness that emerged from the themes in Study 1; generosity of time and resources, and compassionate caring. The fourth theoretical item in the second empirical factor relates to gratitude, which is theoretically associated with the virtue category of Transcendence. Given the relatively clean mapping of the theoretically derived character strengths onto these two empirical virtue categories, the names Wisdom and Humanity were retained for these factors.

The third factor is more diffuse in that the character strengths that comprise it are from four theoretical virtue categories. Persistence draws from Courage, leadership draws from Justice, prudence and self-regulation draw from Temperance, and beauty/excellence draw from Transcendence. Despite this break from theoretical housing, however, this factor encompasses

regulatory features that represent a moderating factor within character-strengths based leadership, so Peterson and Seligman's category title of Temperance has been retained.

Based on the 240-item Virtues in Action-Individual Strengths (VIA-IS) scale (Peterson & Seligman, 2004), five factors emerged from exploratory factor analysis: restraint, intellect, interpersonal strengths, emotional strengths, and theological strengths. Emotional and theological strengths have no counterpart in my studies (their theological category contained only items from spirituality and gratitude; based on my results, gratitude loaded on the Humanity subscale) and about half of the specific character strengths load differently on my scales. However, the restraint, intellect, and interpersonal strengths do correspond to categories of Temperance, Wisdom, and Humanity that emerged from my data. Given that my scale has only 27 items, I find the item matches and the virtue category alignment to be relatively congruent.

Partial Correlations Controlling for Negative Affect

The correlation matrix is presented in Table 7. Partial correlations also were computed between three character strength scales and all measures of leadership while controlling for negative affect as measured by the ten negative items of the Positive and Negative Affective Scale. Results indicated that correlations retained both their direction and their significance. Results are presented on the right diagonal of the correlation matrix. Although some of the bivariate correlations indicate a relative change in magnitude (e.g., r^2 between Abusive Supervision and the character strength scale of Wisdom before partialling $=-.54$, partial r^2 after partialling out negative affect $=-.46$; r^2 between Ethical Leadership and the character strength scale of Humanity before partialling $=.76$, partial r^2 after partialling out negative affect $=.72$), correlations retained both their direction and their significance in all cases. Since the bivariate relationships are sustained, these data indicate that high

levels of individual leadership measures continued to be associated with high levels of

other positive leadership measures, high levels of character strengths, and lower levels of

abusive or passive supervision exists even after removing the contribution of negative

affect.

Table 7
Means, Standard Deviations, Zero-Order Correlations, and Reliability Coefficients

Variable	M	SD	1	2	3	4	5	6	7	8	9
1 Wisdom	3.86	.84	(.89)	.65**	.63**	.67**	.75**	.74**	.72**	.70**	.70*
2 Humanity	3.8	.96	.70**	(.90)	.64**	.74**	.67**	.65**	.75**	.72**	.72**
3 Temperance	3.77	.81	.67***	.68**	(.84)	.68**	.70**	.67**	.74**	.62***	.74**
4 LMX	5.81	1.14	.72**	.79**	.72**	(.95)	.71**	.72**	.79**	.73**	.79**
5 MLQ-Intell. Stimul.	3.54	.90	.78**	.71**	.73**	.75**	(.89)	.87**	.83**	.82**	.75**
6 MLQ-Inspir. Motiv.	3.64	.89	.77**	.69**	.70**	.75**	.88**	(.87)	.82**	.74**	.76**
7 MLQ-Ideal. Influence	3.57	.92	.75**	.78**	.76**	.81**	.85**	.83**	(.81)	.81**	.84**
8 MLQ-Indiv. Consid.	3.50	1.01	.74**	.76**	.66**	.76**	.84**	.77**	.83**	(.87)	.75**
9 Ethical Leadership	3.69	.87	.74**	.76**	.77**	.83**	.78**	.78**	.85**	.78**	(.92)
10 Abusive Supervision	1.22	.39	-.54**	-.56**	-.47**	-.55**	-.50**	-.50**	-.52*	-.53**	-.62**
11 Passive Leadership	2.09	1.16	-.59**	-.58**	-.69**	-.62**	-.58**	-.55**	-.62**	-.60**	-.69**

Variable	M	SD	10	11	12	13
1 Wisdom			-.46**	-.55**	.54**	.68**
2 Humanity			-.46**	-.53**	.63**	.75**
3 Temperance			-.39**	-.66**	.56**	.70**
4 LMX			-.43**	-.57**	.70**	.82**
5 MLQ-Intell. Stimul.			-.40**	-.53**	.53**	.69**
6 MLQ-Inspir. Motiv.			-.42**	-.50**	.52**	.69**
7 MLQ-Ideal. Influence			-.44**	-.58**	.59**	.76**
8 MLQ-Indiv. Consid.			-.44**	-.55**	.60**	.73**
9 Ethical Leadership			-.53**	-.75**	.61**	.80**
10 Abusive Supervision			(.91)	.49**	-.48**	-.63**
11 Passive Leadership			.49	(.92)	-.48**	-.65**
12 Liking	4.42	.72	-.48**	-.48**	---	.66**
13 Trust	4.02	1.22	-.63**	-.65**	.66**	---

$N=266$, **=$p<.01$; *=$p<.05$; coefficient a for observed variables presented on diagonal ( )
Partial correlations controlling for Negative Affect appear to the right of the diagonal

To ensure that there are differences among the leadership constructs that were

measured, a confirmatory factor analysis was conducted to compare the fits of a latent

1-factor solution versus a latent 3-factor solution. The analysis included the three

character strengths subscales, the four MLQ subscales (individualized consideration,

motivation, stimulation, and idealized influence) and the four LMX subscales (affect,

contribution, and respect). As demonstrated in Table 8, fit statistics indicate that a 3-

factor model represented a better fit for the data than did a 1-factor model.

Differences between the models were assessed with a variety of fit indices; the chi-

square difference test, normed fit index (NFI), comparative fit index (CFI), and the root

mean square error of approximation (RMSEA). A one-factor solution indicated a worse

fit to the data (χ^2 (43) = 305.39; NFI = .90; CFI = .92; RMSEA = .15, p=.000) than the fit

of a three-factor solution (χ^2 (41) = 199; NFI = .94; CFI = .95; RMSEA = .12, p=.000),

$\Delta\chi2$ (3, N=305.39) = 106.39, p < .01.

Table 8
Confirmatory Factor Analysis: MLQ Subscales, Leader-Member Exchange Subscales, and Character Strengths Subscales

Model	$\chi2$	p	df	RMSEA	p	NFI	CFI
11 factor model	199	.000	41	.12	.001	.94	.95
1 factor model	305.39	.000	44	.15	.001	.90	.92

Discriminant Validity with Leader-Member Exchange (LMX)

One of the important features of developing a new survey tool is to ensure that it

represents meaningful differences from extant measures. To this end, an exploratory factor

analysis was conducted with the character strengths and LMX items. Results are reported in

Table 9.

Table 9

Discriminant Validity: Factor Loadings for Leader-Member Exchange and Character Strengths Items

Character Strengths Items	Humanity	Temperance	Wisdom
Sentence stem: My supervisor...			
1. is authentic	.53		
2. cares immensely for me	.69		
3. gives generously of his/her time and/or resources	.57		
4. is caring and/or compassionate	.72		
5. understands what motivates people around him/her	.51		
6. focuses on "We", not "I"	.55		
7. treats all of his/her employees in an unbiased manner		.54	
8. demonstrates sincere appreciation for work done well		.63	
9. encourages me to have fun at my job		.62	
10. follows through no matter what		.55	
11. exercises appropriate levels of caution		.80	
12. level-headed even when things are difficult or tense		.66	
13. appreciates small details as part of a whole		.62	
14. seeks unique ways to do things or solve problems			.65
15. enjoys trying new things			.74
16. is committed to life-long learning			.70
17. willing to take a risk for what he/she believes is the right thing			.59
18. is passionate about everything he/she does			.56

Table 9 (cont'd)
Discriminant Validity: Factor Loadings for Leader-Member Exchange and Character Strengths Items

Leader-Member Exchange Scales	Affect*	Respect#	Contribution**	Loyalty##
character strength item that loaded on Loyalty;				
19. defers or deflects credit to the team, no matter how much he/she does				.62##
Leader-Member Exchange Items				
20. I get along with my supervisor	.57*			
21. I like my supervisor very much as a person	.63*			
22. my supervisor is a lot of fun to work with	.70*			
23. my supervisor is the kind of person one would like to have as a friend	.62*			
24. I admire my supervisor's professional skills		.50#		
25. I do not mind working my hardest for my supervisor			.58**	
26. I respect my supervisor's knowledge and and competence on the job		.67#		
27. I am willing to apply extra efforts, beyond those normally required, to help my supervisor meet his/her work goals of his/her job			.74**	
28. I am impressed with my supervisor's knowledge. of his/her job		.61#		
29. I do work for my supervisor that goes beyond what is specified in my job description			.70**	
30. My supervisor defends my decisions, even without complete knowledge of the issue in question				.64##
31. My supervisor would defend me to others in the organization if I made an honest mistake				.73##
32. My supervisor would come to my defense if I were "attacked" by others				.65##

Leader-Member Exchange subscales: *Affect; #Professional Respect; **Contribution; ##Loyalty

Hierarchical Regression Analyses (R²)

Hierarchical regression analyses were conducted to assess whether character strengths

contribute to the prediction of trusting one's supervisor and getting along with one's

supervisor above and beyond what is attributable to previously established measures of

leadership. In the first two tables, Step 1 includes the negative descriptors of the PANAS,

Step 2 includes 5 previously constructed measures of leadership, and Step 3 represents the

addition of the Character Strengths in Leadership measure. The results of the hierarchical

regressions and redundancy analyses are demonstrated in Tables 10, 11, 12, and 13.

Table 10

Hierarchical Regression Analyses for Leadership Measures on 'Trust'

	Variable	B	β	R	R^2	ΔR^2
Step 1	PANAS	-.85	-.37	.37	.13	.13***
Step 2 .61***	PANAS	.14	.06	.87	.75	
	MLQ-IS	-.06	-.04			
	MLQ-IM	-.03	-.02			
	MLQ-II	.11	.09			
	MLQ-IC	.10	.08			
	Ethical Leadership	.24	.17*			
	Abusive Supervision	-.64	-.21***			
	Passive Supervision	-.12	-.11*			
	Leader-Member Exch.	.47	.44***			
Step 3	PANAS	.14	.06	.87	.76	.01*
	MLQ-IS	-.08	-.06			
	MLQ-IM	-.03	-.02			
	MLQ-II	.05	.03			
	MLQ-IC	.07	.06			
	Ethical Leadership	.20	.14			
	Abusive Supervision	-.60	-.19***			
	Passive Supervision	-.10	-.09			
	Leader-Member Exch.	.41	.38***			
	CS-Temperance	.11	.07			
	CS-Wisdom	.02	.01			
	CS-Humanity	.17	.14*			

Note: ***$p < .001$, **$p < .01$, *$p<.05$

Listwise $N = 266$

Using 'Trust' as the dependent variable, R^2 was significantly greater than zero at the end

of each step. Following Step 1, $R^2=.13$, $F(1, 264)=40.51$, $p<.001$, indicating that negative

affect accounted for 13% of the variance in scores. In Step 2, the addition of leadership

measures resulted in $R^2=.75$, $F(9, 256)=84.19$, $p<.001$. With all variables including character

strengths entered into the equation at Step 3, $R^2=.76$, $F(12, 253)=65.08$, $p<.001$. As

indicated in Table10, the addition of character strength scales on the third step, particularly

Humanity, accounted for a small but statistically significant amount of incremental variance.

Table 11

Hierarchical Regression Redundancy Analyses for Character Strength Measures on 'Trust'

Variable		B	β	R	R^2	ΔR^2
Step 1	PANAS	-.85	-.37	.37	.13	.13***
Step 2	PANAS	-.14	.04	.81	.65	.52***
	CS-Temperance	.42	.28***			
	CS-Wisdom	.27	.18**			
	CS-Humanity	.52	.41***			
Step 3	PANAS	.14	.06	.87	.76	.11***
	CS-Temperance	.11	.07			
	CS-Wisdom	.02	.01			
	CS-Humanity	.17	.14**			
	MLQ-IS	-.08	-.06			
	MLQ-IM	-.03	-.02			
	MLQ-II	.05	.03			
	MLQ-IC	.07	.06			
	Ethical Leadership	.2	.14			
	Abusive Supervision	-.60	-.19***			
	Passive Supervision	-.10	-.09			
	Leader-Member Exch.	.41	.38***			

Note: ***$p < .001$, **$p < .01$, *$p<.05$, listwise $N = 266$

The redundancy analysis identifies the amount of variance accounted for by the three

character strength scales before the addition of the leadership scales. In this analysis, R^2 was

significantly greater than zero at the end of each step using 'Trust' as the dependent variable,

although the character strengths scales explained substantially more of the variance in Step 2

than did the leadership scales in Step 3. As reported in Table 11, following Step 1, R^2=.13 F (1, 264)=40.51, p<.001. In Step 2, the addition of character strength measures resulted in R^2=.65, F (4, 261)=121.33, p<.001, indicating a net increase of 52% of explained variance. In Step 3, with all variables including character strengths and leadership entered into the equation, an additional 11% of the variance is explained; R^2=.76, F (12, 253)=65.08, p=.001.

Table 12

Hierarchical Regression Analyses for Leadership Measures on 'Liking'

Variable		B	β	R	R^2	ΔR^2
Step 1	PANAS	-.6	-.44	.44	.19	.19***
Step 2	PANAS	-.21	-.15**	.71	.51	.32***
	MLQ-IS	-.08	-.09			
	MLQ-IM	-.10	-.13			
	MLQ-II	.08	.10			
	MLQ-IC	.14	.2*			
	Ethical Leadership	.001	.001			
	Abusive Supervision	-.12	-.07			
	Passive Supervision	-.03	-.05			
	Leader-Member Exch.	.30	.48***			
Step 3	PANAS	-.21	-.15**	.73**	.54**	.03**
	MLQ-IS	-.11	-.14			
	MLQ-IM	-.10	-.13			
	MLQ-II	.002	.002			
	MLQ-IC	.12	.17			
	Ethical Leadership	-.05	-.06			
	Abusive Supervision	-.08	-.05			
	Passive Supervision	.001	.002			
	Leader-Member Exch.	.24	.39***			
	CS-Temperance	.15	.17*			
	CS-Wisdom	.04	.04			
	CS-Humanity	.16	.22**			

Note: ***p < .001, **p < .01, *p<.05, listwise N = 266

R^2 was also significantly greater than zero at the end of each step using 'Liking' as the dependent variable. Following Step 1, R^2=.19, F (1, 264)=62.55, p<.001, indicating that negative affect accounted for 19% of the variance in people's ratings of how they get along

with their supervisors. In Step 2, the addition of leadership measures resulted in $R^2 = .51$, Δ

$R^2 = .32$, $F(9, 256) = 29.53$, $p < .001$. As indicated in Table 12, the addition of leadership

measures on the second step explained an additional 32% of the variance. Finally, in Step 3,

all variables including character strengths entered into the equation at Step 3, $R^2 = .54$, Δ

$R^2 = .03$, $F(12, 253) = 24.27$, $p = .01$ explained 54% of the variance. As with trust, the addition

of character strength measures on the third step accounted for a small but significant amount

(3%) of incremental variance. In this case, the Temperance scale made a significant

contribution.

Table 13

Hierarchical Regression Redundancy Analyses for Character Strength Measures on 'Liking'

	Variable	B	β	R	R^2	ΔR^2
Step 1	PANAS	-.60	-.44	.44	.19	.19***
Step 2	PANAS	-.29	-.21***	.70	.48	.29***
	CS-Temperance	.17	.20**			
	CS-Wisdom	.05	.06			
	CS-Humanity	.29	.39***			
Step 3	PANAS	-.21	-.15**	.73	.54	.05**
	CS-Temperance	.15	.17*			
	CS-Wisdom	.04	.04			
	CS-Humanity	.16	.22**			
	MLQ-IS	-.11	-.14			
	MLQ-IM	-.10	-.13			
	MLQ-II	.002	.002			
	MLQ-IC	.12	.17			
	Ethical Leadership	-.05	-.06			
	Abusive Supervision	-.08	-.05			
	Passive Supervision	.001	.002			
	Leader-Member Exch.	.24	.39***			

Note: ***$p < .001$, **$p < .01$, *$p < .05$
Listwise $N = 266$

The redundancy analysis identifies the amount of variance accounted for by the three

character strength scales before the addition of the leadership scales. In this analysis, R^2 was

significantly greater than zero at the end of each step using 'Liking' as the dependent variable, although the character strengths scales explained substantially more of the variance (in Step 2) than did the leadership scales (in Step 3). Following Step 1, $R^2=.19$, $F(1, 264)=62.55$, $p<.001$, indicating that negative affect accounted for 19% of the variance in people's ratings of whether they like their supervisors. In Step 2, the addition of character strength measures resulted in $R^2=.48$, $\Delta R^2= .29$, $F(4, 261)=48.97$, $p<.001$, indicating a net increase of 29% of explained variance. In Step 3, with all variables including character strengths and leadership entered into the equation at Step 3, $R^2=.54$, $F(12, 253)=24.27$, $p<.01$, indicating that character strengths and leadership measures interact to predict 5% of incremental variance (Table 13).

Discussion

This study integrates a variety of known measures to help establish convergent and divergent validity for a new, multi-factor measure of Character Strengths in Leadership in a North American sample. The data indicate emergent evidence of both convergent and divergent validity and, through correlations derived from measures of Leader-Member Exchange, Transformational Leadership, Ethical Leadership, Passive Leadership and Abusive Supervision, continue to substantiate previously observed findings regarding the contrast in subordinate ratings between good and poor leadership (Arnold et al., 2007; Kelloway et al., 2006).

This model also demonstrates that character strengths make an incremental, statistically significant contribution to the prediction of trusting and liking one's supervisor over and above the variance accounted for by a multiplicity of known leadership measures. Previous research has indicated the importance of the explanation of incremental variance within the context of leadership (Anderson, Krajewski, Goffin, & Jackson, 2008; Kelloway et al., 2006)

and in fact, fully 76% of leadership variance has been explained by well-known extant measures. Consequently, the ability to explain another, independent 4% makes a contribution to the leadership literature.

It is interesting to note that the impact of the variable 'trust' contributes less than that of the variable liking, but this may be because the notion of trust is implicit in several of the composite leadership scales, particularly within Leader-Member Exchange (LMX). Since the LMX Affect subscale contains three items that most closely resemble trust items, a hierarchical regression that removes this subscale was run. These results indicate an identical percentage of variance, $R^2 = .77$, $F (13, 254)=63.973$, $p=<.001$, as is explained by the full model that includes all four LMX subscales. In essence, while it may be the case that some of the variance attributed to trust has already been parsed out before the introduction of trust as an explicitly defined variable, this is difficult to assess without completing an item by item analysis. This relationship will be explored further in the next study.

One outcome that is worthy of note relates to high intercorrelations between the transformational leadership items of the MLQ and character strength items. Despite strong correlations, the individual items do not map directly, and this lack of convergence raises some thought-provoking questions that remain to be addressed in future research. Although correlations between the three character strength subscales and the four MLQ subscales range from .66 to .78, item analysis indicates that only five of the 27 character strength items tap nearly identical MLQ constructs; leadership and hope items map onto inspirational motivation items, bravery and citizenship map onto idealized influence items, and open-mindedness maps onto an intellectual stimulation item. Since two of these five items (hope and citizenship) do not appear in the final character strengths factor solution, the remaining items were also assessed for weaker but present relationships. In this case, the items for persistence, vitality, and social intelligence demonstrated similarities to three inspirational

motivation items, while the item for caring demonstrated similarities with an individualized consideration item. Once again, only two of these strengths, persistence and caring, contributed to the final factor solution.

These patterns raise interesting questions about the nature and role of character strengths within the commonly accepted rubric of transformational leadership. Given that most studies of transformational leadership yield a uni-factorial solution and that a four-factor model only emerges through the use of confirmatory factor analysis, it may be the case that the Character Strengths in Leadership survey represents a more multi-dimensional measure of leadership than does the MLQ. Alternatively, future research may indicate that character strengths are an antecedent of transformational leadership and thus comprise more of a meta-construct in keeping with their more philosophical underpinnings.

While additional work is clearly necessary to provide further parsing with regard to discriminating character strengths from other known measures of leadership, this study does provide fledgling evidence for an empirical factor structure of Peterson and Seligman's virtue categories. Factor analysis results dovetail with previous studies that have identified strengths in the virtue categories of Humanity and Temperance, although in earlier studies these categories have been associated with the characteristics of forgiveness, compassion, and humility (Cameron & Caza, 2004; Chun, 2005; Sarros et al., 2006) or fairness, humility, mercy, and prudence (Peterson & Seligman, 2004, p. 632) rather than a dimension involving regulation, prudence, and self-governance. I find this to be an interesting constellation given the current economic climate. Though historically eclipsed by leader characteristics of charisma (Aguilera & Vadera, 2008; Tosi, Misangyi, Fanelli, Waldman, & Yammarino, 2004) and, in some cases, megalomania (Singh, 2008), regulatory characteristics are likely to become increasing historically timely foci as international corporate debacles continue to headline the evening news.

The results of this study suggest strong support for all of the hypotheses regarding character strengths-based leadership and known measures of leadership and they convincingly demonstrate that character strengths are an integral part of leadership. While not surprising as a general conclusion, these results indicate that a relatively short measure of character strengths was able to generate a meaningful, multi-dimensional factor structure with 17 times fewer items than the VIA-IS (Peterson & Seligman, 2004; Seligman & Peterson, 2004). The results also continue to substantiate the absence of the virtue categories of Justice and Courage, which are intuitively unusual omissions. This feature is discussed in the third study.

The data for this study were collected from a snowball sample, which carries both beneficial and problematic aspects. On the positive side, it permitted data from a wide range of individuals in over ten professional areas from all over North America. On the negative side, it is possible that there is an artificial level of homogeneity among the respondents as people ask their friends and colleagues to respond. An additional weakness involves the fact that only subordinates, rather than subordinate and supervisor pairs, were surveyed. However, the perceptions of the supervisee were the relevant feature for this study and so the focus was on perception, or how subordinates view their leaders, rather than action, or what the subordinate actually does.

Summarily, the incremental variance (Harvey, Kelloway, & Duncan-Leiper, 2003) contributed by the criterion variables of 'trust' and 'get along', which has been demonstrated to be a useful contribution to leadership research (Anderson et al., 2008), indicates that there are still gains to be made in identifying individual threads among the intricate tapestry of what we call 'leadership'. As volumes of previous research indicate, leadership is a complex and multi-pronged construct that results in the intersection of individual characteristics, interpersonal phenomena, and organizational features at both micro and macro levels. Given

the cross-sectional nature of these data, it will be the goal of further studies to determine

more about the relationship among the differentiation, correlates, and outcomes of character

strengths and leadership.

Study Three: Development and Evaluation

of a Model of Character Strengths in Leadership

Introduction

The domain of positive psychology is quickly gaining traction in the literature in a variety of psychological and managerial domains (Luthans, 2002a; Peterson & Seligman, 2004; Richardson, 2002; L. M. Roberts, Dutton, Spreitzer, Heaphy, & Quinn, 2005; Rotella, Gold, Andriani, & Scharf, 2002; Seligman, 1998; Seligman & Csikszentmihalyi, 2000; Steen et al.). As psychology and organizational behaviour scholars move toward strengths-based models, we shift from trying to identify lagging indicators to focusing on protective factors or leading indicators that facilitate health-promoting models both at work (Kelloway & Day, 2005b) and within our personal lives. While the appeal of shifting from a "gospel of victimology" (Seligman, as quoted in Keyes, 2003, p. xviii) to a doctrine of positive psychology is appealing, there clearly must be good science to support the utility and veracity of such a move. Cautions regarding the pace and rigour of positive psychology's growth are well-founded (Hackman, 2009) and deserve careful attention with appropriately meted conclusions.

Nonetheless, recent preliminary empirical exploration has yielded promising results with regard to building on a core of capability (Deci, Connell, & Ryan, 1989; Judge, Bono, Erez, & Locke, 2005) and bolstering the human capacities for strengths such as optimism (Seligman & Csikszentmihalyi, 2000, Seligman, 1998), compassion (J. Dutton, 2003; Kanov, Maitlis, Worline, & Dutton, 2004), forgiveness (Cameron et al., 2004), courage, and gratitude (Seligman, 2002). These strengths have demonstrated the potential to act as protective factors against addiction, trauma and depression (Cameron & Caza, 2002; Seligman et al., 2005). Positivity can also favorably impact creativity,

tolerance, generosity, and help to facilitate constructive, nonjudgmental environments in which growth can occur (Seligman, 2002, p. 39) and several books have recently been written on flourishing (cf. Keyes, 2003).

The purpose of this study is to test a model of leaders' character strengths (see Figure 3). The relationship between character strengths at the individual level of analysis and most outcome measures has yet to be assessed, so further analysis of this logical linkage is warranted. Since the ultimate goal is to identify vital characteristics that can meet individual and organizational goals concurrently by fostering both industrial production and personal wellness (Bernstein, 2003), this study seeks to add to a recent study that supports context-free mental health (Arnold et al., 2007) by providing data that provide more support for what "may be the most important consequence of good character: its effects on other people" (Peterson & Park, 2006, p. 1152).

The proposed model hypothesizes that the demonstration of character strengths by a leader increases subordinates' levels of both workplace and individual outcomes and that these increases will be mediated by subordinate affective and cognitive trust in his/her leader. Character strengths intuitively share a number of features with well-vetted markers of high quality leadership, but this seems to be the first to compare character strengths-based leadership outcomes against outcomes that are more typically associated with ethical and transformational leadership.

Given the exploratory nature of these studies, a variety of outcomes could have appropriate choices. Some were ruled out because they have already been exhaustively vetted (e.g. burnout, with over 18,600 studies having been conducted), while others were pragmatically difficult to include (e.g., Ryff's [2002] wellness scales, which include six 14 item scales). The outcomes that were chosen for inclusion represent both features that

are more contextually relevant, such as job satisfaction, affective commitment, and

OCBs, as well as several that are closer to an individual locus such as psychological

health (as measured by the GHQ) and conscientiousness. These choices were made to

incorporate both known quantities, which permits comparison with other known models

of leadership, and more atypically chosen outcomes (e.g., conscientiousness), which

provides texture and contrast.

Trust is included as a hypothesized mediating variable in this model because it has

been identified as a "key component" (Burke, Sims, Lazzara, & Salas, 2009, p. 606) in

leadership effectiveness. Trust results from leader and subordinate interactions and has

wide-ranging effects on a variety of outcomes at individual, team, organizational, and/or

inter-organizational levels. As noted by Burke, et al. (2009), trust is a complex construct

that has been simultaneously described as a trait, an emergent state, and as a process.

There are a multiplicity of definitions, interpretations, and outcomes associated with

trust (Cook & Wall, 1980; Deluga, 1994; Lester & Brower, 2003; Mayer et al., 1995;

McAllister, 1995; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Nonetheless,

various models of trust do have common themes that include: individual characteristics of

both parties; predictors within behaviours, cognition, and attitudes; factors of situation

and context; and attitudinal and behavioural outcomes that are trust-dependent (Burke et

al., 2009).

In a meta-analysis of trust, 94% of the studies that were reviewed approached trust

through either a cognitive or a combined/overall frame (Dirks & Ferrin, 2002). Findings

indicated significant results for higher organizational commitment, job satisfaction, and

less intent to quit in studies that used cognitive trust rather than overall trust.

Additionally, using a direct leader as the referent led to significantly higher subordinate

job performance, job satisfaction, and the organizational citizenship behaviour (OCB) of

altruism in comparison to studies that had organizational leadership as their referent.

Given the referent focus on individual leaders and definitional alignment with cognitive

trust, these findings support the use of organizational commitment, job satisfaction, and

OCBs as proposed outcome measures for the proposed series of studies.

Further justification for inclusion of trust in a model of character strengths is garnered

from the three meta-themes of trust-facilitating behaviour. Mayer et al. (1995) identified

elements of ability, benevolence, and integrity as essential features of trust-building, and

these have retained their hallmark status to date. Although different researchers have

identified varying factors within each of three categories (for a review of different

theoretical and empirical factors, see Burke, et al., 2009), these categories intuitively

share features with character strengths. Consequently, one goal of this study is to assess

the relationship between character strengths and trust and to test trust as a mediating

variable.

In sum, the hypothesized relationships are as follows:

Figure 3
Hypothesized Model
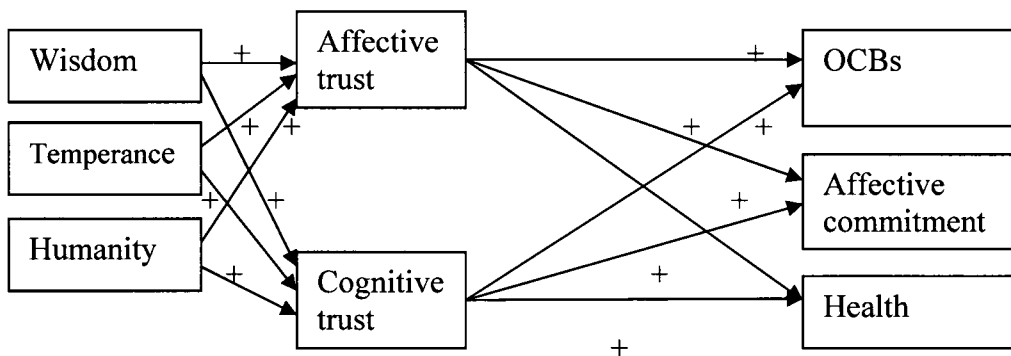
Workplace Outcomes

Organizational Citizenship Behaviours (OCBs)

Organizational citizenship behaviours (OCBs) have been formally defined as "individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (Organ, 1988, p. 4). More specifically, organizational citizenship behaviours provide organizational "contributions not contractually rewarded nor practicably enforceable by supervision or a job description" and which provide explicit benefits to members of "three broad categories: interpersonal citizenship behaviour (benefiting employees), organizational citizenship performance (benefiting organizations), and job/task conscientiousness (benefiting work itself)" (Hough & Oswald, 2000, p. 633). Conceptual differentiations have been explored and sought regarding extra-role behaviour, civic citizenship, prosocial behaviour, organizational spontaneity, and contextual performance (Farh, Zhong, & Organ, 2004), and organizational citizenship behaviours are closely related to contextual performance (Borman & Motowidlo, 1993). OCBs include dimensions of altruism, compliance, courtesy, sportsmanship, and civic virtue (Organ, 1988). OCBs have also been treated as both outcome variables and as a mediator between trait conscientiousness and Leader-Member Exchange quality (Lapierre & Hackett, 2007).

OCBs have been similarly linked with a wide variety of measures of both individual differences and attitudes in many different contexts and environments (Organ & Ryan, 1995), and they have been demonstrated to be robust indicators for increased effectiveness at both unit and organizational levels (Wat & Schaffer, 2005). OCBs have strong empirical links and correlate approximately .25 (Lapierre & Hackett, 2007) with leader-member exchange (LMX) (Ilies, Nahrgang, & Morgeson, 2007), trust (Wat &

Schaffer, 2005), and have a .36 corrected correlation (Lapierre & Hackett, 2007) with job

satisfaction. However, evidence regarding trust and behavioural outcomes is weaker

(Lester & Brower, 2003) and the relationship between OCBs and virtuous behaviours,

though intuitive, has not been explored. OCBs have been contextualized in terms of

individual (OCBI), organizational (OCBI), and in-role behaviours (IRB) (L. J. Williams

& Anderson, 1991); this interpretation will be employed for the current studies, and

individual OCBs will be the focus. Therefore:

> *Hypothesis #3-1: Employees who reported that their supervisors demonstrated high*
>
> *levels of virtuous behaviours (as operationalized by character strengths) also reported*

higher levels of organizational citizenship behaviours.

Organizational Commitment

Organizational commitment was originally defined based on affective (personal

identification), continuance (possibility of perceived losses), and normative (obligation,

investment, or socialization) commitment (Meyer & Allen, 1997), and some models also

include goal-regulated behaviour (Meyer, Becker, & Vandenberghe, 2004). Organizational

commitment is a construct that has been well-studied in a variety of contexts, but it does not

appear that any published research looks at the relationship between it and character

strengths. However, a multitude of studies have assessed antecedents of and correlates of

organizational commitment; themes of these studies are briefly presented.

Organizational commitment has been demonstrated to be significantly related to (and

mediated by) job satisfaction with regard to efficacy (Luthans, Zhu, & Avolio, 2006). Not

surprisingly, a significantly negative relationship has been demonstrated with regard to

organizational commitment and turnover intention (Luthans et al., 2006). Relationships have

also been identified between organizational commitment, turnover intention, and HR

practices (Huselid, 1995) as well as job constraints (O'Connor, Peters, Kline, & Brush, 1984).

This study provides empirical inquiry regarding the previously unexplored relationship between leader-demonstrated character strengths and the domain of affective organizational commitment. Therefore:

Hypothesis #3-2: Employees who reported that their supervisors demonstrated high levels of virtuous behaviours also reported higher levels of affective organizational commitment.

Mediating Variable: Trust

Trust has been chosen as a proposed mediating variable for several reasons. First, it has been identified as both a conceptually (Argyris, 1964) and empirically (Mayer & Gavin, 2005; Podsakoff, MacKenzie, & Bommer, 1996) important element of organizational performance. Secondly, character has been historically posited to be an antecedent of trust (Gabarro & Athos, 1976), and the second study in this sequence demonstrated that the addition of leader trust explains unique variance within the context of character strengths-based leadership. Third, despite meta-analytic data that suggest trust as a "key concept" in a variety of leadership theories (Dirks & Ferrin, 2002, p. 611) and a strong research base surrounding the constructs of trust and leadership (Cook & Wall, 1980; Dirks & Ferrin, 2002; McAllister, 1995; Robinson, 1996; Rousseau, Sitkin, Burt, & Camerer, 1998; Verschoor, 2005), trust has not been mapped against a full complement of character strengths or virtuous behaviours at either an individual or organizational level of analysis.

Trust is a complex construct that has been operationalized, defined, and tested from several theoretical perspectives and within a diverse contexts and organizations. For instance, one commonly employed relationship-based model is built on Blau's social exchange theory (Konovsky & Pugh, 1994), while another is considered to be a character-based model that includes the dimensions of ability, benevolence, and integrity (Mayer et al., 1995; Mayer & Gavin, 2005). At least one other debate has been raised about whether trust

is based in a process of social exchange process or a commitment spiral whereby the choice

to trust is related to a reduction of ambiguity (Pratt & Dirks, 2006). Further gradations of

inquiry have involved types of trust within different relationships and with different

outcomes, including inter- versus extra-role behaviors, and there is some evidence to support

the notion that trust is more strongly related to extra- than inter-role behaviors (Mayer &

Gavin, 2005).

Meta-analytic findings from Dirks and Ferrin (2002) support two distinct theoretical

streams of trust in leadership that are "conceptually independent" (p. 621); affective and

cognitive trust. Affective trust, or the "relation-based perspective", encompasses

relationship-based trust theories, is based on elements of social exchange, reciprocity,

goodwill, obligation, care, and consideration, and as the name implies, is associated with

relational elements of the leader/ subordinate interaction. This stream is often associated

with leader-member exchange (LMX) (Dienesch & Liden, 1986). The second

conceptualization, cognitive trust or the "character-based perspective", recognizes the roles

that authority and hierarchy play in a leader/subordinate relationship and focuses on the

subordinate's perception of the leader's character and characteristics (Dirks & Ferrin, 2002;

McAllister, 1995). This avenue of trust encompasses many aspects of virtuous behaviour and

assesses leader characteristics such as integrity, fairness, honesty, competence, benevolence,

and dependability (Dirks & Ferrin, 2002).

Dirks and Ferrin (2002) suggest that trust is multi-dimensional and that different

operational definitions highlight different magnitudes of relationships based on different

theoretical underpinnings (e.g., theories based on either relationships or character).

Operationalizing the construct of trust also involves differentiating the referent (either a

direct leader or organizational leadership, made up of more than one individual) and

identifying types of trust (e.g., interpersonal, which is further split into cognitive, affective, or

combined/overall types, and belief-expectation) (Dirks & Ferrin, 2002). The definition of

trust employed by this study is provided by Rousseau, Sitkin, Burt, & Camerer (1998) and

has been described as: "a psychological state comprising the intention to accept vulnerability

based upon positive expectations of the intentions or behavior of another" (p. 395).

As previously noted, the most commonly employed model of trust comprises the three

intercorrelated factors of benevolence, integrity, and ability (Mayer & Davis, 1999). However,

since ability is assessed through leadership dimensions and benevolence has been contextually

operationalized and is subsumed within character strengths, it is my belief that this triadic

model would offer too much overlap to be of practical utility. As such, the use of affective and

cognitive trust as competing mediators permits contrasting analyses to test the relative

contribution of each type of trust.

Therefore:

Hypothesis #3-3a: Employees who reported that their supervisors demonstrated high

levels of character strengths also reported higher levels of affective and cognitive trust,

and

Hypothesis #3-3b: Cognitive and affective trust mediated the relationship between

leader- demonstrated character strengths and outcome measures.

Individual Outcomes

Health and wellness

Employee health is a complex construct that can, depending on interpretation and

application, include elements of psychological, physical, and social well-being. Recent

estimates indicate that 64% of large employers include programs and incentives designed to

increase the health and wellness of their employees (Wojcik, 2006). However, despite this

statistic, a survey of 135 executives of large, multi-national business conducted by

PricewaterhouseCoopers LLP indicated that only one-fifth believe that overall workforce health

had improved in the previous 24 months (Wojcik, 2006). Further, programs are heavily

influenced by organizational goals, priorities, and resources (Spinks, 2006, p. 18). Although

there are many studies that detail workplace outcomes as a result of workplace events and

behaviours related to health and wellness, there are very few that looked at whether workplace

experiences can transcend the workplace and effect individual outcomes of health and wellness

(Arnold et al., 2007). This element of my studies aims to address this lacuna and is, in my

mind, the most interesting and far-reaching of outcomes.

Components and definitions of employee health and well-being differ by source. One

comparison represents a substantial range: the World Health Organization describes five

macro-areas of health including physical, psychological, social, environmental, and economic

factors (Smith, 2006), while a more proximal, contextualized workplace model hypothesizes

fully 10 elements that define and create a healthy workplace. These areas include

transformational leadership, elements of workload and pace of job, scheduling, clarity of one's

role, future potential, job content, workplace justice, non-hierarchical status distinctions, the

presence of a social environment, and extrinsic factors (Barling, 2006).

Empirical evidence has linked workplace health to a large variety of outcomes that include

personal goal facilitation (ter Doest, Maes, Gebhardt, & Koelewijn, 2006), coherence

(Antonovsky, 1987), economic and social indicators (Diener & Suh, 1997), group structure

(Gilmore & Barnett), job characteristics and role stressors (Kelloway & Barling, 1991),

motivation (Gagné & Deci, 2005), and perceptions of justice (Kivimaki et al., 2005). More

specific dimensions of health include mental health (Joshanloo & Nosratabadi, 2009) and well-

being (Keyes & Haidt, 2003), which is beginning to be refined and operationalized as

flourishing in the literature (Snow, 2008). In turn, these factors impact a full spectrum of

organizational concerns that include employee illness and injuries, corporate legal compliance

business reputations, and general risk-management strategies employed by companies (Smith,

2006). Given the demonstrated salience of health-related constructs and outcomes, I propose that:

Hypothesis #3-4: Employees who reported that their supervisors demonstrated high levels of character strengths also reported higher levels of psychological health.

Method

Sample

Employees of a post-secondary university in Atlantic Canada were solicited by an electronic email from the university's human resources department. 1296 employees received the initial email; 802 members of a unionized group of technical, support, and clerical staff, and 494 managers. 115 technical and support staff completed the survey, resulting in a 14% completion rate, while 208 managers (43%) completed the survey. 4 respondents were not employed by either group. This resulted in an aggregated response rate of 25%.

Procedure

The survey link opened to an introductory letter from the Vice President of Human Resources describing the purpose of the study and then followed with an informed consent explaining the voluntary and anonymous nature of this study and participants' right to withdraw at any time. It also explained participant confidentiality and assured each respondent that only aggregate, non-identifiable information would be reported. Respondents were required to click a box that appeared after the letter and informed consent to reach the actual survey. The survey is in Appendix D.

I constructed the survey under the supervision of the participating organization's survey administrator. The survey was operational for two weeks and several reminders were included in the survey deployment. Respondents were asked to provide a variety of

demographic data: his/her sex, employment status (part time/full time), age, ethnicity, type of work (managerial or technical and academic or administrative), time in his or her job, level of education, time with his or her supervisor, number of subordinates for his/her supervisor, number of subordinates for him/herself, and amount of time spent in leadership training activities within the last year. For additional confidentiality, some of the demographic questions included bracketed ranges (e.g. age, 26-34, 35-44, etc.) rather than pinpointed numbers. As a result, modes are presented for demographic variables such as age and job tenure.

Measures

This survey included my 14 item Character Strengths in Leadership scale, Williams' (1991) seven-item measure of individual OCBs (OCBI) [although it is slightly longer than Podsakoff's five item scale (1990), it has been explicitly designed to be used for self-report (L. J. Williams & Anderson, 1991) (α=.80)]. The survey also contained Allen and Meyer's 8 item (1990a) affective commitment scale (Allen & Meyer, 1990b) (α=.87) and McAllister's (1995) affective (α=.95) and cognitive trust (α=.90) scales. Health was assessed by the 12 item General Health Questionnaire (GHQ) (Goldberg, 1978), which was chosen for its ability to provide succinct indicators of a person's self-reported recent psychological health (GHQ, 2007) (α=.92). Since affect is considered to be the hallmark of wellbeing, the Positive and Negative Affect Scale (PANAS) was utilized to assess participants' affect (Watson et al., 1988) (α=.90).

Results

Data Cleaning

Data were screened for missing values, out-of-range values, outliers, and violations of assumptions of normality. Given the nature of the variables in question, many were

negatively skewed. However, since none of the violations of normality were severe, no transformations were conducted. The surveys were completed electronically, so they were automatically coded as individuals completed them. Data were analyzed using SPSS version 11.5 and AMOS 7. The descriptive statistics for all study variables are presented in Table 14.

Demographic information reveals that well over half of this sample (66%) has not participated in any leadership training within the last year. Just over 1/3 (39%) do not have any subordinates, while another 1/3 (37%) have 5 or less subordinates. Just over half (52%) have worked with his or her supervisor for at least three years, while 45% have been in the same position for at least 11 years. 60% of the sample holds at least a Bachelor's degree. The intercorrelations for all study variables are presented in Table 15.

Table 14
Demographic Information for Study 3 Sample*, N=327

Sex	Male	Female	Unreported					
	22.3%	77.4%	.6% (2 people)					
Age	<18	18-25	26-34	35-44	45-54	55-64		
		1%	14%	31%	41%	14%		
Race	White	Black	Indian	Asian/ Pacific Islander				
	93%	2%	1%	3%				
Edu- cation	HS	Some college	Certificate	Assoc. Degree	Bachel. Degree	Master Degree	PhD/ MD	
	7%	21%	13%	1%	41%	17%	1%	
Work Status	Full-time		Part-time					
	97%		3%					
Type of job	Managerial		Other	Tech/Support staff (Unionized)				
	64%		1%	35%				
	Academic	Admin		Academic	Admin			
	8%	56%		8%	27%			
Time at Job	<6 m.	6 m.- 1 yr.	2-5 years	6-10 years	11-15	16-20	21-30	30+
	4%	9%	23%	20%	13%	10%	17%	5%
Time with Super- visor	<6 m.	6 m.- 1 year	1-3 years	3-5 years	5-10 years	10-15 years	15-20 years	20+ yrs.
	7%	12%	26%	22%	20%	8%	2%	1%
Number of Subor- dinates	None	<5	5-10	11-15	16-20	21-30	31-50	51+
	39%	37%	15%	3%	2%	2%	1%	1%
Super- visor's # of Subord.	None	<5	5-10	11-15	16-20	21-30	31-50	51+
	1%	33%	35%	12%	5%	3%	4%	6%
Leader- ship training in last year	None	½- 1 day	2-3 days	4-5 days	6-10 days	11+ days		
	66%	12%	13%	3%	4%	2%		

*Note: Percentage totals are rounded; may not compute to exactly 100%.

Table 15

Means, Standard Deviations, Zero-Order Correlations, and Reliability Coefficients (Study Variables n=127)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
1 Wisdom	3.84	1.07	(.91)										
2 Humanity	3.77	1.1	.85**	(.92)									
3 Temperance	3.8	1.05	.86**	.89**	(.91)								
4 Trust	3.64	.92	.80**	.89**	.87**	(.90)							
5 OCBs	4.2	.56	.23***	.23***	.20***	.17**	(.80)						
6 Affective Commit	4.77	1.33	.43**	.40**	.40**	.39***	.19**	(.87)					
7 GHQ	5.22	1.19	.36***	.39**	.33***	.37***	.10	.42**	(.92)				
8 Negative Affect	1.66	.71	-.36**	-.38**	-.37**	-.37**	-.07	-.33***	-.73**	(.90)			
9 Age+	45-54 (41%)		.09	.05	.1	.08	.1	.15**	.14*	-.10			
10 Type of work+	Managerial (64%)		-.19**	-.11**	-.15**	-.15	-.07	-.16**	-.12*	.16	-.05		
11 Leadership training+	None (66%)		.21**	.16**	.18**	.21**	.1	.18**	.19	-.16**	-.02	-.24**	
12 Education+	Bachelor's (41%)		.19**	.11	.13	.1	-.01	.03	.03	-.02	-.18**	-.34**	.11*

n=327; +n=326; data were collected in bracketed groups, so modes are presented
**=p<.01; *=p<.05, coefficient α for observed variables presented on the diagonal ( ).

Structural Equation Modeling

Structural equation modeling was used to test the fit of the hypothesized model of character strengths. Structural equation modeling handles multiple dependent variables and, rather than forcing categorization, permits analysis with continuous-variable scores. Further, it accounts for shared variance between non-independent variables (Kelloway, 1998; La Guardia, Ryan, Couchman, & Deci, 2000). Overall, hypotheses 1, 2, and 4 were supported. The correlations indicate that character strengths are positively and significantly related to trust, organizational citizenship behaviours, affective commitment, and psychological health (Rs=.22 to .87, p<.01). Character strengths predicted both affective and cognitive trust, but these items were collapsed into one variable based on model fitting during analyses.

The first step involved a confirmatory factor analysis to assess the fit of a one-factor versus a three-factor model character strengths distribution per the second study. Differences between the models were assessed with a variety of fit indices; the chi-square difference test, normed fit index (NFI), comparative fit index (CFI), and the root mean square error of approximation (RMSEA). As demonstrated in Table 16, a one-factor solution indicated a worse fit to the data (χ^2 (76) = 280, p=<.001; NFI = .93; CFI = .95; RMSEA = .09, p=<.001) than the fit of a three-factor solution (χ^2 (74) = 226, p=<.001; NFI = .95; CFI = .96; RMSEA = .08, p=<.001), $\Delta\chi2$ (2, N=280) = 54, p < .01.

Table 16

Confirmatory Factor Analysis: Character Strengths Items

Model	χ^2	p	df	RMSEA	p	NFI	CFI
3 factor	226	<.001	76	.09	<.001	.95	.96
1 factor	280	<.001	74	.08	<.001	.93	.95

A second confirmatory factor analysis was conducted to compare the fits of a latent 1-factor solution versus a latent seven-factor, 15 parcel solution. This latent variable analysis included 3 GHQ scales balanced by loadings, 2 OCB scales split by factor analysis, 2 Affective Commitment scales split by factor analysis, 2 scales for each of the Character Strengths split by theory, and trust, comprised of both Cognitive Trust and Affective Trust. As demonstrated in Table 17, fit statistics indicate that a 7-factor model represents better fit for the data than does a 1-factor model.

Differences between the models were assessed with a variety of fit indices; the chi-square difference test, normed fit index (NFI), comparative fit index (CFI), and the root mean square error of approximation (RMSEA). A one-factor solution indicated a worse fit to the data (χ^2 (90) = 562; NFI = .85; CFI = .87; RMSEA = .127, p=.000) than a seven-factor solution (χ^2 (69) = 132; NFI = .96; CFI = .98; RMSEA = .053, pclose=.330), $\Delta\chi^2$ (21, N=562) = 430, p < .01.

Table 17

Confirmatory Factor Analysis: MLQ Subscales, Leader-Member Exchange Subscales, and Character Strengths Subscales

Model	χ^2	p	df	RMSEA	p	NFI	CFI
7 factor model	132	.000	69	.053	.330*	.96	.98
1 factor model	562	.000	90	.127	<.001	.85	.87

represents pclose value

Figure 4
3-factor structural model
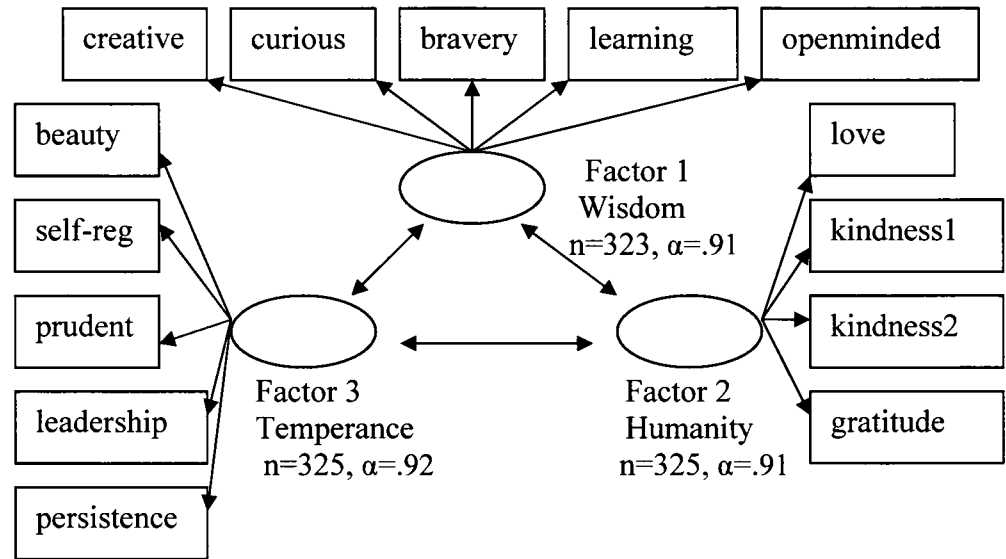
Since the three factor model provided a better fit for the data, the 14 items that made

up the three factors were retained for the character strengths measure and each factor

was used as an independent variable for the subsequent structural equation. In model

fitting, it became apparent that affective trust was a stronger relational variable than

cognitive trust. However, since cognitive trust did add strength to the model as well,

the two trusts were combined into one observed variable. A series of structural

equation models were then tested with parameters estimated in AMOS 7.0 (SPSS,

2009) and derived from covariance matrices generated in SPSS 11.5 (SPSS, 2009). A

fully mediated model includes all direct paths passing through trust, a partially

mediated model adds direct paths from character strengths to each of the three

outcomes (organizational citizenship behaviours, affective commitment, and

psychological health), and a non-mediated model includes direct relationships

between character strengths and each outcome, with no path from trust to

organizational citizenship behaviours, affective commitment, or psychological health.

Figure 5
Parameters for a Fully Mediated Model
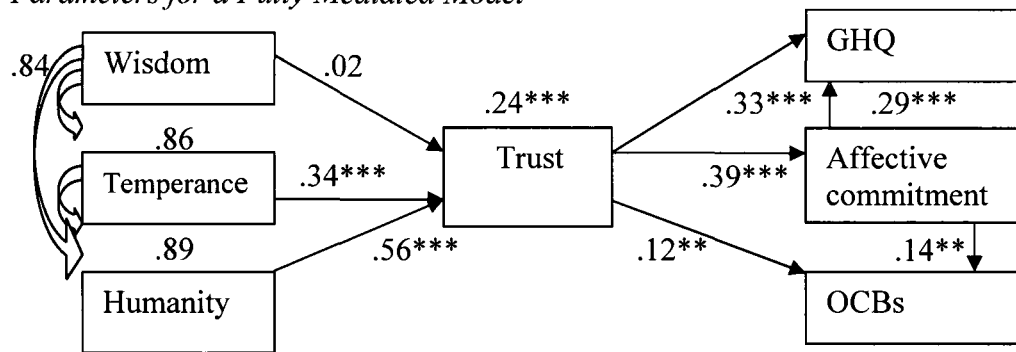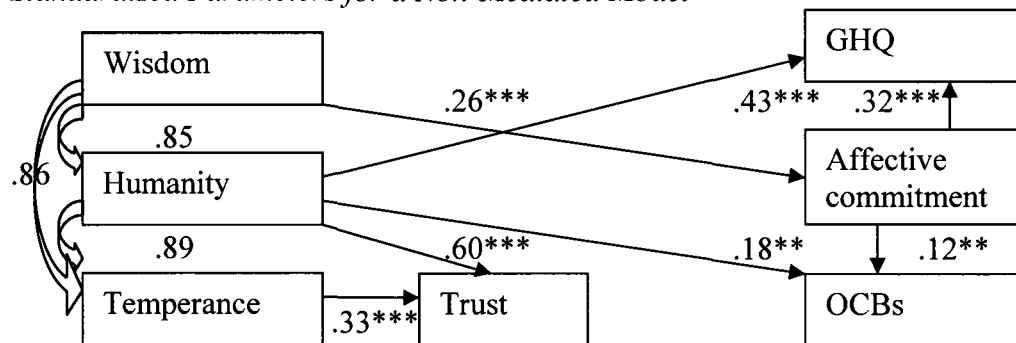

Notes: n=327, **p<.05, ***p<.01.

Figure 6
Standardized Parameters for a Partially Mediated Model
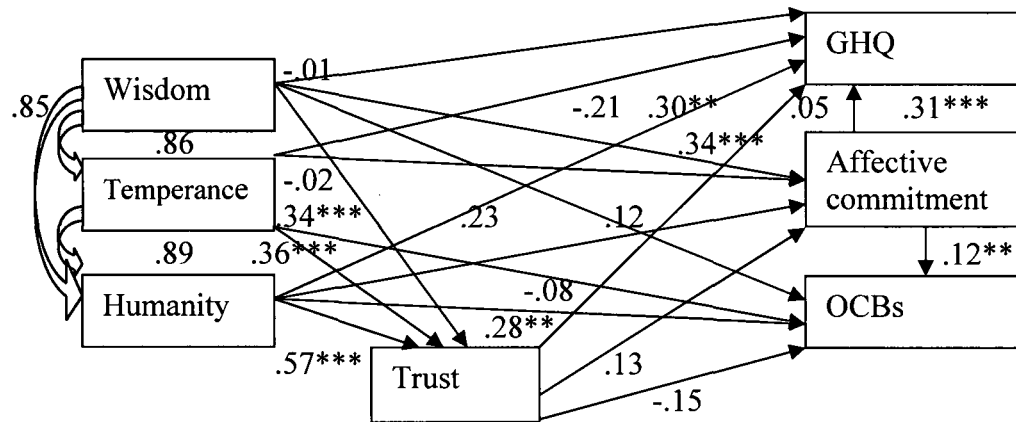
Notes: n=327, **p<.05, ***p<.01.

Figure 7
Standardized Parameters for a Non-Mediated Model

Notes: n=327, **p<.05, ***p<.01.

The partially mediated model provided a better fit to the data than did the fully mediated model, but it did not provide a better fit than the non-mediated model (see Table 18).

Table 18
Results of the Model Tests

Model	$\chi2$	p	df	RMSEA	p	NFI	CFI
A (fully mediated)	31.17	.00	10	.081	.06	.98	.99
B (partially mediated)	.59	.90	2	.000	.71	1.0	1.0
D (non-mediated)	8.55	.69	11	.000	.97	.99	1.0

Moreover, less than half of the paths comprising the partially mediated model were significant. Therefore, based on both overall fit and parsimony, the non-mediated model was retained for further analysis.

As shown in Figure 7, leader wisdom predicted affective commitment (β = .26, p < .01), while leader temperance predicted trust (β = .33, p < .01). Leader humanity was the most broad-based predictor and influenced subordinate psychological health (β = .43, p < .01), organizational citizenship behaviours (β = .18, p < .05), and trust (β = .60, p < .01). Affective commitment predicted organizational citizenship behaviours (β = .12, p < .05) and psychological health (β = .32, p < .01).

Discussion

Model fitting represents a symbiotic blend that includes goodness of fit, parsimony, and generalizability. It should incorporate thoughtful consideration of a daunting list of features; "substantive interpretability, faithfulness to theory, explanatory adequacy, ability to generate new research, and the model's historical performance relative to other models intended to account for the same phenomena" (Preacher, 2006, pp. 232-233). In this case, since there is no historical precedent from which to compare my results to other studies that employ the same character strengths structure, consideration must be

weighted toward factors of interpretability, plausibility, and congruence with extant

theory and research around character strengths and trust.

To that end, when comparing these data to related previous studies detailed in the

introduction, it is reassuring to note that there is a substantial degree of overlap

among both virtue categories and the character strengths themselves despite the

different lists of virtues employed in previous studies. These findings raise

interesting questions regarding the ubiquity and universality of character strengths

and lend support to the notion that there may be a handful of context-free strengths

recognized the world around (Den Hartog et al., 1999).

Within the scope of my research, the findings of the confirmatory factor analysis

in Study Three are congruent with Study Two's findings and suggest that humanity,

wisdom, and temperance are related but distinct constructs with differential

relationships between outcome measures. This finding underscores the inclusion of

each factor as a separate construct in my structural model and also adds additional

empirical support to a multi-factorial structure of the character strengths rubric.

Results from this study dovetail with extant research regarding affective

commitment and OCBs and support the hypotheses that leader-demonstrated

character strengths do impact both of these workplace outcomes. Previous research

has demonstrated that affective commitment is linked a variety of workplace

variables such as intention to stay (Luthans et al., 2006), socialization (Catano, Pond,

& Kelloway, 2001), organizational satisfaction (S. Williams & Cooper, 1998), and is

significantly related to both general health and organizational citizenship behaviours

(Meyer & Allen, 1991).

Perhaps the most novel contribution of this research is its contribution to evidence regarding context-free well-being through the Humanity subscale's prediction of subordinate psychological health. This scale was comprised of two kindness items, one caring item, and one gratitude item. It raises what I feel to be a most salient and interesting question.....Is leadership an inherently teachable skill or determined by our genetic inheritance? Can people, in this case leaders, be taught to be more kind, caring, and grateful? Since a review of the heritability of leadership indicated that only approximately 28% of leadership skills are explained by genetics, ensuing life experiences represent a blend of purpose, disposition, affect, cognition, and social engagement (Moberg, 1999) and explain far more of the variability (Avolio et al., 2009; Bono & Judge, 2004).

Cross-sectional data will forever create a chicken-or-egg conundrum, and I would like to conduct follow-up studies that involve an intervention or teaching piece with longitudinal data collection. A variety of studies have, in fact, demonstrated that leadership does represent a teachable skill set, and transformational leadership has nearly always been the focus (Anderson et al., 2008; Barling et al., 1996, Bono, 2004; Collins & Holton III, 2004, Walumbwa, 2008).

Defining the links from evidence-based strategies to causal mechanisms to good leadership and then to outcomes (Avolio et al., 2009, p. 441) clearly makes good practical sense. Although a person's ability to learn depends on internal factors such as one's self concept and developmental readiness (Avolio et al., 2009), core self-evaluations (Bono & Colbert, 2005), and the actual methods and materials employed by the trainer/s, individuals who have participated in at least one day of leadership training have a

substantially higher chance (reportedly 32%) of receiving "positive outcomes" (Avolio et al., 2009, p. 425). Methodologically, training generally focuses on "personal feedback and goal setting" (Kelloway, Barling, & Helleur, p. 145) and has been shown to be more effective when managers (a) are provided with evidence that change is necessary, and (b) are willing accept suggestions for positive change, address areas for improvement, and set goals to improve their skills and performance (Smither, London, & Reilly, 2005). Conversely, the impact of training is adversely impacted when individuals either (a) are not provided with sufficient time to develop and practice new behaviours, or (b) are not provided with content that is specific enough for his or her own "practical demands" (Santos & Stuart, 2003, p. 40).

There is one further line of inquiry that I find promising and would like to address in future research. We know that transformational leadership predicts a multiplicity of follower behaviours, but we do not have strong predictors of leader performance. From the high performance work systems literature, we also know that organizations are more effective when they can decrease conflicts of interest, increase the participation of employees, decrease legislation, and increase cross-training, role-sharing, teamwork, and commitment (Arthur, 1992). Leaders are largely responsible for each of these areas; consequently, I think it would be most interesting to compare and contrast a variety of models of moral reasoning such as Kohberg's post-conventional (which is associated with transformational leadership) and conventional moral reasoning (which is associated with transactional leadership) (Turner et al., 2002) to assess what 'feeds the leader'. In addition to character strengths, other related models of transcendent principles that could be triangulated with outcome measures of customer satisfaction, productivity,

profitability, turnover, and safety include Gilligan's ethic of care versus an ethic of

justice (Simola, Barling, & Turner, 2010), Kidder's care-based thinking versus rule-based

thinking (Kidder, 2003), autonomous versus controlled motivation (Deci & Ryan, 1987).

Conclusions

Taken as a whole, this sequence of studies has several strengths that are worthy of

mention. First, conducting three separate but related studies allowed me to build both a

rationale and a process, to dovetail multiple elements using a mixed-methods approach,

and to compare results across different populations with different statistical analyses. In

the second study, garnering data from a snowball sample that was nearly equal in terms

of Canadian and American participants provided information from individuals from a

wide geographic swath and provided breadth, while having all the data for the third study

contained within one organization allowed for greater depth. It was also productive to

administer a variety of leadership questionnaires simultaneously in the second study to

review their factor loadings and structure and to assess the meaning and contribution of

character strengths to the leadership literature through an analysis of their convergent and

discriminant validity.

All studies also have limitations and weaknesses, and this one is no exception. First,

using a more extensive life satisfaction scale would have permitted analysis of several

domains. Second, the small cell sizes in some of the categories of employment type do

not lend themselves to strong comparisons, so I am not as wholly confident as I would be

with equal representation. The third concern is related; a more balanced sample would

have resulted if there were a more equitable gender distribution. Most importantly, I

would have liked to have had more extensive measures of well-being to assess different areas within the holistic construct.

In addition to the particulars of the studies and the context of leadership, there is a larger discussion around both character strengths and virtuous behaviour as a whole. Peterson and Seligman assert that, "a psychology of character traits is not a fool's errand. The overarching goal…is to reclaim psychology's early concern with character by drawing on a century's worth of hard-earned lessons about how to conduct good psychological science" (2004, p. 59). However, while scholars continue to develop content-based hypotheses regarding the construction of character strengths, virtue theorists have yet to codify a theoretical taxonomy of human greatness that is backed by good theory (Peterson & Seligman, 2004, p. 9) and compelling data. I find it quite interesting that neither extant studies nor my own research demonstrated character strengths that fall within the theoretical virtue categories of Courage or Justice; whether this is a result of misclassification at the character strengths level or entirely different underlying mechanisms remains a challenging question for future research.

It is also important to locate this research within the greater scheme of positive organizational scholarship (POS). Two specific issues resonated throughout this five-year effort, and I have recently come across several articulate pieces of literature that tidily summarize my concerns. First, I wholeheartedly agree that it is important that our research participants be recognized as more than "stakeholder afterthoughts" (Wright & Quick, 2009b, p. 333). I could not have completed this work without the participation of well over 600 individuals, and my applied background impels me to make the commitment to try and disseminate useful findings in appropriate venues whenever

practically possible. That said, I am acutely aware of the pragmatic constraints of information sharing and the balance between researcher cost versus participant gain (Wright & Quick, 2009b) and so I am not sure how to best address that tension in my own work.

At the most practical level, there remains an enormous amount of work to be done in terms of identifying and implementing effective interventions regarding positive psychological outcomes that can directly improve people's lives. Positive organizational scholarship is still in its infancy as a discipline, but encouraging evidence is mounting. Proactive, preventatively-focused agendas do benefit children and young adults (Catalano, Hawkins, Berglund, Pollard, & Arther, 2002) and recent meta-analytic data indicate that positive interventions also increase well-being and decrease depressive symptoms in adults (Sin & Lyubomirsky, 2009). I can think of no worthier quest.

The second helpful piece of literature speaks to understanding what makes a life 'good' or 'worth living'. Fowers asserts that "virtue ethicists generally see the true measure of character in terms of how it contributes to the worthiness of the individual's life as a whole" (2008) and views virtue ethics as a "holistic blend of purpose, disposition, affect, cognition, and social engagement" (Fowers & Tjeltveit, 2003, p. 391). Aristotle also viewed virtuous behaviour as voluntary, and this tenet is fundamental to contemporary virtue ethicists' belief that virtuousness "is learned through the observation and adoption of others' behaviours" (Shanahan & Hyman, 2003, p. 198). Following this line of reasoning, two powerful precepts come into play: first, that individuals have the personal power to change the way they think and act (Seligman, 1999), and second, that characteristics of virtuousness are both able to be taught and acquired. Thus personal

agency and tenets of social learning theory (Bandura, 1977) are central features of this perspective.

Within this context, Fowers challenges positive psychologists on three fronts: (1) to move beyond subjective interpretations to further assess and identify, through objective or formal means, what is meant by "good"; (2) to acknowledge and consider that character is not absolute, and (3) to recognize that virtuous behaviours and character strengths are not piecemeal. Instead, they are collective, cumulative, and should be guided by practical wisdom. He makes the observation that identical behaviour may be adaptive in one context and completely maladaptive or counterproductive in another, and he asserts that character is best understood through contrast and a person's ability to make "one's actions fit the circumstances" (Fowers, 2008, p. 645).

Several other recent critiques have appeared, and they offer preliminary but conditional support for both positive psychology and character strengths as well (Hackman, 2009; Wright & Quick, 2009a, 2009b). While they acknowledge the great promise of a positive approach, it is important to acknowledge the potential shortcomings and diminishing returns of wholesale, unconditional endorsement and acceptance. Thoughtful attention to the cautions that have been articulated can only strengthen the honesty, integrity (Wright & Quick, 2009b), and ultimately the utility of this relatively new arm of psychological inquiry.

Appendix A: Study 1-Definitions of 24 Character Strengths (in 6 Virtue Categories)

Wisdom

Creativity [originality, ingenuity]: Thinking of novel and productive ways to think about and do things; includes artistic achievement, but is not limited to it

Curiosity [interest, novelty-seeking, openness to experience]: Taking an interest in ongoing experience for its own sake; finding subjects and topics fascinating; exploring and discovering

Open-mindedness [judgment, critical thinking]: Thinking things through and examining them from all sides; *not* jumping to conclusions; being able to change one's mind in light of evidence; weighing all evidence fairly

Love of learning: Mastering new skills, topics, and bodies of knowledge, whether on one's own or formally; related to the strength of curiosity, but love of learning goes on to describe the tendency to add *systematically* to what one knows

Perspective [wisdom]: Being able to provide wise counsel to others; having ways of looking at the world that make sense to oneself and to other people

Courage

Bravery [valor]: Not shrinking from threat, challenge, difficulty, or pain; speaking up for what is right even if people disagree; acting on convictions even if unpopular; includes physical bravery, but is not limited to it

Persistence [perseverance, industriousness]: Finishing what one starts; going forth with a course of action in spite of obstacles; "getting it out the door"; taking pleasure in completing tasks

Integrity [authenticity, honesty]: Speaking the truth, but more broadly presenting oneself in a genuine way and acting in a sincere way; being without pretense; taking responsibility for one's feelings and actions

Vitality [zest, enthusiasm, vigor, energy]: Approaching life with excitement and energy; *not* doing things half-way or half-heartedly; living life as an adventure; feeling alive and activated

Humanity

Love: valuing close relations with others, in particular those in which sharing and caring go both ways; being close to people

Kindness [generosity, nurturance, care, compassion, altruistic love, "niceness"]: Doing favors and good deeds for others; helping them; taking care of them

Social Intelligence [emotional intelligence, personal intelligence]: Being aware of the motives and feelings of other people and oneself; knowing what to do to fit into different social situations; knowing what makes other people tick

---

Justice

Citizenship [social responsibility, loyalty, teamwork]: Working well as a member of a group or team; being loyal to the group; doing one's share

Fairness: Treating all people the same according to notions of fairness and justice; *not* letting personal feelings bias decisions about others; giving everyone a fair chance

Leadership: Encouraging a group of which one is a member to get things done and at the same time maintain good relations within the group; organizing group activities and seeing that they happen

---

Temperance

Forgiveness and mercy: Forgiving those who have done wrong; accepting the shortcomings of others; giving people a second chance; *not* being vengeful

Humility/modesty: Letting one's accomplishments speak for themselves; *not* seeking the spotlight; *not* regarding oneself as more special than one is

Prudence: Being careful about one's choices; not taking undue risks; *not* saying or doing things that might later be regretted

Self-regulation [self-control]: Regulating what one feels and does; being disciplined; controlling one's appetites and emotions

---

Transcendence

Appreciation of beauty and excellence [awe, wonder, elevation]: Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life, from nature to art to mathematics to science to everyday experience

Gratitude: Being aware of and thankful for the good things that happen; taking time to express thanks

Hope [optimism, future-mindedness, future orientation]: Expecting the best in the future and working to achieve it; believing that a good future is something that can be brought about

Humor [playfulness]: Liking to laugh and tease; bringing smiles to other people; seeing the light side; making (not necessarily telling) jokes

Spirituality [religiousness, faith, purpose]: Having coherent beliefs about the higher purpose and meaning of the universe; knowing where one fits within the larger scheme; having beliefs about the meaning of life that shape conduct and provide comfort

Appendix B: Study 1-Character Strengths in Leadership (CSL) Survey

Creativity [originality, ingenuity]
My supervisor seeks unique ways to do things or solve problems.

Curiosity [interest, novelty-seeking, openness to experience]
My supervisor enjoys trying new things.

Open-mindedness [judgment, critical thinking]
My supervisor willingly considers viewpoints other than his/her own.

Love of learning
My supervisor demonstrates life-long learning.

Perspective [wisdom]
My supervisor is able to keep elements of life in scale, from little things to the big picture.

Bravery [valor]
My supervisor is willing to take a risk for what he/she believes is the right thing.

Persistence [perseverance, industriousness]
When something has to get finished, my supervisor follows through no matter what.

Integrity [authenticity, honesty]
My supervisor is authentic.
My supervisor takes ownership, even if he/she did something negative.

Vitality [zest, enthusiasm, vigor, energy]
My supervisor is passionate about everything he or she does.

Love
My supervisor cares immensely for me.

Kindness [generosity, nurturance, care, compassion, altruistic love, "niceness"]
My supervisor gives generously of his/her time and/or resources.

Social Intelligence [emotional intelligence, personal intelligence]
My supervisor understands what motivates people around him/her.

Citizenship [social responsibility, loyalty, teamwork
My supervisor focuses on "We", not "I".

Fairness
My supervisor treats all of his/her employees in an unbiased manner.

Leadership
My supervisor is good at getting people to work together to accomplish a task.

Forgiveness and mercy
My supervisor holds it against me when I make a mistake. (reverse-coded)

Humility/modesty (2 items)
My supervisor seeks external recognition or credit. (reverse-coded)
My supervisor defers or deflects credit to the team, no matter how much he/she does.

Prudence
My supervisor exercises appropriate levels of caution.

Self-regulation
My supervisor is level-headed even when things are difficult or tense.

Appreciation of beauty and excellence [awe, wonder, elevation]
My supervisor appreciates small details as part of a whole.

Gratitude
My supervisor demonstrates sincere appreciation for work that is done well.

Hope [optimism, future-mindedness, future orientation]
My supervisor looks forward to better things.

Humor [playfulness]
My supervisor encourages me to have fun at my job.

Spirituality [religiousness, faith, purpose]
My supervisor openly talks about spirituality and/or faith.

Appendix C: Study 2-Full Survey

Informed Consent Letter

Bally Thun
(902) 496-8232, bthuned@yahoo.com

     I am a doctoral student in Halifax, Nova Scotia. As part of my graduate studies, I am conducting research under the supervision of Dr. Kevin Kelloway, and I invite you to participate in my study. Its purpose is to explore the relationship between different types of leadership and employee perceptions.

     Your answers are completely confidential and <u>you do not need to provide your name at any time</u>. I am an independent researcher, I have not been hired or paid by your company, and no individual results will be provided to anyone. Responses are collected anonymously and results will only be reported in an aggregated format. In fact, I will never have access to the email address from which your answers are sent. You may reply from work or home.

     This research has been approved by the research ethics board at Saint Mary's University. If you have any questions or concerns about this study, you may contact them at ethics@smu.ca, or by telephone (902-420-5728). Several of the questions do ask about negative forms of leadership, and sometimes individuals who are asked to think about these events may experience negative feelings. If this happens to you, please stop and contact me. You may also contact your employee support representative or a health care professional for assistance. If they suggest you need to see a specialist, you may be required to pay for these services.

     The survey should take between 10 and 15 minutes. Your participation is completely voluntary and you may withdraw from this study at any time without penalty. I would be happy to provide you with a copy of my research report; please send an email the address above.

By clicking on "Continue", you are indicating that you fully understand all of the information above and that you agree to participate in this study. Thank you!

This study is about different types of leadership, and it contains a variety of questions about your supervisor's behaviour. Some of the questions are similar, but none are identical. We ask that you pay careful attention to what each question is asking and to answer each one as accurately and honestly as you can. For each of the following questions, **please choose and mark the rating that best describe your current supervisor.**

Character Strengths in Leadership Scale

Using the following rating scales, **please indicate how often your supervisor...**

0	1	2	3	4
Not at all	Once in a while	Sometimes	Fairly often	Frequently/ always

seeks unique ways to do things or solve problems.
enjoys trying new things.
willingly considers viewpoints other than his/her own.
is committed to life-long learning.
is able to keep elements of life in scale, from little things to the big picture.
is willing to take a risk for what he/she believes is the right thing.
When something has to get finished, my supervisor follows through no matter what.
is authentic.
takes ownership, even if he/she did something negative.
is passionate about everything he or she does.
cares immensely for me.
gives generously of his/her time and/or resources.
is caring and/or compassionate.
understands what motivates people around him/her.
focuses on "we", not "I".
treats all of his/her employees in an unbiased manner.
is good at getting people to work together to accomplish a task.
Even when I make a mistake, my supervisor doesn't hold it against me.
doesn't seek and/or need external recognition or credit.
defers or deflects credit to the team, no matter how much he/she does.
exercises appropriate levels of caution.
is level-headed even when things are difficult or tense.
appreciates beauty and excellence.
demonstrates sincere appreciation for work that is done well.
looks forward to better things.
encourages me to have fun at my job.
openly talks about spirituality and/or faith.

Leader-Member Exchange (LMX)

With regard to your current supervisor, **please indicate the extent to which you agree or disagree with each of the following statements:**

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neither disagree nor agree	Slightly agree	Moderately agree	Strongly agree

I like my supervisor very much as a person.
My supervisor defends my decisions, even without complete knowledge of the issue in question.
I do not mind working my hardest for my supervisor.
I respect my supervisor's knowledge and competence on the job.
My supervisor is a lot of fun to work with.
I am willing to apply extra efforts, beyond those normally required, to help my supervisor meet
 his or her work goals.
I am impressed with my supervisor's knowledge of his/her job.
I do work for my supervisor that goes beyond what is specified in my job description.
My supervisor would defend me to others in the organization if I made an honest mistake.
My supervisor is the kind of person one would like to have as a friend.
My supervisor would come to my defense if I were "attacked" by others.
I admire my supervisor's professional skills.

Multi-Factor Leadership Questionnaire

Using the following rating categories, **please indicate how often your supervisor:**

1	2	3	4	5
Not at all	Once in awhile	Sometimes	Fairly Often	Frequently, if not always

Re-examines critical assumptions to question whether they are appropriate.
Talks about their most important values and beliefs.
Seeks differing perspectives when solving problems.
Talks optimistically about the future.
Instills pride in me for being associated with her/him.
Talks enthusiastically about what needs to be accomplished.
Specifies the importance of having a strong sense of purpose.
Spends time teaching and coaching.
Goes beyond self-interest for the good of the group.
Treats me as an individual rather than just as a member of a group.
Acts in ways that builds my respect.

Considers the moral and ethical consequences of decisions.
Displays a sense of power and confidence.
Articulates a compelling vision of the future.
Considers me as having different needs, abilities, and aspirations from others.
Gets me to look at problems from many different angles.
Helps me to develop my strengths.
Suggests new ways of looking at how to complete assignments/tasks.
Emphasizes the importance of having a collective sense of mission.
Expresses confidence that goals will be achieved.

Passive Leadership

Using the following rating categories, **please indicate how often your supervisor:**

1	2	3	4	5
Not at all	Once in awhile	Sometimes	Fairly Often	Frequently, if not always

avoids making decisions.
fails to intervene until problems become serious.
waits for things to go wrong before taking action.

Ethical Leadership Scale

Using the following rating categories, **please indicate the extent to which you agree or disagree with each of the following statements:**

1	2	3	4	5
Strongly Disagree	Disagree somewhat	Neutral	Agree somewhat	Strongly Agree

My supervisor listens to what employees have to say.
My supervisor disciplines only employees who violate ethical standards.
My supervisor conducts his/her personal life in an ethical manner.
My supervisor has the best interests of employees in mind.
My supervisor makes fair and balanced decisions.
My supervisor can be trusted.
My supervisor discusses business ethics or values with employees.
My supervisor sets an example of how to do things the right way in terms of ethics.
My supervisor defines success not just by results but also the way that they are obtained.
When making decisions, my supervisor asks, What is the right thing to do?".

Abusive Supervision Scale

1	2	3	4	5
Not at all	A little	Sometimes	Quite a bit	Extremely often/always

Please indicate how frequently you feel that **"My boss…"**:

Ridicules me.
Tells me my thoughts or feelings are stupid.
Gives me the silent treatment.
Puts me down in front of others.
Invades my privacy.
Reminds me of my past mistakes and failures.
Doesn't give me credit for jobs requiring a lot of effort.
Blames me to save himself/herself embarrassment.
Breaks promises he/she makes.
Expresses anger at me when he/she is mad for another reason.
Makes negative comments about me to others.
Is rude to me.
Does not allow me to interact with my coworkers.
Tells me I'm incompetent.
Lies to me.

PANAS

Indicate to what extent you generally feel this way, that is, how you feel on average:

1	2	3	4	5
Very slightly or not at all	A little	Moderately	Quite a bit	Extremely

irritable
distressed
ashamed
upset
nervous
guilty
scared
hostile
jittery
afraid

Affective Checks~last two questions before demographic section:

I get along with my supervisor.

I trust my supervisor.

Demographic Information

Are you: Male/Female

On average, how many hours a week do you work?
        0-20 hrs.
        21-30 hrs.
        31-40 hrs.
        40+ hrs.

Age: Younger than 18
        18-25   66-75
        26-35   over 75
        36-45
        46-55
        56-65

Please indicate which group applies to you:
        White/non-Hispanic
        Hispanic
        Black/non-Hispanic
        Native Indian (US) or First Nations (Canada)
        Multirace-including White
        Multirace-not including White
        Asian/Pacific Islander
        Other _____

Highest level of education completed:

Some high school	1	Associate's degree	5
High school	2	Bachelor's degree	6
Some college or university courses	3	Master's degree	7
Professional certificate	4	PhD or MD	8

How long have you been at your job?

Less than six months	1	11-15 years	5
6 months-1year	2	16-20 years	6
2-5 years	3	21-30 years	7
6-10 years	4	30 years+	8

How long have you worked with your current supervisor?

Less than six months	1	5-10 years	5
6 months-1year	2	10-15 years	6
1-3 years	3	15-20 years	7
3-5 years	4	20 years+	8

How long have you spent working in your current occupation (with your current employer and with any other organizations/employers)?

Less than six months...........1		5-10 years.......................5
6 months-1year..................2		10-15 years.....................6
1-3 years........................3		15-20 years....................7
3-5 years........................4		20 years+......................8

How many people are employed within your workplace? (Please estimate if unsure)

1-5 employees 1	50-99 employees...............5
5-10 employees 2	100-499 employees............6
11-25 employees.............. 3	500 employees or more 7
26-49 employees.............. 4	

In which region do you currently work?

Canada	US
Pacific	Pacific
Prairies	Midwest
Ontario	Southwest
Quebec	Northeast
Atlantic	Southeast

I work in the following industry:

1	Construction
2	Education
3	Health Services
4	Finance
5	Insurance
6	Real Estate
7	Government or Public Administration
8	Information Technology
9	Leisure and Hospitality
10	Manufacturing
11	Natural Resources and Mining
12	Wholesale and Retail Trade
13	Professional and Business Services
14	Transportation, Communications, Electric, Gas, Sanitary Services
15	Other

Dear Participant,

Thank you for filling out my survey for my research on Leadership Styles. Your feedback has been extremely valuable to my research.

If you have any questions please feel free to contact me via e-mail: bthuned@yahoo.com

To complete the survey, please click on the submit button below.

Submit Survey

Appendix D: Study 3-Full Survey

Character Strengths in Leadership

1	2	3	4	5
Not at all	Once in awhile	Sometimes	Fairly Often	Frequently, if not always

Using the rating categories above, please indicate how often your supervisor:

gives generously of his/her time and/or resources.
is willing to take a risk for what he/she believes is the right thing.
cares immensely for me.
is level-headed even when things are difficult or tense.
is caring and/or compassionate.
seeks unique ways to do things or solve problems.
demonstrates sincere appreciation for work that is done well.
appreciates small details as part of a whole.
When something has to get finished, my supervisor follows through no matter what.
enjoys trying new things.
is committed to life-long learning.
exercises appropriate levels of caution.
willingly considers viewpoints other than his/her own.
is good at getting people to work together to accomplish a task.
demonstrates courage when needed.
treats his/her employees according to principles of justice.
connects with transcendent (nonmaterial) aspects of life.

Passive Leadership

Using the rating categories above, please indicate how often your supervisor:

1	2	3	4	5
Not at all	Once in awhile	Sometimes	Fairly Often	Frequently, if not always

My supervisor avoids making decisions.
My supervisor fails to intervene until problems become serious.
My supervisor waits for things to go wrong before taking action.

MLQ

1	2	3	4	5
Not at all	Once in awhile	Sometimes	Fairly Often	Frequently, if not always

Using the rating categories above, please indicate how often your supervisor:

Re-examines critical assumptions to question whether they are appropriate.

Talks about their most important values and beliefs.

Seeks differing perspectives when solving problems.

Talks optimistically about the future.

Instills pride in me for being associated with her/him.

Talks enthusiastically about what needs to be accomplished.

Specifies the importance of having a strong sense of purpose.

Spends time teaching and coaching.

Goes beyond self-interest for the good of the group.

Treats me as an individual rather than just as a member of a group.

Acts in ways that builds my respect.

Considers the moral and ethical consequences of decisions.

Displays a sense of power and confidence.

Articulates a compelling vision of the future.

Considers me as having different needs, abilities, and aspirations from others.

Gets me to look at problems from many different angles.

Helps me to develop my strengths.

Suggests new ways of looking at how to complete assignments/tasks.

Emphasizes the importance of having a collective sense of mission.

Expresses confidence that goals will be achieved.

Organizational Citizenship Behaviour-Individual (OCBIs)

1	2	3	4	5
Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree

Using the ratings above, please indicate how often you do the following things:

I often help others who have been absent.

I often help others who have heavy workloads.

I often assist my supervisor with his/her work, even when I'm not asked.

I take time to listen to my co-workers' problems and worries.

I go out of my way to help new employees.

I take a personal interest in other employees.

I pass along information to my co-workers.

Job Satisfaction

1	2	3	4	5
Strongly disagree	Disagree	Undecided	Agree	Strongly agree

I feel fairly well satisfied with my present job.
Most days I am enthusiastic about my work.
Each day at work seems like it will never end. (R)
I find real enjoyment in my work.
I consider my job rather unpleasant. (R)

Trust Scales

1	2	3	4	5
Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree

My supervisor approaches his/her job with professionalism and dedication.
Given this person's track record, I see no reason to doubt his/her competence and
        preparation for
the job.
I can rely on this person not to make my job more difficult by careless work.
Most people, even those who aren't close friends of this individual, trust and respect
him/her as a coworker.
Other work associates of mine who interact with this individual consider him/her to be
trustworthy.
If people knew more about this individual and his/her background, they would be
more concerned and monitor his/her performance more closely. (R)

The following 5 item affective trust scale will also be used (McAllister, 1995):
We have a sharing relationship. We can both freely share our ideas, feelings, and hopes.
I can talk freely with my supervisor about difficulties I am having at work and know that
she/he will want to listen.
We would both feel a sense of loss if one of us was transferred and we could no longer
work together.
If I shared my problems with this person, I know s/he would respond constructively and
caringly.
I would have to say that we have both made considerable emotional investments in our
working relationship.

NEO Personality Inventory: Conscientiousness scale

1	2	3	4	5
Not at all	A little	Moderately	Quite a bit	Extremely

I make plans and stick to them.
I waste my time. (R)
I don't see things through. (R)
I shirk my duties. (R)
I am always prepared.
I do just enough to get by. (R)
I carry out my plans.
I pay attention to details.
I find it difficult to get down to work. (R)
I get chores done right away.

1 item of global satisfaction

1	2	3	4	5
Not at all	A little	Moderately	Quite a bit	Extremely

Overall, I am satisfied with my life.

General Directions: Please note- the rating system changes to 1-7 for the next sets of items.

Affective organizational commitment

Strongly disagree	Mostly disagree	Somewhat disagree	Neither Agree nor disagree	Somewhat agree	Mostly agree	Strongly agree
1	2	3	4	5	6	7

I would be very happy to spend the rest of my career with this organization.
I enjoy discussing this organization with people outside it.
I really feel as if this organization's problems are my own.
I think that I could easily become as attached to another organization as I am to this one (R).
I do not feel like "part of the family" at my organization (R).
I do not feel "emotionally attached" to this organization (R).
This organization has a great deal of personal meaning for me.
I do not feel a strong sense of belonging to my organization (R).

General Health Questionnaire

1	2	3	4	5	6	7
Not at all	Rarely	Once in awhile	Some of the time	Fairly often	Often	All of the time

Please read the questions below and circle the response that best applies to you.

Have you recently:

been able to concentrate on what you're doing?
lost much sleep over worry?
felt that you are playing a useful part in things?
felt capable of making decisions about things?
felt constantly under strain?
felt you couldn't overcome your difficulties?
been able to enjoy your normal day to day activities?
been able to face up to your problems?
been feeling unhappy or depressed?
been losing confidence in yourself?
been thinking of yourself as a worthless person?
been feeling reasonably happy, all things considered?

Positive and Negative Affect Schedule

Read each item and then mark the appropriate answer in the space next to that word. *Indicate to what extent you generally feel this way; that is, how you feel on average:*

1	2	3	4	5
Very slightly	A little	Moderately	Quite a bit	Extremely or not at all

____	interested	____	irritable
____	distressed	____	alert
____	excited	____	ashamed
____	upset	____	inspired
____	strong	____	nervous
____	guilty	____	determined
____	scared	____	attentive
____	hostile	____	jittery
____	enthusiastic	____	active
____	proud	____	afraid

Demographic Information

Are you: Male/Female

Do you work: Full-time/Part-time

Age:
        ___ 18-25
        ___ 26-34
        ___ 35-44
        ___ 45-54
        ___ 55-64
        ___ 65-74
        ___ 75+

How would you describe your ethnicity?:

White/non-Hispanic................1   Hispanic...5
Black/non-Hispanic.................2   Native Indian (US) or First Nations (Canada)...6
Multirace-including White........3   Asian/Pacific Islander........ 7
Multirace-not including White...4   Other _____ 8

Highest level of education completed:

High school..............................1   Bachelor's degree..............5
Some college or university courses....2   Master's degree...............6
Professional certificate..................3   PhD or MD....................7
Associate's degree...................... .4

I currently work in:
DPMG-academic.............1   NSGEU-academic...........3
DPMG-administrative......2   NSGEU-administrative.....4

How long have you been at your job?
Less than six months..........1   11-15 years.....................5
6 months-1 year.................2   16-20 years....................6
2-5 years.......................3   21-30 years...................7
6-10 years......................4   30 years+.......................8

How long have you worked with your current supervisor?
Less than six months..........1   5-10 years.....................5
6 months-1 year.................2   10-15 years....................6
1-3 years.......................3   15-20 years....................7
3-5 years.......................4   20 years+.......................8

How many subordinates/direct reports does **your supervisor** have?

Less than 5...........1		30-50.................5
5-10....................2		50-100...............6
11-20.................3		100+..................7
21-29.................4		

How many subordinates/direct reports do **you** have?

None..................1	21-29.................5
Less than 5...........2	30-50.................6
5-10...................3	50-100...............7
11-20.................4	100+.................8

In the past year, how much leadership training have you had?

None.................1	4-5 work days.......4
½ -1 work day........2	6-10 work days......5
2 or 3 work days.....3	11+ work days......6

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