

Synthesis between leadership behaviours and principal–agent theory

G.J. Lee

ABSTRACT

'Initiating structure' and 'consideration' have long stood as broad dimensions of leadership behaviour. Recent theory and meta-analyses suggest a continued role for such constructs. However, this study asserts that initiating structure is best composed of two sub-constructs, namely a leadership focus on directing and controlling subordinate *task* behaviours versus a focus on *outcomes*. Ignoring this dualism has previously rendered initiating structure too broad a construct to facilitate meaningful hypotheses, and statistically the weaker of the constructs. This study uses principal–agent theory to support this split in theory, and presents initial structural equation modelling (SEM) tests to illustrate the superiority of a two-part initiating structure construct. Thereafter, a large number of research propositions are explored using the new dimensions, as well as two interesting case contexts. This re-specification allows for propositions more in line with prior empirical findings, and finer examinations of relationships.

Key words: initiating structure, consideration, agency theory, principal–agent theory

Introduction

This article argues that widely used two-factor theories of leadership, including a people-focused versus task-focused leadership, should be reconceived in the light of modern human resource management (HRM) theory to include a third results-focused element.

Leadership theory has developed mostly around concepts of transformational and charismatic leadership, leader–member exchange and implicit leadership theory

Prof. G.J. Lee is at the Wits Business School, University of the Witwatersrand. E-mail: gregory.lee@wits.ac.za

(Yukl 1998), which focus on higher-end affective, relational and subjective aspects of leadership. These theories became prevalent partly because of a perception that prior statistical findings on leadership behaviours and their contingencies had borne disappointing findings (e.g. Yukl & Van Fleet 1991; Wofford & Liska 1993). The major leader behaviour and contingency theories under the spotlight were especially the two-dimensional Ohio State University conceptualisation of 'initiating structure' and 'consideration' (Stogdill 1950); the related two-dimensional path-goal theory, which proposed contingencies for the former constructs (House 1971); and many effectively identical construct definitions (Fleishman, Mumford, Zaccaro, Levin, Korotkin & Hein 1991; Yukl, Gordon & Taber 2002).

Notwithstanding this relative tendency away from leadership behaviours, there are several reasons to continue examining such dimensions. Updates on empirical evidence as well as theoretical refinements support further work in this area. However, an on-going focus on leadership behaviour also requires continual consideration of refinements or expansions of theories, a contribution presented by this research.

Accordingly, this study first examines empirical and theoretical justifications for continuing with examinations of leadership behaviour, along the lines of consideration and initiating structure. Thereafter, this argument suggests a revision of the initiating structure dimension based on theoretical reasons, namely principal-agent theory, as well as empirical considerations, and concludes with construct validity evidence for the hypothesised revision of the initiating structure dimension. Based on this theory development, the second part of the study suggests a comprehensive battery of research propositions incorporating the revised initiating structure construct.

The continued efficacy of broad leadership behaviour dimensions

There are several reasons for maintaining a research focus on broad dimensions of leader behaviour.

Firstly, with regard to empirical support, Judge, Piccolo and Illes (2004) illustrated through meta-analysis that previous findings on initiating structure and consideration had been considerably under-estimated, and that substantial main effects exist with important outcomes. These findings encourage a return to leader behaviour research using these two construct dimensions, and subsequent research has responded by once again utilising consideration and initiating structure with successful results (e.g. Abernethy, Bouwens & Van Lent 2010; Burke, Stagi, Klein, Goodwin, Salas & Halpin 2006; Keller 2006; Cummings et al. 2010; Baker 2011).

Secondly, more complete considerations of the theoretical role of taxonomies in leadership theory, notably by Fleishman et al. (1991), suggest continued efforts.

Fleischman et al. (1991) present a large number of taxonomies of leader behaviour, ranging from the parsimonious two-dimensional consideration and initiating structure to considerably more complex lists. They point out that diversity in dimensions, and prior failure in the development of dimensions, has arisen because of lack of adherence to taxonomic principles. These especially include:

- Explicit definition of the targeted behavioural domain. Differing aims and foci in prior development of leadership domains have clearly led to different categories, for example where the researcher's aim is normative versus descriptive (Fleischman et al. 1991: 254–255).
- Adequate specification of causal relationships, including hierarchical levels of domain categories – for example, Fleischman et al. (1991: 253) point out that “there is no necessary inconsistency between a two-factor approach and multiple-role dimensions, if it is assumed that a hierarchical classification system is operating involving both first and second order dimensions”.
- Evidence for construct validity should be presented, including convergent and discriminant validity (Bagozzi, Yi & Phillips 1991).

Few leadership theories have followed these principles fully. In response to their observations, Fleischman et al. (1991) suggest a specific hierarchical taxonomy based on functional organisational leadership, rooted in systems theory, and incorporating four ‘superordinate’ behaviours describing problem-solving behaviours designed to bring about organisational goals in response to variegated contexts. These deviate from the consideration and initiating structure components, given the specific aim of their taxonomy.

However, a more specific domain definition incorporates the current argument's continued focus on consideration and initiating structure. The detailed, hierarchical focus of Fleischman et al. (1991) and others has the aim of behavioural description, not of broad normative guidelines. In addition, consideration and initiating structure facilitate specific responses to dyadic leader–follower needs rather than the far broader organisational–environment arena of Fleischman et al. (1991). Within the specific realm of principal–agent theory, to be discussed in the next sections, the particular context of the agency problem may be addressed as the specific behavioural domain of interest, namely the problem of aligning agent behaviours with the aims and interests of the principal. This is a more employee/follower-based domain focus than that of Fleischman et al. (1991), and in hierarchical terms would seem to fall within their superordinate domain of managing human resources (HR). House (1996) adopts a similarly employee-focused domain definition. In short, consideration and initiating

structure are valuable both because they facilitate broad normative guidelines, and because they address a specific arena of leadership.

In light of these considerations, others such as Yukl et al. (2002), Judge et al. (2004) and Abernethy et al. (2010), suggest continuing consideration and initiating structure research, potentially with expansions or refinements. Yukl et al. (2002), for example, suggest adding the dimension of leading change to consideration and initiating structure. This approach of building on past dimensions has the added value of extensive comparison to prior research.

Likewise, this research suggests continuing with the classic and parsimonious research leadership behaviour dimensions, but that, in light of the specific domain definition of the agency problem, the initiating structure construct may bear revision. An expansion of initiating structure had been mooted in some leadership theory – notably Stogdill (1963) and path–goal theory modifications; House & Mitchell (1974); House (1996) – but not really pursued. Specifically, two different sets of leader activities may better describe initiating structure. This study suggests an interdisciplinary synthesis between initiating structure and principal–agent theory, which helps to explain previous empirical discrepancies and open up new research directions.

Examining initiating structure

Theorists usually specify initiating structure as a single set of leader behaviours, involving task- and process-based leadership foci. It therefore describes the more transactional issues to do with job and work performance. Theory juxtaposes initiating structure with consideration, which is primarily a people-oriented set of leadership behaviours, focused on human relations and concepts such as empathy, respect and concern for followers.

The following definitions hold that initiating structure:

... is the degree to which a leader defines and organizes his role and the roles of followers, is oriented towards goal attainment, and establishes well-defined patterns and channels of communication (Fleishman 1973).

... reflects the degree to which a leader is bent on defining and structuring the various tasks and roles of group members in order to attain group results (Andriessen & Drenth 1998: 327).

... defines, directs, and structures roles and activities of subordinates towards attainment of the team's goals (Keller 2006: 203).

Examination of the above definitions and the measurement scales and models of initiating structure (Fleishman 1953; Stogdill 1963) reveals that such definitions

incorporate at least two distinct constructs. We can conceive these from a systems viewpoint, namely:

- Leadership behaviours focusing on employee inputs to workflow. The key inputs to workflow are the task-enacting behaviours of employees. Leadership that focuses on the tasks and behaviours of subordinates involves activities such as (a) definition of employee performance, including definition of the work process tasks, standards, inputs, environment and preferred aims; as well as (b) on-going direction of employees' enactment of tasks, including what to do and potentially how it should be done. Direction, by definition, may involve on-going behavioural monitoring and feedback based on workflow results.
- Leadership behaviours focusing on work outcomes/results. Leaders can alternatively focus on the eventual outcomes or results of employee performance. This is also seen in the definitions of initiating structure above, where phrases such as "towards attainment of the team's goals" are tacked on to the end of task foci.

Task- and results-focused leadership may be very different, both theoretically and practically; yet initiating structure subsumes them as a single set of behaviours. In fact, the measurement scales created for initiating structure – for example, Fleischman (1953); Stogdill & Coons (1957) – simply did not contain many items corresponding with a results-oriented view. This is not surprising, since a results focus to leading was only fully developed through the subsequent decades. There were some empowerment items in some versions – for example, Fleischman (1953) included, "He lets others do their work the way they think best" – and these loaded negatively on to the initiating structure factor and were subsequently dropped, strengthening the case for a division of dimensions. There is no doubt that results-based behaviours are under-represented and even missing in the original approach to initiating structure.

Separation of the two dimensions may therefore be desirable. Although similar in some ways to other largely unexplored theories (such as the later versions of path-goal theory, which is discussed in a subsequent section in this study), the development of this theme has unique value because research continues to use the two-dimensional approach without consideration of a results-based dimension as proposed here. An initial question concerns whether task and results orientations exist on a continuum.

Task versus outcomes focus: continuum or independent?

This research asserts that a leader's focus on tasks versus outcomes should be separated, at least because they may not be part of the same construct, or even possibly because the extremes of the two might define opposite ends of a continuum.

This study deals first with the possibility of a continuum. Why might a task focus be the essential opposite of a results orientation by leaders? Practical implications for HR choices may be one possible reason. A task focus often entails managerial micro-management of task design and execution. On-going features of such a focus include monitoring of employees (e.g. through close supervision, design and use of information systems), frequent feedback based on behaviour, possibly selection based on behavioural abilities (e.g. work sample tests), compensation packages biased towards base pay with merit or skills-based increases and seniority, training based on specific skills requirements, and potentially behaviour-based performance appraisal systems such as behaviourally anchored rating scales (e.g. Arthur 1994).

A focus on results often entails a movement away from close supervision and management to more hands-off management, where supervisors leave task execution and perhaps even design up to the employee to some extent, and performance is judged on results. Commensurate HR systems may include competency-based selection, performance appraisal based on operational or financial results, empowerment, increased use of incentives instead of base pay, and broader training to do with contextual as well as task issues. At least some of these HR choices entail less of the prior task-focused elements, for instance, greater empowerment by definition entails less managerial oversight of task design or execution, and results-based appraisals mean a lower weighting on behavioural appraisals. Such a results focus bears substantial similarities to high commitment work practices (Arthur 1994).

To some extent, external constraints may also force the hand of leaders towards a certain focus. Some circumstances make it very difficult for managers to maintain a strong task focus, for instance, where the employee is not physically present (e.g. the archetypical travelling salesperson) or when the task is very technically complex and therefore not amenable to direct managerial oversight (e.g. non-scientists managing research scientists). In such cases, circumstances may force a decrease in task foci, with a results focus being the only other way of assessing and compensating for performance. Other circumstances make a strong results focus all but impossible. Therefore, a continuum-type effect is possible.

Notwithstanding the possibility of a continuum, perusal of these foci suggests rather that co-existence is possible, in terms of which both might conceivably operate at various levels in tandem. It is conceivable that a leader might have a high task focus while nonetheless selecting, appraising and compensating based on results.

Empowerment may be high, while incentives are low. Leaders may partly or wholly empower subordinates, for instance, by monitoring and controlling task design tightly while allowing bounded discretion in task execution, such as the separation in the decision process between initiation and implementation, and ratification and evaluation suggested by Fama and Jensen (1983). Finally, because the overall leadership climate can involve multiple leaders, it is possible that different styles could simultaneously be at play.

The distinction between a behaviour- and outcomes-focus is a core focus of principal-agent theory. Accordingly, the following section suggests that conceptual integration of the initiating structure construct with elements of principal-agent theory could facilitate the development of leadership behaviour theory in the light of the separation of initiating structure suggested above.

Principal-agent theory and initiating structure

Principal-agent theory (Eisenhardt 1989; Laffont & Martimort 2002) presents an economic model of exchange relationships where one party (the agent) is to be contracted to serve the interests of another (the principal, in this case organisational leaders).

Principal-agent theory seeks to ameliorate costs arising from the agency problem, which arises from divergent aims of agent and principal. The theory assumes that agents are at least somewhat self-serving, and accordingly that they do not entirely have the principal's best interests at heart. Interventions must be implemented by leaders either to ameliorate the potential for a commensurate mismatch of behaviour (notably employee shirking, i.e. not exerting proper effort on behalf of the principal) or to create a situation where the principal's and agent's aims are naturally better aligned.

Principal-agent theory holds that remedial options lie largely in the type of employment contract that is designed and overseen (including explicit, implicit and psychological contracts). For contracts, one can read leadership, since contracts require design and direction through on-going leadership processes (Dabos & Rousseau 2004; Rousseau 1998). The theory holds that contractual options fall broadly into the two categories discussed in the previous section, named behavioural- versus outcomes-based contracts.

Principal-agent theory, like path-goal theory, is fundamentally a contingency theory. Characteristics of the tasks themselves, the agents and the job environment dictate which type of contract is optimal. Contingencies are based on the assumption of a trade-off between the consequences of the contracts as follows:

- An outcomes-based contract involves a results-orientation, which generally involves higher levels of outcome-based incentives (monetary and other inducements such as promotion). The theory holds that outcomes-based contracts place greater levels of risk on individual agents, because the ultimate outcomes of their work are only partly a factor of employee effort. An outcomes-based contract places their monetary and other inducements partly at the mercy of these external conditions. Agents are generally averse to bearing this risk, while organisations are better able to assimilate it. Placing risk on risk-averse agents makes it more difficult to hire and retain them at a given level of expected inducements.
- Conversely, a behaviour-based contract presents employees with lower or zero risk, as they are paid and judged on their observed effort, free of contamination from external events. Agency theorists believe this to be beneficial for employees, rendering a given expected level of inducements more attractive. However, it can provide a perverse incentive for employees to mask poor performance, so that leaders are unable to directly observe their behaviour. To the extent that employees can and will act against the principal's interests, the behavioural contract can be problematic.

With this trade-off in mind, the contingencies favouring behavioural contracts (therefore task-oriented leadership) are as follows (Eisenhardt 1989):

- When monitoring and close direction of agents' behaviour is easier, rendering it harder for employees to shirk. This may occur when (a) jobs are highly programmable or routine, making it easier for leaders to learn about, design, understand and monitor the tasks; (b) information systems can be used; (c) leaders are closer to subordinates and; (d) longer or more stable association better enables principals to interpret the behaviour of their agents – for example, when turnover rates have been low, or the length of service in a group is quite homogeneous (Kidwell & Bennett 1993);
- When outcomes are more difficult to measure, making it harder to use the HR policies associated with results-based leadership such as incentives or outcomes-based appraisals;
- When task outcomes are less certain at a given level of employee effort. This is an indicator of risk. To the extent that outcomes are not certain, employee effort may be subject to external effects not under their control; and
- When agents are more averse to risk. This might happen for a variety of reasons, ranging from cultural to demographic. For example, older, male, higher income and more educated agents tend to have less aversion to risk than the alternative demographic profiles (Halek & Eisenhauer 2001; Holt & Laury 2002).

Conditions favour results-based leadership simply in the opposite circumstances to those described for task-oriented leadership.

Principal-agent theory has been criticised for some shortcomings. It assumes moral hazard by agents and downplays positive affective commitment and intrinsic motivations – which may in fact be harmed by either extrinsic incentives or excessive monitoring (e.g. Deci & Ryan 2012) – and assumes that the principal has all the bargaining power. However, principal-agent theory remains a powerful one in management literature and is useful here in providing a basis for consideration of a multi-faceted initiating structure construct.

Some of these principal-agent contingencies, and indeed possibly the leadership dimensions themselves, bear some similarities to those proposed for the later versions of path-goal leadership theory (House & Mitchell 1974; House 1996). A comparison with path-goal theory is therefore briefly given.

Comparisons with the modified 1974 and 1996 path-goal theories

The distinction between task and results orientation is in some respects similar to that developed in the first revision of path-goal theory (House & Mitchell 1974), where a distinction was made between directive leadership (essentially similar to task orientation), achievement-oriented leadership (placing a focus on outcome achievement), supportive leadership (similar in many respects to consideration) and participative leadership.

Notwithstanding surface similarities, results-orientated leadership as derived from principal-agent theory is substantially different from these path-goal constructs. Achievement-oriented leadership was defined as “behaviour directed towards encouraging performance excellence: setting challenging goals, seeking improvement, emphasizing excellence in performance, and showing confidence that subordinates will attain high standards of performance” (House 1996: 327). House therefore based this construct largely on on-going leadership rhetoric. It appears not to include the principal-agent notion of directly linking employee behaviour with achievement, notably through incentivisation. Participative leadership focuses especially on taking subordinates’ suggestions into account (House 1996: 327), rather than actual empowerment. Results-based leadership as used in this argument may well include these, but it would often seek to go beyond them to include especially a combination of empowerment/delegation and incentives, thereby giving employees both the means and motivation to improve outcomes. In addition, later research

almost entirely ignores House and Mitchell's (1974) theoretical distinction between these types (Wofford & Liska 1993), unfortunately sticking almost entirely to the two-dimensional distinction. The distinction made here, however, can draw much from prior path-goal theory, and does indeed do so in the propositions below.

An initial empirical test

The first step before proposing new research propositions is to perform initial construct tests. Specifically, this study applies comparisons of a first-order confirmatory factor analysis and second-order confirmatory factor analysis, since the latter allows for distinction between measurement and specific error (Bagozzi et al. 1991). In the third necessary step for assessing constructs, namely establishment of constructs within a nomothetic net, the author discusses research propositions for such links (Bagozzi et al. 1991; Fleishman et al. 1991).

Participants

Self-report surveys are employed to gather quantitative data from South African call centre agents on the leadership and other climate elements of the model. Call centres are an increasingly common and important part of organisational strategy and service worldwide, and the personnel issues faced by call centres are both pressing and quite particular in some ways to the industry (Holman, Batt & Holtgrewe 2007). However, leadership research has been lacking in the industry. Principal-agent theory perhaps suggests that a task-oriented initiating structure (TOIS) is a more likely leadership option in call centres for a variety of reasons:

- It is particularly easy to monitor agents in call centres (Batt & Moynihan 2006; Holman et al. 2007); for instance, (a) tasks are often highly routine, with employees often responding to computer prompts and scripts, (b) comprehensive information systems exist and calls are generally recorded, allowing managers extensive monitoring abilities, and (c) agents are highly visible, being physically bound to their stations.
- The majority of call centres (79%) involve customer-initiated calls, and offer mostly services – 49% offer only services, and 21% pure sales (Holman et al. 2007: 8). This suggests activation of certainty and outcome measurability contingencies: (a) Services entail relatively risk-free outcomes in the sense that they are not strongly affected by outside factors, nominally supporting a results-oriented initiating structure (ROIS). However, service outcomes are hard to measure, especially in call centres where predominantly inbound calls render follow-up of customers

very difficult. Overall, therefore, TOIS is favoured. However, the (minority) sales tasks involve more measurable outcomes but are far less controllable by staff, especially if sales are dependent on customer initiation. Again, TOIS would seem to be favoured.

- Call centre employees tend to be younger, of lower income and education, and female (Holman et al. 2007), entailing more risk-averse demographic markers, and ROIS is accordingly less popular.

We generated a sampling frame of some 53 South African call centres from online directories and industry bodies. These were largely located in the Johannesburg and Cape Town areas, the economic and call centre hubs of the African continent. Some 26 responded to e-mail requests, a unit response rate of approximately 49%. A total of 238 usable agent responses were obtained from participating centres, with a median age of 32.00 years (SD=9.57) and median tenure of 2.16 years (SD=2.82). The majority of agents are female (67%) and black (59.87%), with education below university level (63.88%).

Leadership climate measures

The validation tests here cannot be achieved using the original leadership behaviour scales. As discussed earlier in the study, the original scale development simply did not cater for results-orientation despite the explicit inclusion of this focus in the definition. Accordingly, alternative measures are required, with items corresponding to a three-construct model of the current type.

This analysis therefore utilises climate questions on leadership from Ryan and Schmit's (1996) organisational climate scale, which includes previously tested scale items that, at face value, correspond with the three proposed factors. The six consideration items include, for example, "Decisions are made by keeping in mind the good of the employees", "Solutions to problems are developed so that as many people as possible will benefit", and "Managers consistently treat everyone with respect". Internal reliability is good, with coefficient alpha = .90. Nine initial task-oriented leadership (TOL) items include, "Rules and procedures are important", "Most communication is formal and concerned with giving direction about what to do", and "Regular fine tuning and improvements in the ways of doing things are implemented" (coefficient alpha = .79). The seven results-oriented leadership (ROL) items include items such as, "Results are more important than procedures", "Achieving or surpassing specific goals is stressed", and "Gaining an advantage over the competition is a key objective" (coefficient alpha = .72).

Initial multivariate normality is not optimal, with Mardia kurtosis greater than 30. Several authors (e.g. Bandalos & Finney 2001; Little, Cunningham, Shahar & Widaman 2002) discuss the use of parcelling (i.e. the combination of indicators into 'parcels' based on criteria such as inter-correlation and item content, specifically for use in such cases). The items are therefore parcelled based on similarity of content and analysed as manifest variables. This results in acceptable kurtosis, with some effect only from some multivariate outliers.

Confirmatory factor analysis results

Three confirmatory factor analysis models are performed on a covariance matrix corrected for multivariate outliers based on Rousseeuw and Van Driessen's (1999) minimum covariance determinant (MCD) algorithm. The data fit other structural equation modelling (SEM) assumptions. The first model tests a one-factor structure, the second the traditional two-factor consideration and initiating structure model, and the third the three-factor structure hypothesised in this paper.

Model 1, the single-factor model, serves to test discriminant validity, since good fit on a single latent factor would intimate that the manifest indicators do not belong to different factors. Table 1 shows that Model 1 – the single factor structure – has poor fit in the chi-square statistic as well as all other absolute fit indices – the root mean square error of approximation (RMSEA) is $>.1$ with a high confidence interval; the non-normed fit index (NNFI) is $<.09$; the confirmatory fit index (CFI) is $<.95$). Comparatively, the two-factor structure has relatively good fit, albeit with a significant chi-square statistic, and a RMSEA range from below .05 to below .1 (point estimate = .767, which is acceptable but not outstanding). The two-factor model does have a significantly improved chi-square statistic over the base one-factor model, as well as better information criteria in all cases. However, the three-factor model hypothesised in this paper is superior in all respects: it has a non-significant chi-square, a good RMSEA of $<.05$, excellent CFI, NNFI and standardised root mean square residual (SRMR), and is superior to the other two models in both the change in chi-square as well as all information criteria.

These results suggest construct validity, both because divergence is suggested by the superiority of different factors, and good fit on the three-factor model suggests convergence of indicators on correct factors.

Finally, Model 4 tests for the presence of a second-order leadership factor underlying the three first-order latent factors. The fit of the model with the second-order factor is fairly good, including a non-significant chi-square, a good RMSEA with range from below .05 to below .1, and high CFI and NNFI. The model has

the same chi-square as Model 3, albeit with slightly inferior information criteria. However, information criteria penalise added constructs, whereas a second-order model deliberately prefers consideration of an added factor. Accordingly, the results suggest sufficient reason to conclude not only that leadership is best represented by three latent factors (consideration, results- and task-oriented initiating structures), but also that these represent a common second-order latent factor, which will be designated simply as 'leadership'. Accordingly, the second-order factor structure is adopted, and the parameters based on it are shown in Figure 1.

Table 1: SEM model comparisons of leadership structures

	Comparative models			
	Model 1: Single latent factor	Model 2: Traditional two- factor structure	Model 3: Hypothesised three-factor structure	Model 4: Second-order latent factor
Chi-square (χ^2)	142.73(27) [†]	59.67(26) [†]	35.95(23)	35.95(20)
$\Delta\chi^2$ from Model 1		83.06(1) [†]	106.78(4) [†]	106.78(4) [†]
$\Delta\chi^2$ from prior model		83.06(1) [†]	23.72(3) [†]	–
AIC	88.72	7.67	-10.0481	-4.048
CAIC	-32.03	-108.60	-112.9103	-93.494
SBC	-5.03	-82.60	-89.9103	-73.494
RMSEA	.135 90% CI .113-.157	.074 90% CI .049-.099	.049 90% CI .010-.078	.058 90% CI .025-.088
CFI	.910	.974	.990	.988
NNFI	.880	.964	.984	.978

[†] = $p < .01$. AIC = Aikake's Information Criterion, CAIC = Bozdogan's Information Criterion, SBC = Schwarz's Bayesian Criterion

These results contrast sharply with prior studies, which as discussed in the introductory sections not only focused exclusively on the two-factor model, but also generally found poor fit for the initiating structure variable (e.g. Yukl & van Fleet 1991; Wofford & Liska 1993). In contrast, the current study shows strong fit for the three-factor model of leadership including a results orientation.

Having discussed an empirical test, the third construct validity stage is placement of the dimensions within a nomothetic net (Bagozzi et al. 1991), in other words confirmation that the constructs are placed within a net of other constructs of both an antecedent and consequent nature in a logical and predictable manner. Full

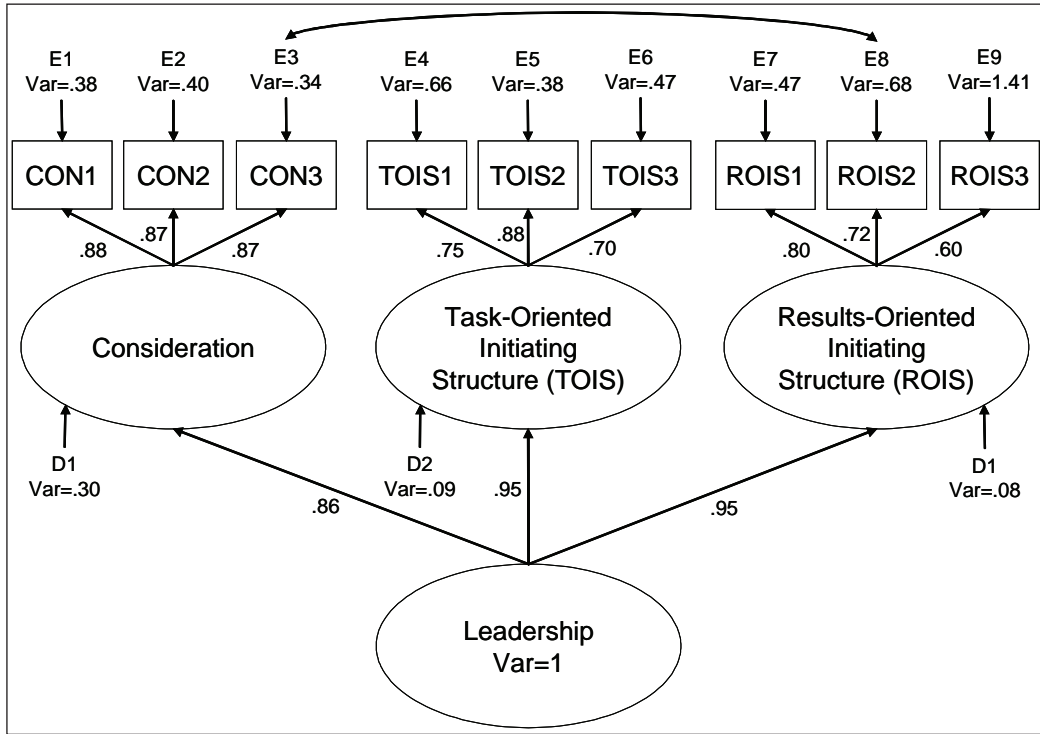


Figure 1: Standardised parameter findings for second-order confirmatory factor analysis

hypotheses for the achievement of this aim are accordingly given in the second part of this study.

Research propositions

To establish a comprehensive nomothetic net, the hypothesis generation considers a large variety of outcome, antecedent, mediation and moderation variables associated in past research with leader behaviours.

Outcome variables

Three main categories of organisational outcomes are likely consequences of leader behaviour, namely (a) *internal operational outcomes*, such as productivity, efficiency measures, employee turnover and organisational citizenship behaviours (OCBs) focused on the organisation; (b) *customer outcomes*, such as customer satisfaction and

retention; and (c) *leader-focused outcomes*, such as employee acceptance of leaders or OCBs focused on the leader. Ultimate financial success is assumed to be affected by each of these (although more so by operational and customer outcomes). Interactions between the outcomes may exist (e.g. leader-focused outcomes probably affect operational outcomes, which in turn probably affect customer outcomes); however, formal propositions for these are deemed to be ancillary to the leadership focus.

Direct effects of leadership on outcomes

Direct positive effects of leadership are possibly only likely where the leadership style is itself performance-focused. TOIS and ROIS are both performance-oriented styles, and are therefore both expected to affect these intermediate outcomes directly.

Further questions are related to direction and relative effect sizes. Some leadership is probably better than no leadership – laissez-fair leadership (Avolio 1999) – so both TOIS and ROIS are expected to have positive effects. However, it is also possible that either approach taken to an extreme could denude the outcomes (e.g. House 1996), especially TOIS (where excess control might disempower, frustrate and actually hamper employees), but also ROIS, which taken to an extreme can leave employees feeling overwhelmed without leadership and support. Relative extremes of either type may therefore be harmful, a point that has not adequately been expressed in prior research propositions.

In addition, TOIS perhaps focuses on internal-operational outcomes, where leaders can directly observe employee behaviour. Customer outcomes are generally more distal to employee inputs (except where employees are front-line ‘boundary spanners’). Since customer outcomes are more closely the result than the input, ROIS may have more impact there than in operational outcomes. Therefore:

Proposition 1. Over non-extreme levels, (a) both TOIS and ROIS directly and positively affect both customer and operational outcomes, but (b) TOIS more strongly affects operational outcomes than customer outcomes, and (c) ROIS more strongly affects customer than operational outcomes, (d) except for boundary spanner employees, where the effects are equivalent.

Proposition 2. TOIS and ROIS have a joint interactive effect on outcomes such that (a) moderate levels of either, in combination or separately, lead to positive effects, but negative effects occur under (b) extreme levels of both in tandem, or (c) extreme levels of TOIS without any ROIS.

Proposition 2 can be tested using polynomial response surface design (Edwards & Parry 1993), a methodology that has hardly been applied in leadership research.

Consideration is not expected to have strong direct effects on either operational or customer outcomes, because it is focused on a leader–follower relationship. Consideration could even have a negative effect on outcomes if taken to an extreme and performance-based leadership is low. Perhaps the only possibility of a stronger relationship is where customers value consideration (perhaps because they associate it with firm strength or have an innate preference for altruism), and, in addition, they are able to observe consideration. Conversely, consideration is likely to affect leader-focused outcomes, as employees may react to the personal exchange aspects of the relationship (Masterson, Lewis, Goldman & Taylor 2000). Therefore:

Proposition 3. Consideration has insignificant direct effects on customer and operational outcomes.

Proposition 4. Customers' preference for (a) employee-focused companies and (b) ability to observe consideration act as moderators such that any relationship between consideration and customer outcomes will be stronger when customers value consideration and can observe it.

Proposition 5. Consideration directly and positively affects leader-focused outcomes.

Moderators

Theorists have long seen interaction effects as key to the study of leadership behaviours. This study will use the terminology of *moderators* (where higher levels of the moderator lead to a stronger relationship between two other variables) and *attenuators* (where higher levels of the moderator lead to a weaker relationship between two other variables).

Two categories of moderators are considered. Firstly, principal–agent theory inherently considers certain possibilities as discussed in the first part of the article. Secondly, the author considers moderators previously utilised in a survey of leadership behaviour research.

Standard principal–agent moderation

The first part of the article discussed the contingencies that principal–agent theory suggests as affecting the choice of leadership, based on the notion that although ROIS takes the onus of monitoring and directing tasks away from leaders, it places unpopular risk on agents, requiring higher pay and affecting issues such as turnover. With this trade-off in mind, the contingencies favouring behavioural contracts (therefore task-oriented leadership) were established as follows (Eisenhardt 1989): (a) Easier monitoring and direction of agents (where jobs are routine, information

systems can be used, leaders are closer to subordinates due to factors such as low turnover or homogeneous length of service); (b) Outcomes are more difficult to measure; (c) Task outcomes are less certain at a given level of employee effort, and therefore more risky; (d) Agents are more averse to risk (indicated on average by established demographics such as younger, female, lower income and less educated agents). Conditions favour results-based leadership in the opposite circumstances from those described for task-oriented leadership. The reader is referred to the first part of the article for more discussion. This translates into the following proposition:

Proposition 6. TOIS leads to better outcomes than results-oriented leadership under the following conditions: (a) more routine/programmable tasks, (b) when greater use of monitoring is possible, (c) greater proximity between leaders and followers (the moderator structural distance has been used to express this – for example, Day & Lord 1988); (d) higher relational length/depth (proxies for this can include extent of employee retention and length-of-service homogeneity in a group (Kidwell & Bennett 1993); (e) greater outcome uncertainty, and (f) greater risk aversion among employees.

More on task programmability

Task programmability (also referred to as task structure) is probably the most studied of interactions in leader theory (Wofford & Liska 1993). In path-goal theory, the dominant hypothesis has been opposite to the above, namely that when tasks are routine, relationships between path-goal clarification by leaders (equating in many ways to initiating structure) and outcomes would be weaker (House 1971, 1996). House based this hypothesis on the assumption that when jobs are routine, employees are able to organise and arrange tasks themselves, and, especially if they like their work, they might prefer to do so. Under such conditions, it was assumed that the leader's path-goal clarification would be seen as superfluous and unwelcome. However, empirical tests have not supported these path-goal assumptions; in fact the opposite is quite often found (e.g. Wofford & Liska 1993).

The synthesis with principal-agent theory does not help to overcome the problem, as it suggests TOIS to be best with routine tasks, which still allows for subordinate frustration as originally postulated by House (1971). However, principal-agent theory prefers to focus on the leader's overall ability to utilise employees as productive resources, including their control ability, while path-goal theory focuses only on leaders' ability to enhance employee motivation. Motivation may not always generate desired outcomes, an objection that undermines path-goal theory (Yukl & Van Fleet

1991: 169). Principal–agent theory may therefore explain why path–goal theory has not met this assumption.

Characteristics of the individual coexist with task characteristics, and may help to resolve some of the finer possibilities. Prior theory has suggested the following.

Task satisfaction/personal involvement

House (1971) suggested that employees who are generally satisfied or involved with their tasks would be happier to have ambiguous (non-routine) tasks clarified via initiating structure. Conversely, dissatisfied employees may see initiating structure as “a means by superiors to induce followers to work harder at distasteful tasks” (House 1996: 336), which would harm motivation. Notwithstanding this, the current study suggests the following: (a) Intrinsically dissatisfied/unmotivated employees might be more inclined to shirk on operational and customer performance. The effects of both original principal–agent contractual options are especially required and strengthened in such cases, which entails increased TOIS for routine jobs and ROIS for non-routine ones. Effects on leader-outcomes will proceed as per path–goal theory; (b) The path–goal assumption that satisfied/involved employees would prefer to arrange non-routine jobs themselves is retained, but under principal–agent theory that occurs anyway under increased ROIS; (c) Satisfied/involved employees in routine jobs prefer to arrange jobs themselves somewhat; however, TOIS will still be efficacious for organisational outcomes. Points (a) and (b) suggest ROIS to be stronger in non-routine jobs under conditions of either very high or low satisfaction, suggesting a curvilinear relationship. Therefore:

Proposition 7. Satisfaction/involvement interacts with programmability of jobs such that:

Proposition 7a. In the case of routine jobs, the effect of TOIS on operational and customer outcomes is positive, but weaker the more satisfied employees are with their tasks.

Proposition 7b. Satisfaction has a curvilinear moderation effect such that, in the case of non-routine jobs, ROIS has a stronger positive effect on operational and customer outcomes the more employees are satisfied/involved or dissatisfied/uninvolved.

Proposition 7c. Task-satisfaction moderates the effect of TOIS on leader-focused outcomes.

House (1996: 341) also proposed that consideration will enhance outcomes more when employees are dissatisfied or stressed with their tasks. This analysis replicates this proposition:

Proposition 8. Task-satisfaction moderates the effect of consideration on outcomes.

Need for task-related guidance

A number of possible moderators involve aspects of the employee's actual or perceived ability to perform. Accordingly, these speak to employees' perceived need for guidance in the execution of their jobs. Objective variables in this regard especially involve the employee's self-perceived ability relative to task demands (House 1996: 336). However, because of the known impact of employee opinions about their own abilities on actual task performance, a subset of these variables is subjective, such as the employee's inherent self-efficacy, internal locus of control and preference for self-direction/independence (Bandura 1997; House 1996: 337). Unlike prior research, which treats these as separate, these variables are possibly varied faces of a latent construct, tentatively named 'employee need for guidance'. Guidance in task areas most commonly comes about through TOIS, but consideration may also bolster the employee's subjective elements. Therefore:

Proposition 9. Employee task-related ability, inherent self-efficacy, locus of control and preference for independence form indicators of a latent factor, namely employee need for guidance.

Proposition 10. Employee need for guidance (a) moderates relationships between both TOIS and consideration with outcomes; and (b) attenuates a relationship between ROIS and outcomes.

Suggested mediation relationships

This study also considers mediators that have previously been used in the older two-construct theory to establish new roles under the three-construct case. Judge et al. (2004: 45) suggest that mediators will explain some of the most important new linkages. Where a mediator is an intermediate outcome of leader behaviour, this study assumes that the above moderation relationships apply.

Mediator 1: Experienced empowerment

Theorists have recently expressed a great deal of interest in the relationships between leadership and empowerment (e.g. Ahearne, Mathieu & Rapp 2005; Arnold, Arad, Rhoades & Drasgow 2000; Keller & Dansereau 1995). It is necessary to separate empowerment as a specific category of leadership behaviour ('leadership empowerment behaviour [LEB]') and as a state experienced by the employee

(‘experienced empowerment’) (Leach, Wall & Jackson 2003). ROIS as defined here already contains the element of LEB. Therefore, empowerment here will refer to experienced empowerment.

Leadership-initiated empowerment has been found to improve customer service and affective outcomes in various settings, generally due to further mediation states such as employee self-efficacy (e.g. Ahearne et al. 2005). This is likely to be attenuated by moderators, especially employee need for guidance (because empowered employees may be overwhelmed if they do not feel able to perform on their own), outcome uncertainty (which expresses the extent to which the employee will be uncertain if empowerment is likely to be successful) and risk aversion (which expresses employee discomfort with uncertainty). Therefore:

Proposition 11. ROIS affects outcomes indirectly and positively through the mediating mechanism of experienced empowerment.

Proposition 12. The effect of experienced empowerment on outcomes is stronger, the lower the levels of (a) need for guidance, (b) outcome uncertainty and (c) employee risk aversion.

Conversely, TOIS should not affect experienced empowerment. Although it is possible that empowerment will decrease with TOIS, as discussed above, varied TOIS and ROIS combinations might be possible. Therefore:

Proposition 13. TOIS has an insignificant relationship with empowerment.

Finally, leaders might seek to enact consideration by attempting to fulfil employee growth needs, which may entail a certain measure of empowerment (Burke et al. 2006), although the employee-focus of such empowerment is likely to lead to lower eventual effects on outcomes than the outcomes-focused empowerment inherent in ROIS:

Proposition 14. (a) Consideration affects outcomes indirectly and positively through mediation of experienced empowerment, although (b) the commensurate effect is stronger for ROIS.

Mediator 2: Organisational justice

Organisational justice is now commonly conceived in the three-construct formulation (Greenberg & Cropanzano 2001), encompassing distributive justice (DJ, being equitable distribution of outcomes), procedural justice (PJ, being fairness in

structural systems and processes underlying decisions) and interactional justice (IJ, including interpersonal treatment such as communication).

Judge et al. (2004: 45) propose mediation through justice, specifically that initiating structure might facilitate DJ, while consideration might lead to IJ, and that both lead to PJ. In the present framework, the consideration propositions remain unchanged. TOIS may, however, facilitate DJ better than ROIS, as task performance stems from closely observed effort only, whereas ROIS is subject to risky outcomes where risk can disrupt equity. Therefore:

Proposition 15. Directly positive relationships exist between (a) TOIS and (b) ROIS with distributive justice, however (c) this effect is stronger for TOIS.

Proposition 16. Consideration directly and positively affects (a) interactional justice and (b) procedural justice.

Judge et al. (2004: 45) suggest that while the communication of objectives and standards in initiating structure would facilitate PJ, the disempowering effect of substantial task direction might also decrease PJ. The framework in this study resolves this dichotomy: since ROIS communicates objectives and standards while empowering employees to act; it should facilitate PJ directly and via experienced empowerment, while the opposite is true for TOIS. Finally, it is possible that ROIS, especially at an extreme, could in fact weaken IJ perceptions. This is because high levels of empowerment associated with ROIS can be associated with structural distance between leaders and followers, which weakens opportunities for interpersonal interactions. Therefore:

Proposition 17. ROIS affects procedural justice, (a) directly and positively, and (b) indirectly and positively through the mediating effect of empowerment.

Proposition 18. ROIS indirectly and negatively affects interpersonal justice through the mediating effect of empowerment.

Proposition 19. Greater structural distance moderates the relationship between empowerment and interpersonal justice in Proposition 18.

With regard to the effect of justice types on ultimate outcomes, because it is personally generated and delivered, IJ is generally linked mostly to leader-focused outcomes (through the quality of leader-member exchange, including trust in the leader). Conversely, because they stem from organisationally broader structures, PJ and DJ are generally linked to operational and customer outcomes (e.g. Aryee, Budhwar & Chen 2002; Konovsky 2000; Masterson et al. 2000). Theory suggests that DJ is less influential than PJ, as individuals seek procedural justifications for

outcomes – for example, Konovsky (2000) for empirical findings. IJ may only affect customer outcomes under the conditions discussed in Proposition 4.

Theory generally does not suggest that these are direct effects. A large variety of mediators exist for justice. We cannot easily incorporate all of them here. However, Masterson et al. (2000) theorised and demonstrated that (a) because it is focused on individual subordinate–leader exchange, IJ most probably acts through leader–member exchange (LMX, including trust in the leader) (Aryee et al. 2002), while (b) PJ seems to act mostly on organisational outcomes through the perception of positive organisational support (POS). In addition, as will be seen later, commitment may also be a mediator. Therefore:

Proposition 20. A positive mediating effect of perceived organisational support (POS) leads to indirect and positive relationships between (a) PJ and (b) DJ and operational and customer outcomes.

Proposition 21. The effects of DJ on operational and customer outcomes are weaker than those of PJ.

Proposition 22. IJ indirectly and positively affects leader-focused outcomes through the positive mediating effect of leader–member exchange (LMX).

Proposition 23. LMX directly and positively affects customer outcomes only under the same moderation conditions as in Proposition 4.

Mediator 3: Goal setting

Judge et al. (2004: 45) also suggest a mediating variable to do with the setting of hard and specific goals, citing Locke (1997) for the motivational effect. They suggest that initiating structure facilitates goal setting. However, in the current framework, the distinction between TOIS and ROIS leads to more complex path requirements.

It is likely that ROIS has more to do with goal setting, and is more likely to motivate in the process, than TOIS. ROIS concentrates on the goals, but also generally facilitates the path through empowerment, which, if implemented correctly, is prepared for through adequate training and communications. Conversely, TOIS focuses more on clarification of the path than the goals; in fact, it is unfortunately possible for such leadership to omit the goal part altogether, possibly jeopardising potential motivation if this occurs. Inherent goal clarity may therefore be important in TOIS. Outcome measurability, as defined earlier, may be a good proxy for the extent to which employees will be able to ascertain and understand goals themselves; therefore, this variable may be a moderator. ROIS emphasises goals, and leaves the

path to a greater or lesser extent up to the employee, suggesting that the effect of ROIS on path-goal clarification may be partially indirect and through empowerment:

Proposition 24. (a) TOIS affects path-goal clarification directly, but (b) this effect is moderated by outcome measurability.

Proposition 25. (a) ROIS affects path-goal clarification indirectly and positively through state empowerment.

Mediator 4: Organisational commitment

This study utilises Meyer & Allen's (1991) affective and normative commitment constructs. The former famously refers to liking and attachment to an organisation, the latter to a sense of obligation to the firm. Continuance commitment, stemming from an inability to leave due to high investments or costs of leaving, is not likely to affect leadership strongly.

Affective commitment is more associated with the employee's identifying with and having emotional exchanges with the organisation, which in this framework is most likely to stem directly from consideration:

Proposition 26. Consideration will affect affective commitment directly and positively.

Affective commitment is also likely to arise from positive intermediate experiences with the organisation, such as when support is provided to the employee, welcome empowerment is provided and relationships are positive (Meyer & Topolnytsky 2000). Therefore, it serves as a second-level mediator:

Proposition 27. Positive and direct relationships exist between (a) empowerment, (b) perceived organisational support, (c) positive leader-member exchange and (d) path-goal clarification with employee affective commitment.

Normative commitment stems largely from an employee's sense of obligation to the organisation. Theorists suggest that it arises from intermediate states that might express investments by the company in the employee (Meyer & Topolnytsky 2000). In the case of variables discussed already, these are likely to be those facilitating personal development or distributed outcomes:

Proposition 28. Empowerment and distributive justice positively and directly affect normative commitment.

These propositions hold both commitment types to be intermediate outcomes, and the same moderation effects as previously proposed for empowerment, justice and goal setting may apply:

Proposition 29. Moderation effects proposed for relationships between (a) empowerment, (b) justice types or (c) goal setting and outcomes also apply in their effect on commitment types.

The theory generally finds that commitment impacts outcomes positively, for reasons such as affective contagion and values congruence (e.g. Meyer & Topolnytsky 2000). This study proposes that normative commitment will have weaker effects, as it is more based on transactional considerations. However, both transactional and social exchange issues impact on affective commitment. Therefore:

Proposition 30. All three types of outcomes are directly and positively affected by (a) affective commitment and (b) normative commitment, but (c) the effects of normative commitment will be weaker than those of affective commitment.

Mediator 5: Self-efficacy

This study dealt earlier with inherent self-efficacy (denoting the employees' general belief in their ability) as a moderator. Specific task-related self-efficacy, however, may serve as a mediator here. Self-efficacy of this nature is frequently seen as an intermediate consequence of leadership (e.g. Ahearne et al. 2005), and is frequently theorised to contribute directly to employee achievement of outcomes (e.g. Bandura 1997; Ahearne et al. 2005). Based on Locke (1997) and House (1996), Judge et al. (2004: 45) suggest that self-efficacy arises both because of the path-goal clarification that stems from initiating structure leadership types, as well as from the personal support inherent in consideration. Task-specific self-efficacy may also arise from state empowerment, which provides the context for self-initiated achievement, moderated by the employee's need for guidance, which dictates the employee's ability to apply and develop self-efficacy within the opportunities given (Ahearne et al. 2005). Therefore:

Proposition 31. Improved goal setting positively affects all outcomes partly through the mediating effect of improved task-specific self-efficacy.

Proposition 32. Higher levels of empowerment positively affect outcomes partly through the mediating effect of improved task-specific self-efficacy.

Proposition 33. Need for guidance moderates the effect in Proposition 32, such that empowerment will increase self-efficacy less for employees with greater need for guidance.

Proposition 34 Consideration positively affects all outcomes partly through the mediating effect of improved task-specific self-efficacy.

Conclusion

In the first part of this study, the author extensively discussed the bases for revising the long-standing consideration and initiating structure constructs of leader behaviour. The research suggests that leader behaviour theories of this type remain useful, especially for broad normative use, and have a place in the light of taxonomic theories enunciated especially by Fleishman et al. (1991). Empirical evidence for the utility of these constructs exists, notably a meta-analysis by Judge et al. (2004), which showed that these constructs had stronger main effects than previously thought, especially consideration. However, initiating structure remained the weaker of the constructs, with occasionally uncertain effects on various outcomes (Judge et al. 2004).

Accordingly, the author suggested a synthesis between leader behaviour and principal-agent theory (Eisenhardt 1989), which specifically concerns leadership in the dyadic context of the employer-employee relationship, where eliciting effort is a key concern. This synthesis results in a two-part initiating structure construct, namely task-oriented initiating structure (TOIS) and results-oriented initiating structure (ROIS). In the former construct, leaders concentrate on the behaviours of their subordinates, directing and monitoring their task performance. ROIS suggests leadership that concentrates on the outcomes of employee actions rather than inputs, through more modern methods such as empowerment and incentives. These leader foci are seen as relatively opposed although not mutually exclusive, as managers may have some combinations of both. As an illustration of this, in early scale development (Fleischman 1953), only a few ROIS behaviours were considered, namely follower empowerment, and these were negatively loaded on the factor.

The synthesis of principal-agent and leadership behaviour theory therefore suggests three broad categories of leader behaviours, namely consideration, task-oriented initiating structure (TOIS) and results-oriented initiating structure (ROIS). This section will develop commensurate research propositions, as the final stage in construct validation is to test a thorough nomothetic net in which variables are placed in differential structural relationships with other antecedent and consequent variables (Bagozzi, Yi & Phillips 1991).

The study of leader behaviours, particularly the classic Ohio State two-dimensional constructs, has dominated much of the history of leadership theory. Although influential theorists have suggested various re-specifications, subsequent development did not adopt these to any great extent. This may have led to seemingly

weak or contradictory findings in many studies, especially those to do with the initiating structure construct.

This two-part study proposes that initiating structure is potentially too wide a construct. It utilises principal–agent theory to suggest that initiating structure be split into task-oriented and results-oriented dimensions. Construct validity was supported. No explicit exploration of such a synthesis has explicitly occurred before, and it has enabled several advances.

Firstly, the synthesis has enabled the development of new research propositions that may resolve some previously ambiguous hypotheses or findings that have been weak or contradictory. Historically, initiating structure, especially, has manifested somewhat inconsistent results, weaker than the findings for consideration. Re-specification might resolve these inconsistencies. The role of task programmability/structure (in path–goal theory) is somewhat reversed by principal–agent theory, and no longer contradicts empirical findings. The current theory allows for both control and motivational leader effects, and therefore overcomes the objection that motivation should not be the only perceived role of leader behaviour (Yukl & Van Fleet 1991). There have also been several instances in research where initiating structure was too broad a construct to enable clear propositions, for instance in predicting procedural justice (e.g. Judge et al. 2004: 45).

Secondly, the addition of new moderators to the literature, notably some principal–agent contingencies that were not previously included, should aid in broadening the theory and differentiating between contexts.

Thirdly, the inclusion of various substantial mediation relationships is in line with the recommendation of Judge et al. (2004: 45) that such relationships may be crucial. The synthesis of path–goal mediators, justice and social exchange variables, commitment, empowerment and efficacy provides a rich bed of research possibilities, and because of the differentiation of initiating structure into two constructs, more finely differentiated mediation relationships in each case have been possible.

Finally, this synthesis has added greater methodological complexity with regard to possible polynomial, curvilinear and latent variable effects. These embellishments, if found to contain empirical support, could also explain some of the weaker historical findings.

The research propositions suggested here may accordingly present a blend of greater sophistication in leadership research, yet retain parsimony, facilitating but perhaps honing the revival in leadership behaviour research prompted by the findings of Judge et al. (2004). The importance of leadership in the modern economy suggests that we treat such investigations as an imperative.

References

- Abernethy, M.A., Bouwens, J. & Van Lent, L. 2010. 'Leadership and control system design', *Management Accounting Research*, 21(1): 2–16.
- Ahearne, M., Mathieu, J. & Rapp, A. 2005. 'To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behaviour on customer satisfaction and performance', *Journal of Applied Psychology*, 90(5): 945–955.
- Andriessen, E.J.H. & Drenth, P.J.D. 1998. 'Leadership: theories and models', In Drenth, P.J.D., Thierry, H. & De Wolff, C.J. (Eds), *Handbook of Work and Organizational Psychology* (3rd edition). Psychology Press.
- Arnold, J.J., Arad, S., Rhoades, J.A. & Drasgow, F. 2000. 'The Empowering Leadership Questionnaire: the construction and validation of a new scale for measuring leader behaviors', *Journal of Organizational Behavior*, 21: 249–269.
- Arthur, J.B. 1994. 'Effects of human resource systems on manufacturing performance and turnover', *Academy of Management Journal*, 37: 670–687.
- Avolio, B.J. 1999. *Full Leadership Development*. Thousand Oaks, CA: Sage.
- Ayree, S., Budhwar, P.S. & Chen, Z.X. 2002. 'Trust as a mediator of the relationship between organizational justice and work outcomes: test of a social exchange model', *Journal of Organizational Behavior*, 23(3): 267–285.
- Bagozzi, R.P., Yi, Y. & Phillips, L.W. 1991. 'Assessing construct validity in organizational research', *Administrative Science Quarterly*, 36: 421–458.
- Baker, W.K. 2011. 'Antecedents and consequences of job satisfaction: testing a comprehensive model using integrated methodology', *Journal of Applied Business Research*, 20(3).
- Bandalos, D.L. & Finney, S.J. 2001. 'Item parcelling issues in structural equation modeling', In Marcoulidie, G.A. & Schumacker, R.E. (Eds), *New Developments and Techniques in Structural Equation Modelling*, Mahweh, NJ: Erlbaum.
- Bandura, A. 1997. *Self-efficacy: The Exercise of Control*. New York: Freeman.
- Batt, R. & Moynihan, L.M. 2006. *Human Resource Management, Service Quality, and Economic Performance in Call Centres*, Center for Advanced Human Resources Working Paper Series. No. 06–01, Cornell University.
- Burke, C.S., Stagi, K.C., Klein, C. Goodwin, G., Salas, E. & Halpin, S.M. 2006. 'What kind of leadership behaviors are functional in teams? A meta-analysis', *Leadership Quarterly*, 17(3): 288–307.
- Cummings, G.G., MacGregor, T., Davey, M., Lee, H., Wong, C.A., Lo, E., Muise, M. & Stafford, E. 2010. 'Leadership styles and outcome patterns for the nursing workforce and work environment: a systematic review', *International Journal of Nursing Studies*, 47(3): 363–385.
- Dabos, G.E. & Rousseau, D.M. 2004. 'Mutuality and reciprocity in the psychological contracts of employees and employers', *Journal of Applied Psychology*, 89(1): 52–72.
- Day, D.V. & Lord, R.G. 1988. 'Executive leadership and organizational performance: suggestions for a new theory and methodology', *Journal of Management*, 14: 453–464.

- Deci, E.L. & Ryan, R.M. 2012. 'Motivation, personality and development within embedded social contexts: overview of self-determination theory', *Oxford Handbook of Human Motivation*, 85: 85–107.
- Edwards, J. & Parry, M.E. 1993. 'On the use of polynomial regression equations as an alternative to difference scores in organizational research', *Academy of Management Journal*, 36: 1577–1613.
- Eisenhardt, K.M. 1989. 'Agency theory: an assessment and review', *Academy of Management Review*, 14(1): 57–74.
- Fama, E. & Jensen, M.C. 1983. 'Separation of ownership and control', *Journal of Law and Economics*, 26: 301–326.
- Fleishman, E.A. 1953. 'The description of supervisory behavior', *Journal of Applied Psychology*, 37(1): 1–6.
- Fleishman, E.A. 1973. 'Twenty years of consideration and structure', In Fleishman, E.A. & Hunt, J.G. (Eds), *Current Developments in the Study of Leadership*. Carbondale, IL: Southern Illinois University Press.
- Fleishman, E.A., Mumford, M., Zaccaro, S.J., Levin, K.Y., Korotkin, A.L. & Hein, M.B. 1991. 'Taxonomic efforts in the description of leader behaviour: a synthesis and functional interpretation', *Leadership Quarterly*, 2(4): 245–287.
- Greenberg, J. & Cropanzano, R. 2001. *Advances in Organizational Justice*. Stanford, CA: Stanford University Press.
- Halek, M. & Eisenhauer, J.G. 2001. 'The demography of risk aversion', *Journal of Risk and Insurance*, 68(1): 1–24.
- Holman, D., Batt, R. & Holtgrewe, U. 2007. The global call centre report: international perspectives on management and employment. [Online] Available at: <http://www.ilr.cornell.edu/globalcallcenter/upload/GCC-Intl-Exec-Sum-UK-Version.pdf>. Accessed: 10 February 2013.
- Holt, C.A. & Laury, S. 2002. 'Risk aversion and incentive effects', *American Economic Review*, 92(5): 1644–1655.
- House, R.J. 1971. 'A path-goal theory of leader effectiveness', *Administrative Science Quarterly*, 16: 321–338.
- House, R.J. 1996. 'Path-goal theory of leadership: lessons, legacy, and a reformulated theory', *Leadership Quarterly*, 7(3): 323–352.
- House, R.J. & Mitchell, T.R. 1974. 'Path-goal theory of leadership', *Journal of Contemporary Business*, 3: 81–97.
- Judge, T.A., Piccolo, R.F. & Illes, R. 2004. 'The forgotten ones: the validity of consideration and initiating structure in leadership research', *Journal of Applied Psychology*, 89: 36–51.
- Keller, R.T. 2006. 'Transformational leadership, initiating structure, and substitutes for leadership: a longitudinal study of research and development project team performance', *Journal of Applied Psychology*, 91(1): 202–210.
- Keller, T. & Dansereau, F. 1995. 'Leadership and empowerment: a social exchange perspective', *Human Relations*, 48: 127–146.

- Kidwell, R.E. & Bennett, N. 1993. 'Employee propensity to withhold effort: a conceptual model to intersect three avenues of research', *Academy of Management Review*, 18(3): 429–456.
- Konovsky, M.A. 2000. 'Understanding procedural justice and its impact on business organizations', *Journal of Management*, 26(3): 489–511.
- Laffont, J.J. & Martimort, D. 2002. *The Theory of Incentives: The Principal-agent Model*. Princeton University Press.
- Leach, D.J., Wall, T.D. & Jackson, P.R. 2003. 'The effect of empowerment on job knowledge: an empirical test involving operators of complex technology', *Journal of Occupational and Organizational Psychology*, 76: 27–52.
- Little, T.D., Cunningham, W.A., Shahar, G. & Widaman, K.F. 2002. 'To parcel or not to parcel: exploring the question, weighing the merits', *Structural Equation Modeling*, 9: 151–173.
- Locke, E.A. 1997. 'The motivation to work: what we know', *Advances in Motivation and Achievement*, 10: 375–412.
- Masterson, S.S., Lewis, K., Goldman, B.M. & Taylor, M.S. 2000. 'Integrating justice and social exchange: the differing effects of fair procedures and treatment on work relationships', *Academy of Management Review*, 43(4): 738–748.
- Meyer, J.P. & Allen, N.J. 1991. 'A three-component conceptualization of organizational commitment', *Human Resource Management Review*, 1: 61–89.
- Meyer, J.P. & Topolnytsky, L. 2000. 'Building and maintaining employee commitment', In Travaglione, A. & Marshall, V. (Eds), *Human Resource Strategies: An Applied Approach*. Sydney: McGraw-Hill.
- Rousseau, D.M. 1998. 'LMX meets the psychological contract: looking inside the black box of leaders-member exchange', In Dansereau, F. & Yammarino, F.J. (Eds), *Leadership: The Multilevel Approaches* (Vol. B). Greenwich, CT: JAI Press.
- Rousseeuw, P.J. & Van Driessen, K. 1999. 'A fast algorithm for the minimum covariance determinant estimator', *Technometrics*, 41: 212–223.
- Ryan, A.M. & Schmit, M.J. 1996. 'An assessment of organizational climate and P-E fit: a tool for organizational change', *International Journal of Organizational Analysis*, 4(1): 75–95.
- Stogdill, R.M. 1950. 'Leadership, membership and organization', *Psychological Bulletin*, 47: 1–14.
- Stogdill, R.M. 1963. *Manual for the Leader Behavior Description Questionnaire. Form XII*. Columbus, OH: Ohio State University Bureau of Business Research.
- Stogdill, R.M. & Coons, A.E. 1957. *Leader Behavior: Its Description and Measurement*. Columbus, OH: Ohio State University Bureau of Business Research.
- Wofford, J.C. & Liska, L.Z. 1993. 'Path-goal theories of leadership: a meta-analysis', *Journal of Management* 19(4): 857–876.
- Yukl, G. 1998. *Leadership in Organizations*. Upper Saddle River, NJ: Prentice Hall.

G.J. Lee

- Yukl, G., Gordon, A. & Taber, T. 2002. 'A hierarchical taxonomy of leadership behavior: integrating a half century of behavior research', *Journal of Leadership and Organizational Studies*, 9(1): 15–32.
- Yukl, G. & Van Fleet, D.D. 1991. 'Theory and research on leadership in organizations', In Dunnette, M.D. & Hough, L.M. (Eds), *Handbook of Industrial and Organizational Psychology* (Vol. 3). Palo Alto, CA: Consulting Psychologists Press.