

# Virtuous Leaders: Assessing Character Strengths in the Workplace

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## Abstract

Three studies were conducted to build, test, and compare a model of character-based leadership. The first qualitative study used the critical incident technique (Flanagan, 1949) and Peterson and Seligman's (2004) comprehensive theoretical framework of character strengths to develop and construct a scale. The second study tested the scale's psychometric properties. Exploratory factor analysis indicated that character-based leadership is a three-dimensional construct and demonstrates adequate content validity. The third study tested the new scale against organizational and personal outcome measures. The resulting structural model provided a strong fit. Relationships emerged between leader wisdom and employee affective commitment, leader humanity and employee wellbeing, employee organizational citizenship behaviours (OCBs), employee cognitive trust, and employee affective trust, and between leader temperance and employee trust. Copyright © 2011 ASAC. Published by John Wiley & Sons, Ltd.

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## Résumé

Trois études ont été menées pour construire, tester et comparer un modèle de leadership basé sur le caractère. La première étude qualitative a utilisé la technique des incidents critiques (Flanagan, 1949) et le cadre théorique complet de Peterson et Seligman (2004) pour développer et construire une échelle. La deuxième étude a testé les propriétés psychométriques de l'échelle. L'analyse exploratoire des facteurs a révélé que le leadership basé sur le caractère est un construit tridimensionnel doté d'une validité de contenu. La troisième étude a utilisé les indicateurs des résultats personnels et organisationnels pour tester la nouvelle échelle. Le modèle structural créé s'est révélé parfaitement adéquat. Il met en évidence des liens entre la sagesse du leader et l'engagement affectif de l'employé, l'humanité du leader et le bien-être de l'employé, les comportements citoyens de l'employé vis-à-vis de l'entreprise (OCBs), la confiance cognitive de l'employé, et enfin, entre la tempérance du leader et la confiance de l'employé. Copyright © 2011 ASAC. Published by John Wiley & Sons, Ltd.

**Mots-clés :** forces du caractère, leadership, vertu, éthique, apprentissage, bien-être

Virtuousness occurs both *by* organizations, where organizational features exist that facilitate virtuousness, and *in* organizations, where individual members demonstrate virtuous behaviours (Cameron, Bright, & Caza, 2004). This paper focuses on virtuousness *in* organizations with a specific focus on character strengths-based leadership, or more simply, leader character. Organizational leaders exercise substantial power and influence on an array of employee and organizational outcomes (Barling, Christie, & Hopton, 2010), and

leader character is one metric of virtuous behaviours that can help us understand more about how leaders exert positive influence, which behaviours matter most, how these behaviours are perceived by employees, and what the relationships are between leader character and employee outcomes.

Character pervades all record of human development and is transmuted through our historical texts, intellectual discourse, social commentary, political oratory, family histories, and even children's stories. Myths, fables, and fairy tales are built around the strengths and weaknesses of human character, pit actions against consequences, and inevitably deliver a "moral of the story." Social scientists have identified our ability and willingness to act in particular ways as moral agency, which is "rooted in self-concepts and manifested in actions" (Weaver, 2006, p. 345). In this paper, we used one

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indicator of moral actions (or character strengths) to further inform the literature on how leader character affects followers.

Consequently, we conducted three mixed-methods studies to explore these relationships. In the first study, we collected followers' examples of leaders' character strengths through qualitative inquiry and then developed a brief scale of leader character. The second study compared leader character to other types of leadership within the context of the workplace and explored the scale's factor structure. The third study re-tested the three-factor structure on an additional sample and assessed follower outcomes.

### Framing Character Strengths within Virtuous Behaviours

Virtuousness is an amorphous construct, and one of the tasks ahead of virtue-based research is to further distinguish the nomological network among related constructs such as values, virtues, morality, and ethics. This network spans many disciplines, such as philosophy, spirituality, religion, psychology, business, and law, and each of these fields has emphasized a different set, amount, and salience of character strengths (Fry, 2005).

This paper draws four distinctions. First, we used the term "virtuous behaviours" to refer to the larger network of positive values and virtues that are typically associated with the broad spectrum of morality and ethics. Second, we have identified a subset of virtuous behaviours (character strengths) as the focus of our study, and used Peterson and Seligman's (2004) 24-item catalogue of character strengths as our framework. Third, no distinction was made between levels of leadership—we used "leaders" to describe any organizational members with a supervisory capacity. Finally, since meta-analytic data indicate that personality traits predict between 16 and 31% of behaviour (Fleeson & Gallagher, 2009), our studies focus on actual behaviours rather than traits.

Consequently, our focus is on 24 specific, theoretically derived character strengths, how they are demonstrated by leaders, and their relationship to a variety of follower outcomes. These three studies are designed 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: (a) the development of a robust measure of character strengths (Cameron et al., 2004); (b) inquiries regarding the impact of character strengths on other people (Peterson & Park, 2006); (c) qualitative attention to construct development and validation (Hackman, 2009); and (d) quantitative factor analysis and structural modelling.

## Theoretical Foundation

### A Review of the Virtue Literature

The umbrella of moral philosophy encompasses deontology, teleology, and virtue ethics. A deontological approach

"stresses principles, rather than consequences or character" (Garafalo, 2003, p. 493). Deontology focuses on universal, absolute, and rational moral imperatives. Teleology is predicated on consequences with a utilitarian focus on maximizing what is good for the majority. However, deontology and teleology are predicated upon "impartial rational agents following moral rules" (McKinnon, 1999, p. 20) and "seem to fail to be an ethics for *human* beings" (McKinnon, 1999, p. 19, italics in original text). Virtue ethics, on the other hand, focus on universal core values (Garafalo, 2003) and are predicated on social-cognitive and identity theories (Neubert, Carlson, Kacmar, Roberts, & Chonko, 2009). Virtue ethics include features of moral identity and moral agency (Weaver, 2006) that facilitate the growth, volition, and action inherent to the fundamental philosophical question of, "What sort of person should I be?"

This paper takes virtue ethics as its point of departure. We consider character strengths to be a subset of moral virtuousness and accept the Aristotelian notion that both intellectual and moral virtue (Cahn & Vitrano, 2008) are volitional. Aristotle described intellectual virtue as a process developed through teaching, while moral virtue is "made perfect by habit" (Cahn & Vitrano, 2008, p. 23). Following this line of reasoning, two powerful precepts come into play: first, that characteristics of virtuousness can be both taught and acquired, and second, that individuals have the personal power to change the way they think and act (Seligman, 1999). From this perspective of agency and volition, developing character strengths might best be described as the nurturing of virtuous elements of human nature.

**Character strengths.** Peterson and Seligman (2004) conducted a comprehensive assessment of character strengths and defined them as "habitual actions" (p. 76) that are "stable yet malleable" (p. 12) and are "shown to have tangible consequences" (p. 85). Character strengths are considered to be outcome-based, capable of being acquired, can be contextualized, and are measurable (Peterson & Seligman, 2004, p. 80; Sarros, Cooper, & Hartigan, 2006). The final framework details 24 character strengths housed within six superordinate virtue categories.

Peterson and Seligman tested this classification system through a series of surveys available online (VIA, 2011). The Values in Action-Inventory of Strengths (VIA-IS) is a 240-item survey that generates "signature strengths," or the strengths that a person employs most frequently based on self-report. Peterson has also created a brief, 24-item survey, but the items simply use the strength names and ask people how frequently they have used that character strength "recently" (VIA, 2011). Surprisingly, despite the impressive volume of data collected, the results simply generate "signature strengths" and do not, with the exception of a handful of individual character strengths, assess relationships between character strengths and any outcome measures.

There are a few studies (Brdar & Kashdan, 2010; Seligman, Steen, Park, & Peterson, 2005) that have gone

beyond the identification of “signature strengths” to explore relationships between character strengths and how they affect people’s attitudes or behaviour; initial data are promising. Brdar and Kashdan (2010) found that several character strengths were associated with aspects of life satisfaction, vitality, autonomy, relatedness, competence, and meaning, while a second study found that expressing gratitude increased an individual’s happiness and decreased symptoms of depression (Seligman et al., 2005).

The original theoretical model (Peterson & Seligman, 2004) identifies six factors, but empirical analyses “have found only moderate support for the conceptual structure” (Shryack, Steger, Krueger, & Kallie, 2010, p. 715). In fact, descriptive terms for the empirical factors do not match the hypothesized virtue categories and the character strengths do not empirically map as theoretically postulated. Instead, five factors (restraint, intellect, interpersonal skills, emotion, and theology) have emerged (Peterson & Seligman, 2004, p. 632). Other research using both Peterson and Seligman’s theoretical catalogue (Brdar & Kashdan, 2010) and other virtue compendia has yielded three factors (Sarros & Barker, 2003; Sarros & Cooper, 2006), four factors (Brdar & Kashdan, 2010; Cameron et al., 2004; Chun, 2005; Shanahan & Hyman, 2003), or evidence for both (Shryack et al., 2010).

**Leadership.** Leadership has deep roots in virtue, and leaders are key organizational members who have extensive influence and power (Barling et al., 2010). Leaders have the “potential...to exert moral authority that contributes...to the flourishing of organizational members,” and they “can be purveyors of virtue or vice” (Neubert et al., 2009, p. 157). Bass and Steidlmeier (1999) asserted that leadership is a “moral compass” (p. 193) and that a leader’s moral character, ethical values, choices, and actions are the “pillars” of leadership (p. 181). We assert that character strengths provide a comprehensive framework, systematic approach, and a common language (Park & Peterson, 2008) to further assess this potential. Our research uses this scaffolding to test character strengths’ semantic and practical contributions to our existing nomological network regarding leadership.

Through their focus on the virtuous, moral, ethical, and relational aspects of leadership, three well-studied models of leadership theory share the greatest conceptual similarities with our proposed construct of leader character: transformational leadership (Bass, 1985), ethical leadership (Brown, Trevino, & Harrison, 2005), and leader-member exchange (Graen & Uhl-Bien, 1995).

Ethical leadership is defined by social learning theory and represents “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct” (Brown et al., 2005, p. 120). As such, ethical leaders exert a positive, “virtuous influence” on followers through role modelling and relationship-building (Neubert et al., 2009, p. 165) and contribute to a “win-win” environment

for both businesses and employees (Ruiz-Palomino, Ruiz-Amaya, & Knörr, 2011). Through a series of seven studies, the Ethical Leadership Scale (ELS) was reduced to a single-factor 10-item scale that involves aspects of listening, discipline, fairness, trust, example-setting, and doing the “right thing.” Ethical leadership has demonstrated links with supervisor effectiveness and subordinate outcomes, and correlated significantly with the idealized influence portion of transformational leadership (Brown et al., 2005).

Leader-member exchange (LMX) is another conceptualization of the relationship between supervisors and subordinates that, although lacking an explicit moral component, is related to virtuous leadership through its analysis of the quality, partnerships, and outcomes of dyadic relationships (Gerstner & Day, 1997). LMX research has been grounded in role and exchange theories (Graen & Uhl-Bien, 1995), and several models have been proposed. 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). In a review of 82 articles on LMX, Schriesheim, Castro, and Coglisier (1999) identified six subdomains; these include “mutual support, trust, liking, latitude, attention, and loyalty” (p. 77). Studies have demonstrated that the quality of leader-member relationships predicts follower role conflict and clarity, satisfaction (both overall and with supervisors), career outcomes, commitment, member competence, and longevity (Gerstner & Day, 1997; Schriesheim et al., 1999).

There are a few studies that address leadership and character simultaneously. Sarros and Barker (2003) studied leader self-reports using 17 virtues, which was followed by Sarros et al.’s 2006 Australian study. However, their scale comprised only seven items and they encouraged other researchers to further validate their model of character. One other published study used Peterson and Seligman’s (2004) full 24 character strength complement and was conducted within the specific context of military leadership training. The population was primarily male and between 18–21 years old (Matthews, Eid, Kelly, Bailey, & Peterson, 2006). No outcome measures were assessed.

In the last of the three studies summarized in this paper, we used structural equation modelling to test several plausible models of factor structures and assess the outcomes of psychological wellbeing, affective commitment, organizational citizenship, affective trust, and cognitive trust. The novel contributions our subsequent studies provide include (a) a scale that is short, comprehensive, and based on contextualized qualitative analysis; (b) using other-report, not self-report, measures of virtues; (c) assessing the utility of previously untested character strengths-based leadership; (d) correlating leader character with other models of leadership; (e) testing our results in multiple studies; and (f) testing our leader character scale against

employee outcomes that are meaningful in both organizational and personal contexts.

### Study 1: Qualitative Assessment of Character Strengths

Exploration of leader character strengths was undertaken with 29 individuals in different positions, industries, ages, and stages within the workplace. We used a critical incident technique (Flanagan, 1949) in order to generate behavioural exemplars of the character strengths identified by Peterson and Seligman (2004). The CIT was chosen for its focus on “essential aspects of the behaviour being observed” (Flanagan, 1949, p. 422).

#### Method

**Participants.** Twenty-nine individuals provided examples of between 1 and 11 character strengths each. There were 16 females and 13 males between the ages of 27 and 66. They had worked between 9 and 45 years and had held between 4 and 22 jobs. Seventeen Canadians, 10 Americans, one South African, and one British citizen were interviewed. Individuals were solicited by face-to-face conversation or by email. Snowball sampling and referrals by individuals who were not interviewed also occurred. 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. All participants were employed when interviewed.

**Procedure.** Each person was asked to try to provide examples for at least eight of the 24 character strengths. Purposive sampling (Kemper, Stringfield, & Teddlie, 2003), which allows researchers to target particular underrepresented areas, was then conducted for the 12 character strengths for which five or fewer examples (e.g., curiosity, love, and hope) had been collected. Overall, between 3 (love) and 10 (kindness and perspective) examples were provided for each character strength.

Individuals were initially contacted by email. Those who agreed to be interviewed were then provided three documents in advance: an informed consent, Peterson and Seligman’s (2004) definitions for each of the 24 character strengths, and a set of general instructions so that they could have time to think of examples beforehand. Standardized prompts were provided for individuals who requested guidance or clarification.

#### Results

All exemplars were transcribed. A graduate assistant and one author then extracted between 3 and 10 themes for each character strength. Despite the diversity of peoples’ professional roles and experiences, overlapping themes

emerged from the descriptively rich examples. First, we extracted the keywords from each example. Next, we established the relationship between the keywords and identified any overlaps or differences. Finally, we tried to balance breadth and parsimony as we constructed items using the central theme of each strength. In the case of integrity, kindness, and humility/modesty, two themes emerged for each. Consequently, we constructed two items for each of these three strengths.

Our initial survey of Leader Character thus contained 27 items (one item each for 21 strengths and two items for the remaining three strengths). Of these 27 items, three were initially classified in character strengths other than those for which they were intended by one graduate student. We discussed and re-wrote those items. Two additional graduate students classified the adjusted items and achieved 100% inter-rater agreement. One response was reproduced (additional examples are available from the first author). For the character strength of open-mindedness, one person responded:

My boss had made a decision that became extremely controversial. She held a public meeting about the decision, took all the information she was provided from all the people that spoke at the meeting, and then, in light of all she’d heard, changed her mind in light of evidence. She wasn’t afraid to publicly change a decision or to be thought of as a weakling, or bullied...she may have had board members’ help in making decisions, but ultimately, she’s the one that wears it...and takes the heat. I don’t know too many people who would do that.

### Study 2: Quantitative Scale Development and Refinement

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. As previously detailed, 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 the second study were to (a) test the empirical factor structure of the Character Strengths in Leadership scale, and (b) explore the relationships and statistical properties between character strengths and other measures of leadership. LMX (Dansereau, Yammarino, & Markham, 1995), ethical leadership (Brown et al., 2005), passive leadership (Kelloway, Mullen, & Francis, 2006), and abusive supervision (Tepper, 2000) were concurrently administered to test convergent and discriminant relationships between constructs.



## Hypotheses

**Leader-Member Exchange (LMX).** The relationship between supervisors and followers has been identified as LMX. Empirical studies have demonstrated that the quality of leader-member relationships predicts follower role conflict and clarity, satisfaction (both overall and with supervisors), career outcomes, commitment, member competence, and longevity (Gerstner & Day, 1997; Schriesheim et al., 1999). Data from one meta-analysis indicated 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). Additionally, there is some meta-analytic evidence that members’ LMX ratings are more reliable than leaders’ ratings (Gerstner & Day, 1997). This supports our assertion that collecting supervisees’ ratings is an appropriate benchmark of leader behaviour. Therefore,

*Hypothesis #2-1: Employees reporting higher levels of leader character strengths will also report higher levels of supervisory-demonstrated LMX.*

**Ethical leadership.** Ethical leadership, as its name implies, resides at the intersection of ethics and leadership. It is a result of both situational influences (e.g., role modelling and ethical conduct) and individual characteristics (e.g., personality and moral reasoning), 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, 2006). Although ethics and character strengths are closely related, ethics are generally viewed as a subset within the general virtue literature. As ethical leadership is a related but nonidentical construct, it has been chosen to provide both convergent and discriminant dimensions. Therefore,

*Hypothesis #2-2: Employees reporting higher levels of leader character strengths will also report higher levels of supervisory-demonstrated ethical leadership.*

**Passive leadership.** Passive leadership is related to a laissez-faire approach that connotes avoidance and lack of interest (Bass, 1985; Bass & Avolio, 1990). 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). For the purposes of this study, passive leadership is defined by a simple two-factor solution of active and passive leadership styles (Bycio, Hackett, & Allen, 1995). Therefore,

*Hypothesis #2-3: Employees reporting higher levels of leader character strengths will also report*

*lower levels of supervisory-demonstrated passive supervision.*

**Abusive supervision.** Abusive supervision is a subset of workplace aggression and is a counterproductive work behaviour (Spector & Fox, 2005). Abusive supervision refers to behaviours such as intimidation, withholding vital information, blaming, or ridiculing a follower in front of others (Tepper, 2000). Abusive supervision is, not surprisingly, negatively correlated with psychological wellbeing and positively correlated with anxiety, although high levels of support from team members can buffer this relationship (Hobman, Restubog, Bordia, & Tang, 2009). Therefore,

*Hypothesis #2-4: Employees reporting higher levels of leader character strengths will also report lower levels of supervisory-demonstrated abusive supervision.*

## Method

**Sample.** An email snowball sample was sent to selected personal and professional contacts listed in both authors’ email. The survey was completed and submitted by 302 individuals and listwise deletion resulted in 270 useable responses. All surveys with missing data were removed. Of the useable surveys, we received responses from 205 people from all over North America, and 65 individuals responded through an intercompany email in a Northeastern division of a large, multinational corporation.

**Procedure and measures.** Respondents were asked to rate their direct supervisor using a Likert scale (1–5 ratings except for the LMX scale, which was rated 1–7). Character strengths were measured by the scale described in the first study. LMX was assessed by Liden and Maslyn’s (1998) scale (12 items). Ethical leadership was assessed by Brown et al. (2005) scale (10 items). Following Kelloway et al. (2006), three items that measure passive leadership were adapted from the Multi-Factor Leadership Questionnaire (MLQ 5X). Abusive supervision was measured by Tepper’s (2000) abusive supervision scale (15 items). Negative affectivity was included to control for response bias using the 10 negative items of the Positive and Negative Affective Schedule (Watson, Clark, & Tellegen, 1988).

## Results

**Factor analysis.** The 27-item scale developed in study one was submitted to a principal axis factor analysis with a varimax rotation. A three-factor solution using 14 items (13 character strengths with two items for kindness) represented the most empirically appropriate and theoretically congruent

solution (Table 1). Three factors had eigenvalues greater than 1 (12.87, 1.76, 1.27), and items were retained that loaded above .5 on only one factor (cross-loaded items were uninterpretable and thus were not included). This solution explains 59% of the variance.

For the remainder of the paper, virtue categories are capitalized (Wisdom, Humanity, Temperance) to differentiate them from the character strengths (written in lowercase). Peterson and Seligman (2004) found Humanity and Justice to be the most common cultural and historical theoretical virtue categories, while "Temperance and Wisdom finish a close second" (p. 50). Their own results indicated diffuse empirical factor structures whereby character strengths often broke away from their theoretical housing (Peterson & Seligman, 2004, p. 632). They conceded that character strengths are "probably not" ubiquitous and may change by geographical region or context (Peterson & Seligman, 2004, p. 50).

Empirically, our first factor corresponds with 4 of the 5 character strengths in their 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 2 of the 3 character strengths within the theoretical virtue category of Humanity: love and kindness. Two kindness items were written to incorporate features that emerged in Study 1: generosity of time/resources and compassionate caring. The fourth item relates to gratitude, which is theoretically associated with Transcendence. Given the overlap of the

theoretically derived character strengths onto these two empirical virtue categories, the theoretical category names of 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 from Temperance, and beauty/excellence from Transcendence. Despite this break from theoretical housing, however, this factor encompasses regulatory features that appear to represent a moderating factor within character-strengths based leadership, so Peterson and Seligman's (2004) category title of Temperance has been retained.

**Partial correlations controlling for negative affect.** The correlation matrix for all study variables is presented in Table 2.

Partial correlations were also computed between the three character strength scales and all measures of leadership while controlling for negative affect. Although some of the bivariate correlations indicate a relative change in magnitude, correlations retained both their direction and their significance in all cases.

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 one-factor solution versus a latent three-factor solution. The three-factor analysis included three character strengths subscales as the first factor, the four LMX subscales as the second factor, and the ethical leadership scale as the third factor. This single indicator factor was estimated by fixing the factor loading and error variance based on the reliability estimate (Kelloway, 1998). Differences between the models were assessed with a variety

**Table 1**  
*Factor Loadings for the Three-Factor Virtue Categories Model*

Variable	Wisdom	Humanity	Temperance
	$\alpha = .89$	$\alpha = .90$	$\alpha = .84$
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)			.63

**Table 2**  
*Means, Standard Deviations, Zero-Order Correlations, and Reliability Coefficients for Study 2*

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1 Wisdom	3.86	.84	(.89)	.66**	.63**	.61**	.53**	.49**	.65**	.70**	-.46**	-.55**
2 Humanity	3.81	.96	.70**	(.90)	.64**	.74**	.61**	.53**	.64**	.72**	-.46**	-.53**
3 Temperance	3.77	.81	.67**	.68**	(.84)	.56**	.46**	.53**	.74**	.75**	-.39**	-.66**
4 LMX Effect	5.74	1.36	.66**	.78**	.61**	(.89)	.65**	.57**	.68**	.69**	-.46**	-.41**
5 LMX Loyalty	5.67	1.30	.59**	.67**	.52**	.71	(.87)	.54**	.60**	.63**	-.43**	-.44**
6 LMX Contribution	5.96	1.17	.55**	.59**	.58**	.63**	.61**	(.78)	.71**	.60**	-.16**	-.44**
7 LMX Respect	5.84	1.49	.69**	.69**	.77**	.72**	.65**	.75**	(.93)	.75**	-.39**	-.62**
8 Ethical Leadership	3.69	.89	.74**	.76**	.77**	.74**	.69**	.66**	.78**	(.92)	-.53**	-.65**
9 Abusive Supervision	1.23	.42	-.54**	-.56**	-.47**	-.57**	-.54**	-.31**	-.48**	-.62**	(.92)	.41**
10 Passive Supervision	2.08	1.16	-.59**	-.58**	-.69**	-.49**	-.50**	-.50**	-.66**	-.69**	.49**	(.88)

**Notes:** N = 266, \*\* =  $p < .01$ , coefficient  $\alpha$  for observed variables presented on the diagonal ( ). Partial correlations controlling for negative affect appear to the right of the diagonal.

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).

The three-factor solution ( $\chi^2$  (18, N = 270) = 105.50,  $p < .01$ , NFI = .94; CFI = .95; RMSEA = .13,  $p = .000$ ),  $\Delta\chi^2$  (2, N = 270) = 24.5,  $p < .01$ ) indicated a better fit to the data than a one-factor solution ( $\chi^2$  (20, N = 270) = 130.00,  $p < .01$ ; NFI = .93; CFI = .94; RMSEA = .14,  $p = .000$ ). Although the RMSEA is a bit high, it is sensitive to a factor structure that is exactly right, whereas the NFI and CFI values are not as sensitive. In this case, the LMX items may not have cleanly factored into their four-factor theoretical housing, or the Ethical Leadership Scale may have empirically represented more than its theoretical one factor. Since the three-factor structure was a better fit than the one-factor solution, the relationship between each factor and different outcomes are tested in a second population in study three.

**Discussion**

This study makes several novel contributions. First, it provides a unique comparison of character strengths and leadership. Secondly, it tests character strengths against other known measures of leadership and uses other-reports to do so. This is a strength of this study since reported correlations of leader and follower perceptions range from .24 (Scandura, Graen, & Novak, 1986) to .50 (Graen & Cashman, 1975). Additionally, there is some evidence that members' LMX ratings are more reliable than leaders' ratings (Gerstner & Day, 1997). Our results also provide a short, multifactorial scale of character strengths and add to the literature regarding the empirical factor structure of Peterson and Seligman's (2004) theoretical virtue categories.

Each of the hypotheses were supported in the expected direction. In support of Hypothesis 2-1, we found that

increased follower ratings of character strengths led to significantly higher ratings of LMX. In support of Hypothesis 2-2, increased follower ratings of character strengths led to significantly higher ratings of leader-demonstrated ethical leadership. In support of Hypotheses 2-3 and 2-4, increased follower ratings of character strengths predicted lower levels of both passive supervision and abusive supervision by leaders.

Empirically, our findings indicate that factors identified in previous studies were often quite similar; intellect and courage share features of Wisdom, interpersonal skills and emotion share features of Humanity, and restraint shares features of Prudence. However, several items loaded on unexpected factors. For instance, bravery loaded on the Wisdom virtue category, and appreciation of beauty and excellence loaded on the Temperance virtue category. As sourced from qualitative interviews, the bravery item reads, "My supervisor is willing to take a risk for what he/she believes is the right thing." We feel that the content of this construct refers to a person's ability to consider other possibilities and then identify which course of action is the most "right" among a host of alternatives, even if the decision is unpopular. This ability generally comes from judgment and experience, and wisdom is usually a primary byproduct of experience. Therefore, we feel the bravery item provides a necessary counterpoint to the cognitive flexibility inherent to creativity, curiosity, and open-mindedness, and makes an important conceptual contribution to the virtue category of Wisdom.

The appreciation of beauty and excellence reads, "My supervisor appreciates small details as parts of a whole." This item may be perceived as problematic due to a lack of cohesion between the name and the item. However, when interviewed, people provided examples that included: recognizing the value of ideas that ultimately contributed

to larger products or more comprehensive services; identifying details as important parts of a whole; and having patience in seeing the smaller, intricate aspects of the job and taking pride in these small things because that is what makes the “whole” piece. Organizational products or services require careful, sequential, constructive, and incremental pieces. Since leaders are ultimately responsible for the quality of their organization’s product or service, whether tangible or intellectual, we believe this item seems appropriately housed within the virtue category of Prudence.

Finally, we argue that there are conceptual distinctions among our factors that are supported by other theorists. As demonstrated by Bycio et al. (1995), high factor inter-correlations do not necessarily indicate equally high conceptual similarity. In their assessment of transformational leadership, results indicated that outcomes were differentially predicted despite the high empirical factor correlations. McKenna, Rooney, and Boal (2009) help articulate some of the distinctions. Their “metatheory” of wisdom includes five propositions that touch on all three of our factors and on many of the character strengths themselves (McKenna et al.). They espouse leaders to (a) use reason and careful observation; (b) allow for subjectivity and nonrationality in decision-making; (c) value humanity and virtuosity with regard to outcomes that undergird prudence; (d) maintain a practical approach that includes judgment, communication, and sensitivity; and (e) include aesthetic and intrinsic creativity to create: “conscientious deciders who use active cognitive processes rather than simply habitual patterns of thought” (McKenna et al., p. 180). At the character-strength level, additional support for the conceptual contribution of prudence to leadership is that “prudence focuses upon the obligation of a leader to achieve moral self-mastery, to attend to the context of a situation, and through deliberation and careful judgment to seek concrete outcomes that are legitimate and durable” (Dobel, 1998, p. 74). Clearly, leaders who are able to marshal their virtuous traits, maintain positive self-concepts, and direct their actions will grow toward moral self-mastery and strong moral agency (Weaver, 2006). These features enable leaders to influence followers in positive ways.

### Study 3: Development and Evaluation of a Model of Character Strengths in Leadership

This study tests a model of leaders’ character strengths (Figure 1) and adds data-driven support to 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 leaders’ character strengths positively influence followers’ workplace and individual outcomes.

### Workplace Outcomes

**Organizational citizenship behaviours (OCBs).** OCBs include dimensions of altruism, compliance, courtesy, sportsmanship, and civic virtue (Organ, 1988). They are robust indicators for increased effectiveness at both unit and organizational levels (Wat & Schaffer, 2005). OCBs have strong empirical links with LMX and job satisfaction (Lapierre & Hackett, 2007). 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. Therefore,

*Hypothesis #3-1: Employees reporting higher levels of supervisory-demonstrated character strengths will also report higher personal levels of organizational citizenship behaviours.*

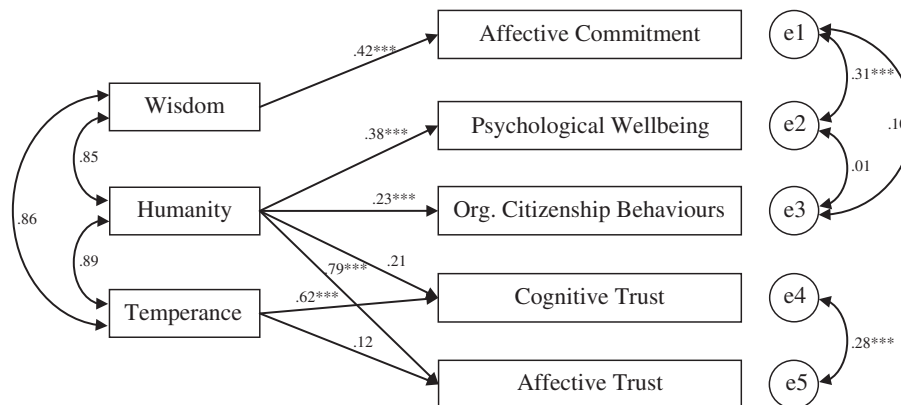
**Organizational commitment.** Organizational commitment was originally defined based on affective (personal identification), continuance (possibility of perceived losses), and normative (obligation, investment, or socialization) commitment (Meyer & Allen, 1997). Some models also include goal-regulated behaviour (Meyer, Becker, & Vandenberghe, 2004). A multitude of studies have assessed antecedents and correlates of organizational commitment but, for space considerations, will not be reproduced here. This study focuses on affective organizational commitment. Therefore,

*Hypothesis #3-2: Employees reporting higher levels of supervisory-character strengths will also report higher personal levels of affective organizational commitment.*

**Psychological wellbeing.** Employee wellbeing is a macro-construct that has been linked to both organizational and individual wellbeing (Diener, Lucas, & Oishi, 2002; Gagné & Deci, 2005; Kelloway, Gallagher, & Barling, 2004; Maslow, 1987). Wellbeing has recently been modelled as a three-component construct made up of subjective, workplace, and psychological wellbeing and linked to strengths-based development (Page & Vella-Brodrick, 2009). Although experimental findings indicate that positive affect is considered “the hallmark of wellbeing” (Lyubormirsky, King, & Diener, 2005, p. 803), there are only a few studies showing that workplace experiences can transcend the workplace and affect individual outcomes of health and wellness, including context-free mental health (Arnold, Turner, Barling, Kelloway, & McKee, 2007). One study found that character strengths related to vitality (e.g., curiosity, gratitude, and hope) were associated with features of wellbeing such as life satisfaction, subjective vitality, relatedness, and meaning and engagement (Brdar & Kashdan, 2010). Therefore,



Figure 1. Standardized parameters for a nonmediated model



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

*Hypothesis #3-3: Employees reporting higher levels of supervisor-demonstrated character strengths will also report higher levels of personal psychological wellbeing.*

**Trust.** 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. The length of a relationship, however, was found to be unrelated to trust (-.01) (Dirks & Ferrin, 2002).

Dirks and Ferrin (2002) identified two conceptually distinct theoretical streams of trust: affective and cognitive. Affective trust is the “relation-based perspective” of the leader and follower interaction. It is based on social exchange, reciprocity, goodwill, obligation, care, and consideration. The second conceptualization is cognitive trust and refers to a “character-based perspective.” It recognizes the roles that authority and hierarchy play in a leader/follower relationship and focuses on the follower’s perception of the leader’s character and characteristics (Dirks & Ferrin, 2002; McAllister, 1995).

*Hypothesis #3-4: Employees reporting higher levels of supervisor-demonstrated character strengths will also report higher levels of cognitive and affective trust.*

**Method**

**Sample.** Employees of a post-secondary university in Atlantic Canada received an email from the human resources department. The initial email was sent to 1296 individuals comprised of 802 members of a unionized group of technical, support, and clerical staff, and 494 non-union managers. Fourteen percent of technical and support staff and 43% of managers completed the survey. This resulted in an aggregated response rate of 25%. The respondents were of varied ages (45% were 26–44, 41% were 45–54, and 14% were 55–64). Most were female (77%) and Caucasian (93%).

**Measures.** Our 14-item Character Strengths in Leadership scale was the first measure. We also used Williams and Anderson’s (1991) seven-item measure of individual OCBs (OCBI) (explicitly designed to be used for self-report Williams & Anderson, 1991). The survey also contained Allen and Meyer’s eight item affective commitment scale (Allen & Meyer, 1990) and items from both cognitive trust (four items) and affective trust (two items) (McAllister, 1995). We used the 12-item General Health Questionnaire (GHQ) (Goldberg, 1978) and the Positive and Negative Affect Scale (PANAS) (Watson et al., 1988) as well.

**Results**

The intercorrelations for all study variables are presented in Table 3.

A confirmatory factor analysis assessed the fit of a one-factor versus a three-factor model of character strengths distribution as 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). A three-factor solution indicated a better fit to the data ( $\chi^2$  (74, N=327)=226.8,  $p < .01$ ; NFI=.95; CFI=.96; RMSEA=.08,  $p < .001$ ), ( $\Delta\chi^2$  (3, N=327)=53.8,  $p < .01$ ) than a one-factor solution ( $\chi^2$  (77, N=327)=280.6),  $p < .001$ ; NFI=.93; CFI=.95; RMSEA=.09,  $p < .001$ ).

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.

We next established the fit of the measurement model for the entire model by conducting a confirmatory factor analysis comparing the fits of a latent one-factor solution versus a latent seven-factor solution. Because of the large number of items involved, we constructed item parcels to represent each construct (Bandalos, 2002; Sass & Smith, 2006). A total of 15 item parcels were constructed. A seven-factor solution ( $\chi^2$  (69, N=327)=132.9; NFI=.96; CFI=.98; RMSEA=.05,  $p < .01$ ), ( $\Delta\chi^2$  (21, N=327)=429.8,  $p < .01$ ) indicated better fit than a one-factor model did ( $\chi^2$  (90, N=327)=562.7; NFI=.85; CFI=.87; RMSEA=.13,  $p = .00$ ) and an absolute good fit to the data.

The nonmediated model also provided a good fit ( $\chi^2$  (14, N=327)=19.54,  $p = .15$ ; NFI=.99; CFI=1.00; RMSEA=.04,  $p < .01$ ). As shown in Figure 1, our results parsed the factors of leader-demonstrated character strengths into three factors that, in turn, predicted follower outcomes differentially. In support of Hypothesis 3–1, higher levels of leader Humanity predicted organizational citizenship behaviours (OCBs) ( $\beta = .23$ ,  $p < .01$ ). In support of Hypothesis 3–2, higher levels of leader Wisdom predicted affective commitment ( $\beta = .42$ ,  $p < .01$ ). Higher levels of leader

Humanity also predicted Hypothesis 3–3, follower psychological wellbeing ( $\beta = .38$ ,  $p < .01$ ), and Hypothesis 3–4, follower affective trust ( $\beta = .79$ ,  $p < .01$ ). Higher levels of leader Temperance also supported Hypothesis 3–4 by predicting cognitive trust ( $\beta = .62$ ,  $p < .01$ ). We allowed the error terms of affective commitment, psychological wellbeing, and organizational citizenship behaviours to correlate, as well as cognitive and affective trust.

**Discussion**

The findings of the confirmatory factor analysis in Study 3 (Figure 1) are congruent with the findings of Study 2 and suggest that Humanity, Wisdom, and Temperance are related but distinct constructs with differential relationships between outcome measures. Our findings also resonate with three of Peterson and Seligman’s (2004) five initial factor structures: restraint, intellect, and interpersonal skills. Neither emotion nor theology emerged within our analyses, which may be related to contexts other than the workplace.

**Discussion**

**Summary**

Our mixed-method results indicate that a leader’s wisdom, temperance, and humanity affect employees differentially with regard to organizational citizenship behaviours, affective commitment, psychological wellbeing, and both cognitive and affective trust. Leader humanity was the most broad-based predictor and was comprised of kindness, love,

**Table 3**  
*Means, Standard Deviations, Zero-Order Correlations, and Reliability Coefficients for Study 3*

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
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 Org. Citizen Behaviours	4.2	.56	.23**	.23**	.20**	.17**	(.80)					
6 Affective Commit.	4.77	1.33	.45**	.40**	.40**	.39**	.19**	(.87)				
7 Wellbeing	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 Education	Bachelor’s	(41%)	.19**	.11	.13	.1	-.01	.03	.03	-.02	-.18**	-.34**

**Notes:** N=327 for variables 1–8. The sample N=326 for variables 9, 10, and 11; data were collected in bracketed groups, so modes are presented.

\*\*= $p < .01$ ; \*= $p < .05$ , coefficient  $\alpha$  for observed variables presented on the diagonal ( ).

and gratitude. Cultivation and application of different character strengths creates a unique opportunity for leaders to focus their efforts in a particular domain depending on their own skills, organizational needs, and personnel.

In addition to the construct of leader character, there is a larger discussion around both character strengths and virtuous behaviour as a whole. Bright, Stansbury, Alzola, and Stavros (2011) have maintained that virtue is “a mean between extremes” (p.), while Fowers (2008) has asserted that character is not absolute and challenges positive psychologists to further assess what is meant by “good.” Thoughtful attention to the cautions articulated by several other recent critiques (Hackman, 2009; Wright & Quick, 2009a) can only strengthen the honesty, integrity (Wright & Quick, 2009b), and, ultimately, the utility of this relatively new arm of psychological inquiry.

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. We found it interesting that none of the extant studies nor our 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.

### Contributions to Scholarship

Overall, these studies contribute what we believe to be the first measure of leader character that is brief, multidimensional, psychometrically sound, contextually grounded, and focused on the individual rather than the organization.

### Applied Implications

Specifically, leader humanity predicted employees' psychological wellbeing, organizational citizenship behaviours, and affective trust. Leader wisdom predicted affective commitment, and leader temperance predicted cognitive trust.

The potential “teachability” of character strengths is an area that roundly deserves further inquiry. If 28% of leadership skills are explained by genetics (Bono & Judge, 2004), life experiences explain far more of the variability. Character strengths provide explicit ways to build leadership training and could certainly be the target of instruction. In future studies, character strengths may prove to be antecedents of transformational leadership, which has nearly always been the focus of studies that demonstrate leadership as a teachable skill set (Barling, Weber, & Kelloway, 1996; Bono & Judge, 2004; Collins & Holton, 2004). To this end, our studies help map how leaders' moral agency develops as

well as provide further understanding of the “identity development process” every leader goes through (Weaver, 2006, p. 352).

### Limitations and Future Research Directions

The data for the second study were collected from a snowball sample. This permitted data from a wide range of individuals in over 10 professional areas from all over North America, but it is possible that there is an artificial level of homogeneity among the respondents as people asked their friends and colleagues to respond. However, we found the geographic dispersion and industry classification variation to be reassuring. A second potential limitation is that each study focused on follower ratings rather than follower and supervisor pairs. Since the perceptions of how followers view their leaders were the relevant features of interest, we did not find this insurmountably problematic. Nonetheless, replicating these studies in a sample that is more gender-balanced and with more finely nuanced dimensions of wellbeing would also be worthwhile. Given the cross-sectional nature of these data, it will be left to further studies to determine more about longitudinal relationships among the differentiation, correlates, and outcomes of character strengths and leadership.

Given that research has historically focused on the effects of leadership, we think it would be interesting to compare and contrast a variety of models of moral reasoning to assess what “feeds the leader.” These could include Kohlberg's postconventional and conventional moral reasoning (Turner, Barling, Epitropaki, Butcher, & Milner, 2002), Gilligan's idea of an ethic of care versus an ethic of justice (Simola, Barling, & Turner, 2010), Kidder's care-based thinking versus rule-based thinking (Kidder, 2003), ethical leadership (Brown et al., 2005; Neubert et al., 2009), and autonomous versus controlled motivation (Deci & Ryan, 1987). As character strengths research continues, outcome measures of customer satisfaction, productivity, profitability, turnover, and safety could also be tested.

At the most practical level, there is meaningful work to be done in terms of identifying and implementing effective interventions that can directly improve people's lives with positive psychological outcomes. Proactive, preventatively-focused agendas do benefit children and young adults (Catalano, Hawkins, Berglund, Pollard, & Arther, 2002; Park & Peterson, 2008), and recent meta-analytic data indicate that positive interventions can increase wellbeing and decrease depressive symptoms in adults (Sin & Lyubomirsky, 2009). Comparing character strengths with other personality and trait theories or longitudinal studies with other leadership models (e.g., transformational, ethical, and/or servant leadership) would further assess their role and contribution. Following Schwab's (1980) criteria for a new construct, testing character strengths with other outcomes will also clarify their differential predictive

abilities. In sum, encouraging evidence is mounting, and we consider further investigation into the role and effects of character strengths to be worthwhile for both organizations and for the individuals within them.

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