Convergent and Discriminant Validity of the Servant Leadership Behaviour Scale

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ABSTRACT
This paper outlines the validation of a multidimensional measure of servant leadership behavior (Servant Leadership Behavior Scale or SLBS). Servant leadership is a leadership approach characterized by its service orientation, holistic outlook, and moral-spiritual emphasis. Previous studies operationalized servant leadership into a set of observable behaviors categorized under six empirically distinguishable dimensions (Voluntary Subordination, Authentic Self, Covenantal Relationship, Responsible Morality, Transcendental Spirituality, and Transforming Influence). The resultant six-factor, 35-item SLBS is further validated in this study. Specifically, the present study provides convergent and discriminant validity of the six factors of the SLBS through examination of chi-square difference tests of several competing models and their respective fit indices, as well as in relation to measures of character and Machiavellian orientation. The theoretical contributions and practical implications of this paper as well as some future research directions are discussed in the concluding section.

Keywords: Leadership, ethical behaviour

Servant leadership has been typically characterized as a leadership approach that is service-orientated, moral-laden, follower-centric, and holistic-minded (Sendjaya & Sarros, 2002). Studies in this emerging field have made a firm entrance into the literature (Autry, 2001; De Pree, 1989; Farling, Stone, & Winston, 1999; Graham, 1991, 1995; Greenleaf, 1977; Jaworski, 1997; Palmer, 1998; Patterson, 2004; Russell, 2001), with an increasing number of empirical studies being conducted and reported in the field of Organizational Behavior. In these aforementioned studies, servant leadership has been associated with many positive attributes increasingly seen as important fabrics of many organizations today. In a stark contrast to corrupt leadership behaviors exposed in recent publications (Kellerman, 2004; Lipman-Blumen, 2004), servant leadership offers a fresh approach to leadership that strives to keep leaders and followers away from many kinds of leadership pitfalls. At the heart of servant leadership is a desire to lead others by serving them instead of serving self by using others, a natural tendency that often leads to moral failures of leaders. Servant leadership starts with the internal orientation of the leader, and not merely an external compliance (Sendjaya & Sarros, 2002), which means it is not so much about ‘doing’ the acts of service as it is about ‘being’ a servant. Hence, servant leaders have many potentials to create profound, transformational effects on their followers, empowering them to “grow healthier, wiser, freer, more autonomous, and more likely themselves to become servants” (Greenleaf, 1977, p. 13-14).

Careful review of extant literature led to the identification of a set of dimensions of servant leadership, as shown in Figure 1, namely voluntary subordination; authentic self; covenantal relationship; responsible morality; transcendental spirituality; and transforming influence. Given the space constraint, only the abridged version of the literature review is presented in this paper.

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Insert Figure 1 about here
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SERVANT LEADERSHIP DIMENSIONS

Voluntary Subordination
Wilkes (1998, p. 94) argued that contrary to the natural inclination of leaders to get ahead, “servant leaders give up personal rights to find greatness in service to others.” The readiness to renounce the superior status attached to leadership and to embrace greatness by way of servanthood is a hallmark of servant leadership. Sanders (1994, p. 15) asserts: “True leadership is achieved not by reducing men to one’s service but in giving one’s selfless service to them.” Voluntary Subordination then signifies the concept of ‘being a servant first, not leader first’. The literature suggests that central to servant leadership is a willingness to take up opportunities to serve others whenever there is a legitimate need regardless of the nature of the service, the person served, or the mood of the servant leader (Blanchard & Hodges, 2003; Foster, 1989; Marshall, 1991; Wilkes, 1998).

**Authentic Self**

Servant leadership has been conceptually linked to the attributes of humility (McGee-Cooper & Looper, 2001; Swindoll, 1981), integrity (Russell & Stone, 2002; Wong & Page, 2003), accountability (Block, 1993; Marshall, 1991), security (Palmer, 1998), and vulnerability (Batten, 1998; De Pree 1997; Patterson, 2004). The authentic self dimension accommodates these attributes, following Autry (2001) and De Pree (1989) who suggested that servant leaders are authentic leaders. The importance of authenticity (defined by Autry (2001) as the state of knowing and being who we really are) has been acknowledged as a core dimension in leader-follower relationships (De Pree, 1989; George, 2003). Guillory (1997, p. 108) argued that “leadership begins with self . . . a sufficiently in-depth knowledge of ourselves that our external activities naturally carry commitment and passion.”

**Covenantal Relationship**

De Pree (1989) suggested that servant leadership builds relationships with others whom they serve on the basis of covenants, which are intensely personal bonds among individuals engaged in intrinsically motivated efforts to achieve common objectives which may not be identified in advance. A covenantal relationship is characterized by shared values, open-ended commitment, mutual trust, and concern for the welfare of the other party (Bromley & Busching, 1988; De Pree, 1989; Elazar, 1980; Graham & Organ, 1993). Given the strong ties that bind covenantal partners, such as servant leaders and the led/served, the relationship is not easily stretched to a breaking point or threatened by disagreement or conflict (Van Dyne, Graham, & Dienesch, 1994). Covenantal relationships are developed and nurtured by servant leaders through the following behaviours: Accepting other people as they are (Autry, 2001); making themselves available for other people to build a genuine relationship (De Pree, 1992); engaging every individual as equal partners in the organization (Patterson, 2004); and collaborating with others to tap into their individual varied talents (De Pree, 1992).

**Responsible Morality**

Morality is a necessary element in leadership (Bass & Steidlmeier, 1999; Howell & Avolio, 1992; Price, 2003; Sergiovanni, 1992), and is central to servant leadership (Ciulla, 1995; Graham, 1991; Sendjaya, 2002). The exercise of authority and power by leaders always entails ethical challenges in every leader-follower relationship (Hollander, 1995), so servant leaders must ensure that
both the ends they seek and the means they employ are morally legitimized, thoughtfully reasoned, and ethically justified (Sendjaya, 2002). On this basis, servant leaders exhibit responsible morality in their reasoning and action, and elevate the same moral conviction in others. Graham (1995) suggested that servant leadership employs relational power which facilitates good moral dialogue between leaders and followers, and promotes and encourages others to engage in post-conventional moral reasoning. As servant leaders always appeal to higher ideals, moral values, and the higher-order needs of followers (Yukl, 1990, p. 210), they are more likely to ensure that both the ends they seek and the means they employ can be ethically justifiable.

**Transcendental Spirituality**

The emergence of research on spiritual leadership as a form of or connected to servant leadership is well documented (Fairholm, 1997; Giacalone and Jurkiewicz, 2003; Korac-Kakabadse et al., 2002; Mitroff & Denton, 1999a). Fry (2003, p. 708) provided a clear articulation of the relationship between the two constructs, in that “the servant leader brings together service and meaning – the leader is attuned to basic spiritual values and, in serving them serves others including colleagues, the organization, and society.” These studies and others suggest that Transcendental Spirituality is an element of servant leadership which incorporates a sense of religiousness, interconnectedness, mission, and wholeness. The spirituality of servant leaders is typically attached to the sense of interconnectedness between the internal self and the external world (Fairholm, 1997; Mitroff & Denton, 1999; Palmer, 1998; Stamp, 1991; Vaill, 1998), to the idea of calling or vocation, and to the notion of wholeness (Conger, 1994; Hicks, 2002) and “holistic, integrated life” (Fairholm, 1997, p. 31).

**Transforming Influence**

Central to the idea of servant leadership is its transforming influence on other people. Greenleaf (1977, p. 27) argued that servant leadership is demonstrated whenever the people who are served by servant leaders are positively transformed in multiple dimensions, including emotionally, intellectually, socially, and spiritually, and in turn transform the people they serve into servant leaders. What is unique in servant leaders is their commitment to the growth of others, and believing that people have an intrinsic value beyond their contribution as workers or employees. To this end, servant leader mentor others to be themselves instead of compelling people to conform (Autry, 2001), and exhibit trust through their willingness to delegate responsibilities and share authority with others (Wilkes, 1998). The ultimate purpose of empowerment is not merely organizational, often expressed in financial terms, but more importantly for the development and growth of individuals within these organizations.

**Servant Leadership Measures**

Apart from the Servant Leadership Behavior Scale developed in the current study, there are four empirical measures of servant leadership which have been published in the literature, namely Laub’s (2003) Organizational Leadership Assessment (OLA), Page and Wong’s (2003) Revised
Servant Leadership Profile (RSLP), Barbuto and Wheeler’s (2006) Servant Leadership Questionnaire (SLQ), and Whittington, Frank, May, Murray, and Goodwin’s (2006) Servant Shepherd Leadership Scale (SSLS). The comparison between these four measures and the SLBS is outlined in Table 1.

Clearly there is a convergence among all measures in the inclusion of servanthood (i.e., willingness to serve others) as a fundamental dimension of servant leadership, albeit the different terminologies used (i.e., Voluntary Subordination in SLBS, Values People in OLP, Servanthood in RSLP, Altruistic Calling in SLQ, and Other-Centeredness in SSLS). However, the idiosyncratic attributes of servant leadership go beyond the dimension of servanthood. For example, the intent to serve others does not naturally emerge, nor does it happen in a vacuum. Instead it is driven by the leaders’ spiritual insights and humility (Graham, 1991). Equally important is that both the ends and means of the acts of serving are exercised in accordance with moral and ethical principles. This paper argues that spirituality and morality-ethics are the sine qua non of servant leadership, which is why they are included in the SLBS. However, the OLA, RSLP, SLQ, and SSLS exclude these two behavioral dimensions key to servant leadership, against extant literature which clearly indicates the link between servant leadership and spirituality (Fairholm, 1997; Korac-Kakabadse, Kouzmin, & Kakabadse, 2002), and between servant leadership and morality or ethics (Graham, 1991, 1995; Yukl, 1990). Without its spiritual and moral-ethical emphases, there is nothing new about servant leadership that has not been addressed in existing leadership studies. For example, in case of the OLA and RSLP, half of the OLA dimensions (i.e., Values People, Provides Leadership, and Develops People) and most of the RSLP dimensions (i.e., Leading, Visioning, Developing Others, Team-Building, Empowering Others, Shared Decision Making, and Integrity) arguably may be found in other leadership measures such as Alban-Metcalfe and Alban-Metcalfe’s (2001) Transformational Leadership Questionnaire or Bass’ (1985) Multifactor Leadership Questionnaire. Hence, the inclusion of the spiritual and moral-ethical dimensions in the SLBS reflects a more comprehensive construct of servant leadership than existing measures. Apart from spirituality and morality-ethics, the other dimensions of servant leadership tapped in the SLBS and the other four measures are by and large comparable (see Table 1 for summary).

Previous studies have provided preliminary psychometric properties of the SLBS (Sendjaya, 2005). The content validity of the measure was established on the basis of literature review, content analysis of interview data, and content expert validation, resulting in the operationalization of the six dimensions of servant leadership behaviors along with each of their sub-dimensions (see Figure 1). This process ensured that the measure sufficiently captured the specific domain of leadership under examination, and excluded irrelevant items. The proposed six one-congeneric models was then confirmed using confirmatory factor analysis on the basis of survey questionnaire data (N = 277).
Structural equation modeling established the unidimensionality of the SLBS, generating a good fitting model with 35 theoretically substantive and parsimonious items. The purpose of the present study is to further validate the measure by examining through structural equation modelling the proposed confirmatory factor solution of the six-factor, 35-item SLBS. Competing model analyses were also carried out to compare the goodness-of-fit indices of the several alternative structural models of the SLBS.

METHODS

Sample and Procedure

An online survey involving two for-profit organizations and two not-for-profit organizations was conducted. The survey asked respondents to evaluate the leadership behaviors of their current supervisor or direct leader, using a 5-point Likert scale (1= strongly disagree to 5= strongly agree). A total of 206 out of 648 possible responses in the population was received, with 14 unusable responses due to excessive missing data. Hence, the survey generated 192 useable responses, which represented a response rate of 30%. A covering letter explaining the purpose of the study was sent to the employees of the sample organizations via the organization’s internal email system. These potential respondents were invited to go to a Web address included in the letter and complete the questionnaire.

The respondents were predominantly male (57%). A majority of the sample was in the 30-49 age group (60%). Most (86%) respondents held tertiary degrees. More than one third of the respondents were professionals from various organizational functions at the time of the survey. The rest of the respondents comprised non-management (27%), middle managers (26%), and senior managers (12%). Most of the respondents were born in Australia and New Zealand (64%) and had been in their current position for one to five years (76%). The length of time respondents had worked together with their direct leaders varied, but most respondents reported from six months to two years (57%). As for the demographics of the supervisors and direct leaders evaluated by the respondents, they were predominantly male (75%), older (75% were 30-49 years of age), and had Bachelors (39%) or Masters (25%) degrees. More than half of the supervisors were professionals with direct reports (53%); the rest of the respondents for the most part were senior executives (14%) and middle managers (27%). A majority of the direct leaders had been in their current position for 1-2 years (38%), 2-5 years (24%), 5-10 years (15%). Compared to the respondents, a higher percentage of leaders were born in Australia (64%), with others from New Zealand (4%), UK (3%), USA/Canada (7), and Asia (7%).

Measures

Apart from the SLBS, two other measures were used in this study to build the convergent and external discriminant validity to the servant leadership measure, namely the Character Assessment Rating Scale (CARS) and the Machiavellian Scale (MACH). It was expected that the SLBS would be positively correlated to the CARS and negatively correlated to the MACH scale.
**Characters Assessment Rating Scale.** The 12-item Character Assessment Rating Scale for Supervisors (the CARS Rev Sups) which assesses character-related behaviors of individuals was employed to assess convergent validity (Barlow, Jordan, & Hendrix, 2003; Hendrix, 2001; Hendrix & Berkowitz, 2000). Respondents rate the frequency with which their direct leaders display certain dimensions using a 9-point behavioral observation rating scale, ranging from 0 (Exceptionally Low) to 9 (Exceptionally High). The twelve items in the scale measure the twelve dimensions of character: integrity, honesty, organization loyalty, employee loyalty, selflessness, compassion, competency, respectfulness, fairness, self-discipline, spiritual appreciation, and cooperativeness. In a recent validation study involving 1114 respondents, factor analysis of the twelve items yielded a one factor model with an alpha of .93 (Barlow et al., 2003). Similarly in this study, the scale indicates a very strong internal consistency reliability ($\alpha = .97$) and its correlations quite varied ranging from 0.44 to 0.90, although most items correlated with each other at levels between 0.70 and 0.80.

**Machiavellian Scale.** To test the external discriminant validity, the Machiavellianism scale, which taps a person’s general strategy for dealing with people particularly the extent to which he/she feels other people are ‘manipulable’ in interpersonal relations was used in this study (Christie & Geis, 1970). A Machiavellian is traditionally considered as someone who views and manipulates others for his/her own purposes. In this study, we used the 20-item, three-factor model that is rated using a seven-point Likert scale ranging from strongly disagree (scored 1) to strongly agree (scored 7). However, the two items of the Generalized Morality factor were excluded in the current study as both were considered theoretically irrelevant and do not represent behavioural responses (i.e., *All in all, it is better to be humble and honest than important and dishonest* and, *People suffering from incurable diseases should have the choice of being put painlessly to death*). Other items were excluded simply because they are conceptually irrelevant (e.g., *Most men forget easily the death of their father than the loss of their property*). In the final analysis, the current study employed eight items. Six of the items were indicators of Interpersonal Tactics (e.g., *Handles people by telling them what they want to hear*) and two items were indicators of Views of Human Nature (e.g., *Gets ahead by cutting corners here and there* and *Acts with the assumption that all people have a vicious streak which will come out when they are given a chance*). The internal consistency reliability is high ($\alpha = .80$). The correlations among the items varied, ranging from 0.12 to 0.67, although nearly all of them were statistically significant.

**Analyses**

Several analyses using structural equation modeling (SEM) were conducted. First, the goodness-of-fit comparisons of the one-factor and the correlated six-factor models were conducted to address concerns regarding the discriminant validity of the a priori six-factor model. This test was necessary to establish that the fit of the six-factor model is superior to that of the one-factor model, hence demonstrating that the multiple factors are not redundant. Second, the correlated six-factor model was also expected to be significantly superior to its uncorrelated counterpart, which indicated that the factors in the model were not orthogonal. Following these redundancy and orthogonality tests,
analyses of a range of other competing models were also conducted. Different structural representations were examined in light of the high inter-correlations of the six SLBS factors, following the recommendations of Lent, Brown, and Gore (1997) and Anderson and West (1998). The best model should be determined by its fit relative to other conceptually plausible models (Bentler & Bonett, 1980; Bollen & Long, 1993; Jöreskog, 1993). In addition to comparisons of incremental fit indices, tests of chi-square differences between nested models were also carried out to establish the best fitting model (Byrne, 2000; Hoyle & Panter, 1995).

Seven different structural representations were included on the basis of their conceptual relevance. First, a one-factor model with all items loading onto a single factor was run (Model 1). Next, a two-factor model was examined (Model 2). In Model 2, the first factor contained all items of Authentic Self (AS), Transcendental Spirituality (TS), and Responsible Morality (RM), representing the internal orientation of servant leadership behavior, whereas the second factor contained all items of Voluntary Subordination (VS), Covenantal Relationship (CR), and Transforming Influence (TI) signifying the external orientation of servant leadership behavior. This delineation of internal and external orientations of servant leadership behavior supports Fairholm’s (1997:149) conceptualization that servant leadership involves transformation of both internal self and external behavior.

Third, a three-factor model in which VS and AS represented the first factor, CR and TI the second factor, and TS and RM the last factor was tested (Model 3). In Model 3, the first factor combined VS and AS items to constitute character of self, which reflected the unanimous comments of the interview respondents that servant leadership is a matter of the heart, and in keeping with the notion of ‘being’ promoted by Jaworski (1997). The second factor in Model 3 aggregated all CR and TI items to signify the relational dimension of servant leadership behaviors, which corresponded to the idea of servant leadership as relational leadership (Wright, 2000). The third factor in Model 3 consisted of all TS and RM items, representing the spiritual-moral aspects which, according to Graham (1991) and several interview respondents, need not be distinguished.

The fourth model examined was a four-factor model in which VS defined the first factor, AS the second, TS and RM the third factor, and CR and TI the last factor (Model 4). This model differed from Model 3 in that VS and AS were stand-alone factors as the former emphasized servanthood (Greenleaf, 1977) and the second, authenticity (Autry, 2001). Fifth, a five-factor model in which VS, AS, CR, and TI each represented one factor, and TS and RM loaded on the fifth factor was run (Model 5). This model was a variation of Model 4 in that CR and TI were two stand-alone factors rather than loading on one factor. While both CR and TI signified the relational dimension of servant leadership behaviors, the impact of the former is one that is individual or personal, whereas the latter is one that is organizational or professional. This delineation alluded to that of the Organizational Citizenship Behavior construct proposed by Organ and Paine (1999).

Finally, the last two models (Model 6a and 6b) were tested. Model 6a was an uncorrelated six-factor model in which VS, AS, CR, RM, TS, TI loaded on separated factors, and Model 6b was a
correlated six-factor model in which all the six factors loaded on separate factors. While these two models corresponded to the initial conceptualization proposed in this study, the correlated model (Model 6b) was the most conceptually plausible model. Given its reasonable fit, it was therefore logical to use Model 6b as the baseline model within which other competing models that are nested, in keeping with Lent, Brown, and Gore’s (1997) recommendation.

**Results**

Table 2 presents the means, standard deviations, correlations, and reliabilities for the six factors of servant leadership. The internal consistency reliabilities of all the six factors exceeded the recommended level of 0.70 on Cronbach’s coefficient alpha (Nunnally, 1978), ranging from 0.84 to 0.95. The six factors were also highly correlated. The highest correlation was found between Transforming Influence and Transcendental Spirituality \( (r = 0.91) \), and the lowest between Responsible Morality and Authentic Self \( (r = 0.78) \). These correlations may suggest the lack of discriminant validity among the factors. Thus, confirmatory factor analysis was subsequently performed to further examine the factor structure.

Table 3 demonstrates the fit statistics of the Six One-Factor Congeneric Models of Servant Leadership Behavior, generating good or acceptable fit indices across all measures of fit. This finding indicates that the models fit the data set for the sample reasonably well. The only exception was the Responsible Morality model. Using the cutoff standards set by Jöreskog and Sörbom (1996) on normed chi-square where values between 1-2 indicate good fit and those between 2-3 show reasonable fit, the value for Responsible Morality \( (\chi^2/df = 3.73) \) was indicative of marginal fit. Analysis of modification indices revealed that there was an error covariance between the two items in the Responsibility Morality model, namely Emphasizes on doing what is right rather than looking good and Employs morally justified means to achieve legitimate ends \( (MI = 4.35) \). However, the model was not respecified because the nature of this error covariance cannot be interpreted theoretically or substantively (Anderson & Gerbing, 1988; Fassinger, 1987; Williams, 1995). Apart from this less-than-optimal normed chi-square, the models on the whole demonstrated acceptable fit to the sample, bearing in mind that the acceptability of a proposed model should be based on the overall measures of fit, not just a particular set of fit indices (Jöreskog, 1993), as no single descriptive index of fit is superior to others nor is impeccable in all cases (Bentler, 1990; Mulaik et al., 1989).

Results of the confirmatory factor analyses consisting of absolute, relative, and parsimonious indices of fit of the various models are summarized in Table 4. Confirmatory factor analysis revealed that the fit statistics of the correlated six-factor model (Model 6b) were superior to the one-factor model (Model 1) across nearly all measures of goodness-of-fit. A chi-square difference test between
the two models was performed as follows: $\chi^2 = 1435.66 - 1279.55 = 156.11$, df = 560 – 545 = 15, p < .001. The result ($\chi^2_{\text{diff}}(15) = 156.11$, p < .001) confirmed that the six-factor model was significantly better than the one-factor model, and was not a redundant model. The relative chi-square statistics of the correlated six-factor model (Model 6b) and uncorrelated six-factor model (Model 6a) were also examined as follows: $\chi^2 = 2992.91 - 1279.55 = 1713.36$, df = 560 – 545 = 15, p < .001. The test suggested that the correlated six-factor model was statistically superior to that of the uncorrelated model, and established that the six factors in the model were not orthogonal (not independent to each other). The fit indices for the alternative models suggested that the correlated six-factor model provided the best fit to the data. Results of the chi-square difference tests indicated that the correlated six-factor model ($\chi^2 = 1279.55$) provided better fit to the data than did the one- through five-factor alternatives as well as the uncorrelated six-factor model. The chi-square to degrees of freedom ratio of the correlated six-factor model was 2.34, which slightly exceeded the recommended ratio of 2.0 (Anderson & West, 1998). However, it was superior to that of the other competing models.

The correlated six-factor model was also more parsimonious than the one-factor model, as measured using the Akaike Information Criterion (AIC). The AIC measures the degree of parsimony in the model where a small value of AIC indicates a parsimonious model (Akaike, 1987), although the criterion for ‘small’ is set to mean “small compared to other competing models” since it is not normed to a 0 – 1 scale (Ullman, 2001:702). As shown in Table 3, the correlated six factor model yielded an AIC value of 1449.55, which was smaller than that for the one- to five-factor alternatives and the uncorrelated six-factor model, suggesting that the correlated six-factor model was the most parsimonious. Apart from chi-square statistic and AIC, on the whole the correlated six-factor model demonstrated an acceptable fit (X$^2$/df = 2.34; CFI = 0.89; RMR = 0.06; RMSEA = 0.08). However, the six-factor model also yielded the goodness-of-fit (GFI) and adjusted-goodness-of-fit (AGFI) values of 0.71 and 0.66, respectively, which were less than optimal (see Arbuckle & Wothke, 1999; Jöreskog & Sörbom, 1996; Ullman, 2001). It is important to note, however, that while GFI and AGFI are widely used in structural equation modeling studies, they have been known to be inconsistently sensitive to model misspecification (Marsh, Balla, & McDonald, 1998). Given these shortcomings, Hu and Bentler (1998) disapproved usage of both GFI and AGFI. In short, although the GFI and AGFI values for the six-factor model were less than optimal, the other various measures of overall goodness-of-fit fall within the acceptable levels. In summary, these findings established that the correlated six-factor model (Model 6b) provided the best fit to the data, and that the six variables of servant leadership represent related yet empirically distinguishable latent dimensions.

These findings were corroborated by the expected correlations between the SLBS and measures of character and Machiavellian. Table 5 shows that the correlations of the SLBS with the
CARS were significantly and positively related across all six factors, ranging from 0.76 to 0.82, providing evidence of convergent validity. The correlations of each of the six factors of the SLBS with the MACH IV also revealed a similar pattern, with the correlations were all significant and in negative directions, ranging from -.56 to -0.63, providing some evidence of external discriminant validity. Note that the initial hypothesis was that the SLBS would be positively correlated to the CARS and negatively correlated to the MACH IV, which were both confirmed by these findings. More implicitly, however, it was also expected that they were not so strongly correlated as to render the SLBS redundant. While the correlations with both scales were deemed to be strong, there are no hard and fast rules as to how low or weak these correlations must be to provide evidence for convergent and discriminant validity. Kline (2005), for example, suggests that r values of 0.85 or greater suggest lack of discriminant validity. On the basis of this threshold, these correlations (all below 0.85) still indicate convergent and discriminant validities. In addition, since the coefficient for SLBS and MACH are consistently lower than the coefficients for SLBS and CARS (see Table 5), the evidence of discriminant validity was corroborated.

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DISCUSSION

It is important to note that the high correlations among the SLBS factors may not necessarily indicate a lack of discriminant validity. On the contrary, these findings support the initial conceptualization that servant leadership behaviors are not meant to be practised in a piecemeal fashion (Farling et al., 1999; Greenleaf, 1977; Jaworski, 1997). The servant leadership behaviors are shown to represent a holistic construct similar to a selfless life orientation. For example, the highest correlation was found between Transforming Influence and Transcendental Spirituality (r = 0.91), which may suggest that servant leaders’ efforts to transform people into what they are capable of becoming is closely associated with their spiritual conviction (Fairholm, 1997). At a more practical level, servant leaders draw the best out of others and contribute to their personal and professional growth (Transforming Influence items) as a way to encourage other people to express their whole self in the workplace and because they are driven by a sense of higher calling (Transcendental Spirituality items). This finding confirms Graham’s (1991) contention that the source of servant leadership influence is one that is spiritual, and is not based on personality, competency, or hierarchical position. The chi-square difference test revealed that the correlated six-factor model had the strongest support compared to other competing models (χ²/df = 2.34; CFI = 0.89; RMR = 0.06; RMSEA = 0.08; GFI = 0.71, AGFI = 0.66; AIC = 1449.55). While the intercorrelations among the six factors were for the most part high, these six factors were found to be empirically distinguishable, each representing unique, though related, latent dimensions. These findings provided corroborative evidence that the six
factors of the SLBS (VS, AS, CR, RM, TS, and TI) represent conceptually and empirically distinct constructs, and confirm the multidimensional nature of the SLBS.

GENERAL DISCUSSION

This paper discussed the validations of a new scale measuring servant leadership behavior, establishing convergent and discriminant validity of the multidimensionality of the SLBS. Empirical evidences provided support for the six-factor, 35-item SLBS as an accessible and easily administered measure of servant leadership behavior, which can potentially be used in an organizational setting to inform assessment, selection, training, promotion, and performance evaluation decisions. The behavioral indicators in each of the six dimensions of the SLBS may be particularly useful for the selection and training of leaders. Since servant leadership behaviors can be discriminated by respondents, there may be a case for assessing and developing the specific leadership behavior needs of current employees at all levels and in selecting potential employees based on separate SLBS scores in order to develop more socially responsible and ethically-based organizations.

There exists a need for the continued refinement and validation of the scale, since establishing the psychometric properties of behavioral measures is a complex and lengthy process (Anastasi & Urbina, 1997; Cronbach & Meehl, 1955; Schmitt & Klimoski, 1991). The predictive validity of the SLBS can be examined using an organizational citizenship behavior measure, in light of Ehrhart’s (2004) study which indicates that the two concepts are theoretically and empirically related. Servant leadership is an altruistic leadership style that potentially contributes to the development of positive attitudes in followers, most notably Organizational Citizenship Behavior (OCB). The relationship between servant leadership behaviours and OCB is possibly mediated by followers’ affect/emotion and trust. Followers who engage in OCB will likely have a stronger self-concept, which in turn reinforces the leader’s self concept, hence encouraging the leader to exemplify more servant leadership behaviors. Extant literature shows that followers’ OCB is partly attributable to supportive leader behavior (Podsakoff, MacKenzie, Paine, & Bachrach, 2000), such as transformational leadership (e.g., Pillai, Schriesheim, & Williams, 1999; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Given that servant leadership is a form of supportive leadership and has conceptual similarities with transformational leadership, it is conceptually plausible to conclude that servant leadership positively affects followers’ OCB.

The problem of common method variance associated with self-report measures is also acknowledged, and should be addressed in future studies. The advanced causal modeling techniques to control for common method variance as suggested by Williams, Edwards, and Vandenbeng (2003) are particularly appropriate. Finally, replication studies with larger samples comprising respondents of different industries and cultural settings, would enable examination and enhance the generalizability of the study findings. This direction is important in order to ascertain the usefulness of the scale in different populations, particularly given that the samples employed in this study were primarily Australian.
REFERENCES


Figure 1
Theoretical Framework Used to Categorize the Qualitative Data
Table 1: Summary of Five Measures of Servant Leadership

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<td>Shares Leadership</td>
<td>Servanthood</td>
<td>Emotional healing</td>
</tr>
<tr>
<td></td>
<td>Covenantal Relationship</td>
<td>Values People</td>
<td>Visioning</td>
<td>Wisdom</td>
</tr>
<tr>
<td></td>
<td>Responsible Morality</td>
<td>Provides Leadership</td>
<td>Developing Others</td>
<td>Persuasive mapping</td>
</tr>
<tr>
<td></td>
<td>Transcendental Spirituality</td>
<td>Builds Community</td>
<td>Team-Building</td>
<td>Organizational stewardship</td>
</tr>
<tr>
<td></td>
<td>Transforming Influence</td>
<td>Develops People</td>
<td>Empowering Others</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Shared Decision Making</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Integrity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Abuse of Power</td>
<td>Other-centeredness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Egotistic Pride</td>
<td>Facilitative Environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Self-sacrifice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Affirmation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content validation</td>
<td>Yes, through literature review, semi-structured interviews, and expert panel</td>
<td>Yes, through expert panel</td>
<td>Yes, through literature review and personal experience</td>
<td>Yes, through literature review and expert panel</td>
</tr>
<tr>
<td>Factor analyses</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Convergent and Discriminant Validity</td>
<td>Yes</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
Table 2: Means, Standard Deviations, Correlations and Reliabilities of Servant Leadership Factors

<table>
<thead>
<tr>
<th>Servant Leadership Factors</th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Voluntary Subordination</td>
<td>3.61</td>
<td>.89</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Covenantal Relationship</td>
<td>3.60</td>
<td>1.00</td>
<td>.93</td>
<td>.90**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Authentic Self</td>
<td>3.53</td>
<td>.90</td>
<td>.89</td>
<td>.87**</td>
<td>.88**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Responsible Morality</td>
<td>3.47</td>
<td>.86</td>
<td>.88</td>
<td>.88**</td>
<td>.80**</td>
<td>.78**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Transcendental Spirituality</td>
<td>3.39</td>
<td>.93</td>
<td>.84</td>
<td>.88**</td>
<td>.86**</td>
<td>.80**</td>
<td>.86**</td>
<td>.91**</td>
</tr>
<tr>
<td>6 Transforming Influence</td>
<td>3.37</td>
<td>1.0</td>
<td>.95</td>
<td>.89**</td>
<td>.89**</td>
<td>.86**</td>
<td>.86**</td>
<td>.91**</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)

Table 3: Fit Statistics of the Six One-Factor Congeneric Models

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>$\chi^2$/df</th>
<th>GFI</th>
<th>AGFI</th>
<th>CFI</th>
<th>RMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary Subordination</td>
<td>26.81</td>
<td>14</td>
<td>0.02</td>
<td>1.92</td>
<td>0.96</td>
<td>0.92</td>
<td>0.99</td>
<td>0.03</td>
<td>0.07</td>
</tr>
<tr>
<td>Authentic Self</td>
<td>21.46</td>
<td>9</td>
<td>0.01</td>
<td>2.38</td>
<td>0.96</td>
<td>0.91</td>
<td>0.98</td>
<td>0.04</td>
<td>0.09</td>
</tr>
<tr>
<td>Covenantal Relationship</td>
<td>21.59</td>
<td>9</td>
<td>0.01</td>
<td>2.40</td>
<td>0.96</td>
<td>0.91</td>
<td>0.99</td>
<td>0.03</td>
<td>0.09</td>
</tr>
<tr>
<td>Responsible Morality</td>
<td>18.62</td>
<td>5</td>
<td>0.00</td>
<td>3.73</td>
<td>0.96</td>
<td>0.88</td>
<td>0.97</td>
<td>0.04</td>
<td>0.12</td>
</tr>
<tr>
<td>Transcendental Spirituality</td>
<td>3.81</td>
<td>2</td>
<td>0.15</td>
<td>1.90</td>
<td>0.99</td>
<td>0.95</td>
<td>0.99</td>
<td>0.02</td>
<td>0.07</td>
</tr>
<tr>
<td>Transforming Influence</td>
<td>39.91</td>
<td>14</td>
<td>0.00</td>
<td>2.85</td>
<td>0.94</td>
<td>0.89</td>
<td>0.98</td>
<td>0.03</td>
<td>0.10</td>
</tr>
</tbody>
</table>
Table 4: Overall Fit indices for the Servant Leadership Behavior Scale

<table>
<thead>
<tr>
<th>Competing Models</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>GFI</th>
<th>AGFI</th>
<th>CFI</th>
<th>RMR</th>
<th>RMSEA</th>
<th>AIC</th>
<th>$\Delta \chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-factor model (1)</td>
<td>1435.66</td>
<td>560</td>
<td>2.56</td>
<td>0.66</td>
<td>0.62</td>
<td>0.87</td>
<td>0.06</td>
<td>0.09</td>
<td>1575.66</td>
<td>156.11(15)***</td>
</tr>
<tr>
<td>Two-factor model (2)</td>
<td>1349.92</td>
<td>553</td>
<td>2.44</td>
<td>0.69</td>
<td>0.65</td>
<td>0.88</td>
<td>0.06</td>
<td>0.09</td>
<td>1503.92</td>
<td>70.37(8)***</td>
</tr>
<tr>
<td>Three-factor model (3)</td>
<td>1340.88</td>
<td>551</td>
<td>2.43</td>
<td>0.69</td>
<td>0.64</td>
<td>0.88</td>
<td>0.06</td>
<td>0.09</td>
<td>1498.88</td>
<td>60.45(6)***</td>
</tr>
<tr>
<td>Four-factor model (4)</td>
<td>1333.97</td>
<td>550</td>
<td>2.43</td>
<td>0.69</td>
<td>0.65</td>
<td>0.88</td>
<td>0.06</td>
<td>0.09</td>
<td>1493.97</td>
<td>54.42(5)***</td>
</tr>
<tr>
<td>Five-factor model (5)</td>
<td>1315.47</td>
<td>548</td>
<td>2.40</td>
<td>0.69</td>
<td>0.65</td>
<td>0.88</td>
<td>0.06</td>
<td>0.09</td>
<td>1479.47</td>
<td>35.92(3)***</td>
</tr>
<tr>
<td>Uncorrelated Six-factor model (6a)</td>
<td>2992.91</td>
<td>560</td>
<td>5.34</td>
<td>0.51</td>
<td>0.45</td>
<td>0.63</td>
<td>0.70</td>
<td>0.15</td>
<td>3132.91</td>
<td>1713.00(15)***</td>
</tr>
<tr>
<td>Correlated Six-factor model (6b)</td>
<td>1279.55</td>
<td>545</td>
<td>2.34</td>
<td>0.71</td>
<td>0.66</td>
<td>0.89</td>
<td>0.06</td>
<td>0.08</td>
<td>1449.55</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. N = 192. GFI = Goodness-of-Fit Index; AGFI = Adjusted Goodness-of-Fit Index; CFI = Comparative Fit index; $\Delta \chi^2$ = the difference in chi-square compared with the correlated six-factor model. One-factor model = all six measured variables represented a single latent construct; two-factor model = AS + TS + RM vs. VS + CR = TI; three-factor model = VS + AS vs. TS + RM vs. CR + TI; four-factor model = VS vs. AS vs. TS + RM vs. CR + TI; five-factor model = VS vs. AS vs. CR vs. TI vs TS + RM; six-factor model = each of the measured variables represented separate, correlated latent constructs. VS = Voluntary Subordination; AS = Authentic Self; CR = Covenantal Relationship; RM = Responsible Morality; TS = Transcendental Spirituality; TI = Transforming Influence

*** p < .01
Table 5: Correlation between Servant Leadership Behavior Scale Factors and Character Assessment Rating Scale and Machiavellianism Scale

<table>
<thead>
<tr>
<th>SLBS Factors</th>
<th>CARS</th>
<th>Mach IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary Subordination</td>
<td>.82**</td>
<td>-.63**</td>
</tr>
<tr>
<td>Authentic Self</td>
<td>.77**</td>
<td>-.60**</td>
</tr>
<tr>
<td>Covenantal Relationship</td>
<td>.76**</td>
<td>-.59**</td>
</tr>
<tr>
<td>Transcendental Spirituality</td>
<td>.77**</td>
<td>-.56**</td>
</tr>
<tr>
<td>Responsible Morality</td>
<td>.79**</td>
<td>-.60**</td>
</tr>
<tr>
<td>Transforming Influence</td>
<td>.80**</td>
<td>-.62**</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tail).