TRANSFORMATIONAL LEADERSHIP AND SUPPLY CHAIN ORIENTATION: AN EMPIRICAL DESCRIPTIVE STUDY IN MANUFACTURING RELATED BUSINESS SECTOR IN SRI LANKA

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ABSTRACT

The challenge of cultivating or developing supply chain oriented culture is often primarily an organizational one and depends on top management leadership. Strategic leader's vision plays a critical role in shaping an organization's direction, values and orientation. He/she must first realize the significance of strategic, operational and market impact of applying supply chain oriented culture to his/her firm. Literature suggests that transformational leaders help to realign the values and norms of their organization, to accommodate and promote both internal and external change when necessary, and to influence major changes in organization members and build commitment for the organization's objectives. Despite the theoretical and managerial importance ascribed to the transformational leadership (TL), less emphasis has been devoted to empirically test whether or not it has direct influence over the development of supply chain oriented culture. Thus, this study attempts to address the question whether the TL style would foster a supply chain orientation (SCO) inside the firms directly involved in the supply chain. The major objective of this study is to examine the association between TL style and the degree of SCO. The study examined a descriptive hypothesis where an association between TL and SCO was inferred only. It does not examine the causal hypothesis, where the determination of degree of SCO by TL was inferred. The single cross sectional design was employed to collect data through a self administered questionnaire. Unit of analysis was the manufacturing related firms. A sample of 45 firms was randomly selected from the registry of the Colombo Stock Exchange-2007. Results indicate an association between TL and SCO in manufacturing related organizations though the contribution of each dimension of the TL varies.

INTRODUCTION

A prerequisite for implementation of supply chain management (SCM) is the fostering of a supply chain orientation (SCO) inside the firms directly involved in the supply chain since strategic orientation guides an organization's alignment with its environment by shaping its strategic attributes and competencies (Hambrick 1983; Manu and Sriyam 1996;

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Gatignon and Xuereb (1997). SCO guides decision making and problem solving both inside the firm and within the boundaries of supply chain prior to successfully implementing supply chain management (SCM) (Mellow and Stank 2005). While numerous factors influence the development of supply chain oriented culture, the style of leadership may have the greatest influence over it. Leadership, which embodies a process of moving groups of individuals in a desired direction through largely non coercive means (Kotter 1988), plays a vital role in organizations by providing direction and facilitating the processes that enable organizations to achieve their goals and objectives (Zaccaro and Klimoski 2001). Specially, literature suggests that transformational leaders help to realign the values and norms of their organization, and when necessary, to accommodate and promote both internal and external change (e.g. Burns 1978; Avolio, Waldman, and Yammarino 1991; Hartog et al., 1997). And, Yukl (1994) describes transformational leadership (TL) as influencing major changes in organization members and building commitment for the organization's objectives. According to Bass and Avolio (1993), transformational leaders foster a culture of creative change and growth rather than one which maintains status quo. Grojean et al (2004) argue that the transformational leadership approaches will help to increase the acceptance of the organization values leading to greater congruence of values between the followers and the organization. Despite the theoretical and managerial importance ascribed to the TL, less emphasis has been devoted to empirically test whether or not it has a direct influence over the development of supply chain oriented culture. Thus, the major purpose of this study is to address the question "whether or not the TL style facilitates fostering a supply chain oriented culture inside the firms directly involved in the supply chain?" The major objective of this study is to examine the association between TL style and the degree of SCO.

The first section of this study gives the conceptual account, the second section elaborates on the methodology, and the third section presents discussion followed by recommendations and then, the conclusion.

CONCEPTUAL BACKGROUND

Transformational Leadership (TL)

Yukl (1989) defines TL as "the process of influencing major changes in the attitudes and assumptions of organization members and building commitment for the organization's mission or objectives'' (p. 204). Burns (1978) characterized transformational leaders as those who motivate followers by appealing to higher ideals and moral values. Transformational leaders attempt to use intrinsic motivation to inspire others to go beyond personal interest and work toward a higher collective purpose, arouse heightened awareness and interests in the group or organizations, increase confidence, and move followers gradually from concern for existence to concern for achievement and growth (Grojean et al 2004; Yammarino and Dubinsky 1994). TL goes beyond the attempts of leaders who seek to satisfy the current needs of followers through transactions or exchange via contingent reward ehavior (Bass 1985). The dynamics of TL involve strong personal identification with the leader, joining in a shared vision of the future, or going beyond the self interest exchange of rewards for compliance (Harter and Bass 1988).

Bass and Avolio (1994) proposed that TL is composed of four dimensions, described as the ``Four Is'' and measured by the Multifactor Leadership Questionnaire (MLQ). The first is idealized influence (charisma), which is based on a follower's respect and admiration for the leader. Next is individualized consideration (IC), the extent to which the leader cares about the individual followers' concerns and developmental needs. Third is intellectual stimulation (IS), the degree to which the leader provides followers with interesting and challenging tasks and encourages them to solve problems in their own way.

Finally, inspirational motivation (IM) is based on communication of expectations and followers' confidence in the leader's vision and values.

Supply Chain Orientation

Mentzer et al (2001, p.4)) define supply chain as ''a set of three or more entities (organizations or individuals) directly involved in the upstream and downstream flows of product, services, finances, and /or information from a source to a customer." Mentzer et al (2001, p.11) define SCO as the ''recognition by an organization of the systemic, strategic implications of the tactical activities involved in managing the various flows in a supply chain.'' SCO adopts a systems approach to viewing the supply chain as a whole and to managing the total flow of goods inventory from the supplier to the ultimate customer. It also predicates a perspective that favours cooperative efforts to synchronize and congregate intra-firm and inter-firm operational and strategic capabilities into unified whole (Mentzer et al 2001). The actual implementation of SCO, across various companies in the supply chain is called SCM (Min and Mentzer 2004). The studies done by Mentzer et al (2001) and Min and Mentzer (2004) considered supply chain orientation as a multi –dimensional construct which includes such dimensions as trust (credibility and benevolence), commitment, organizational compatibility, cooperative norms and top management support. Trust includes credibility and benevolence. Credibility is a firm's belief that its partner stands by its words, fulfills promised role obligation, and, be sincere. Benevolence refers to a firm's belief that its partner is interested in the firm's welfare, is willing to accept short term dislocations, and will not take unexpected actions that would have a negative impact on the firm. Trust, overall, determines cooperation and relationship commitment. Commitment refers to an implicit or explicit pledge of relational continuity between exchange partners. Cooperative norms are the perception of the joint efforts of both the supplier and distributor to achieve mutual and individual goals successfully while refraining from opportunistic action. Organizational compatibility means the similarity in goals, objectives, operating philosophies and corporate culture. Top management support includes leadership and commitment to change and it plays a critical role in defining a firm's direction.

Transformational Leadership and Supply Chain Orientation

A firm must establish a cultural orientation to guide decision making and problem solving both inside the firm and within the boundaries of supply chain prior to successfully implementing supply chain management (SCM) (Mellow and Stank 2005). Creating an organizational climate and culture that guide decision making and problem solving both inside the firm and within the boundaries of supply chain prior to successfully implementing supply chain is a crucial role of top-level leadership. (Mellow and Stank 2005). The challenge of cultivating or developing supply chain oriented culture is often primarily an organizational one and depends on top management leadership. Strategic leader's vision plays a critical role in shaping an organization's direction, values and orientation (Kotter, 1990; Hambrick and Mason 1984).

The TL may impact supply chain oriented culture in different ways. For example, transformational leaders change their culture by first understanding it and then realigning the organization's culture with a new vision and a revision of its shared assumptions, values, and norms (Bass 1985). Transformational leaders help to realign the values and norms of their organization, and when necessary, to accommodate and promote both internal and external change (Avolio, Waldman, and Yammarino 1991). How leaders react to problems, resolve crises, reward and punish followers is all relevant to an organization's culture as well as how the leader is viewed both internally by followers and externally by clients/

customers (Bass & Avolio 1993). According to Bass and Avolio (1993), transformational leaders who build on assumptions such as people are trustworthy and purposeful; everyone has a unique contribution to make, and complex problems are handled at the lowest level possible and articulate them to followers, foster a culture of creative change and growth rather than one which maintain status quo.

TL approaches will help to increase the acceptance of the organization values leading to greater congruence of values between the followers and the organization (Grojean et al 2004). The dimensions of TL may impact the climate of an organization in different ways. For example, intellectual stimulation which encourages followers to question their own, as well as the leader's and organization's values, beliefs and goals, prevent employees from keeping blind faith in leader. Blind faith in leaders locks the organization into a cycle of self- affirming processes that maintain a self-identity out of tune with reality (Rowsell and Berry 1993). These traps are called psychic prisons. The cultural prison is reinforced by members who endow leaders with magical qualities which raise the leaders' self-esteem and establish narcissistic tendencies which result in obsessive needs for self-preservation (Rowsell and Berry 1993). Dimensions of idealized influence and inspirational motivation of TL inspire followers to accept the leader's vision and collective values of the group. House and Shamir (1993) suggest that charismatic aspect of transformation leadership influences the hierarchy of values and identities within a person's self-concept. As a result, followers' identification with the collective values is a more salient aspect of the self-concept; followers internalize the values and goals of the leaders; followers become personally committed to these values and goals; and followers become willing to subordinate their own interest to work toward the collective good. The group or collective level self-concept then becomes the most salient of self-concepts and individuals are motivated to act consistently with this self-concept to enhance their self-esteem (Grojean et al 2004). Bass and Avolio (1993, p.113) assert "there is a constant interplay between culture and leadership. Leaders create mechanisms for cultural development and the reinforcement of norms and behaviours expressed within the boundaries of the culture. Cultural norms arise and change because of what leaders focus their attention on, how they react to crises, the ehavior they role model, and whom they attract to their organizations. The characteristics and qualities of an organization's culture are taught by its leadership and eventually adopted by its followers." Thus, this study hypothesizes that, in Sri Lankan context, there is a strong positive association between the TL and the degree of supply chain orientation in the manufacturing related business firms.

METHODOLOGY

The study is descriptive in nature, and attempts to examine the descriptive hypotheses if a relationship does exist between the TL and the degree of supply chain orientation in the manufacturing related business firms in Sri Lanka. The study does not attempt to control any variable and to establish a cause and effect relationship. A single cross sectional design was employed to collect data through a self administered questionnaire. The questionnaire collected information about TL and the degree of supply chain orientation. Unit of analysis was the manufacturing firm. A sample of 45 firms was randomly selected from the registry of the Colombo Stock Exchange-2007. Proxies were the marketing or marketing related managers of the services firms.

Operationalization

Supply chain orientation

The SCO construct was operationalized based on the study done by Min and Mentzer (2004). Dimensionality of the construct arrives at a priory. Min and Mentzer (2004) consider SCO as a second order factor, which is higher in abstraction, consisting of six first order factors– credibility, benevolence, commitments, norms, compatibility, and top management support –which are determined directly from its indicators. The definitions of these dimensions have been stated somewhere in this study. Four items for each were generated to measure credibility and benevolence, three items for each were developed to capture commitments, norms, and compatibility, and five for top management support. All together, 22 items were generated. All items were assessed through respondents' perceptual evaluation on the degree to which the items were consistent with the qualities/ characteristics of their company by using a five point Liker scale; the response categories for each item were numbered by 1 (strongly disagree) and 5 (strongly agree). The midpoint was anchored by 3 (neither agree nor disagree). The mean scores of the measurement were calculated to determine the degree of SCO adopted by each company.

Transformational leadership style

The study measured the four dimensions- idealized influence, individualized consideration, intellectual stimulation, and inspirational motivation- of TL style by employing 39 items from Form 5-X of the Multifactor Leadership Questionnaire (Bass and Avolio, 1990). The 39 TL items include 10 each for measuring idealized influence, individualized consideration, and ntellectual stimulation, and 9 for inspirational motivation. Respondents rated each of the 39 items on the degree to which they perceived the items were consistent with the qualities/ characteristics of their strategic leadership. Response choices ranged from one (strongly disagree) to five (strongly agree), midpoint being 3 (neither agree nor disagree). The mean scores of the measurement were calculated to determine the degree to which the strategic leaders of the respective firms reflect the characteristics of TL style. Decision criteria are given in Table 01.

Table 01: Decision Criteria- Degree of Reflection of TL style

Mean value	Decision
Between 1 and 2.59	Low degree of reflection
Between 2.6 and 3.59	Moderate degree of reflection
Between 3.6 and 5	High degree of reflection

Source: Author constructed

Validation of measurement properties

An important aspect of increased rigor in conducting scientific research in the modern positivist paradigm is the testing for content and construct validity.

Content validity

The content validity ensures that the measure includes an adequate and representative set of items that tap the domain of the concept (Malhothra 2005, Sekaran 2004). A rigorous literature review was carried out to ensure the content validity of both constructs- TL and supply chain orientation-. The dimensions and items of the TL and supply chain orientation were arrived at priori and tested against data by using confirmatory factor analysis (CFA).

Construct validity

Construct validity depends on how well the scale of a construct actually measures that construct (Peter 1981). The sub dimensions of construct validity are unidimensionality, reliability, convergent validity, and discriminant validity (Peter 1981). This study employed the measurement model in structural equation modeling (SEM) to test for construct validity and its sub dimensions of the TL and the SCO scales. The SEM is a powerful statistical technique that combines the measurement model (confirmatory factor analysis) and the structural model (regression or path model) into a simultaneous statistical test (Aaker and Bagozzi 19779; Garver and Mentzer 1999). The purpose of the measurement model is to describe how well the observed indicators serve as a measurement instrument for the latent constructs (Garver and Mentzer 1999).

Unidimensionality

A scale is unidimensional when the items of a scale estimate one factor (Dunn et al. 1994). The model proposed for this study for measuring TL and SCO is a multiple indicator measurement model. To ensure that each construct is measured by multiple indicators and each of the indicators measures only a single construct, the TL and the SCO scales were examined for unidimensionality through CFA provided by the AMOS program. The CFA, which describes how well the observed indicators serve as a measurement instrument for the latent variables, provides a more rigorous test of unidimensionality (Garver and Mentzer 1999). The indices such as the ratio of x 2 to degree of freedom (CMIN/DF), Goodness of Fit (GFI), Adjusted Goodness of Fit (AGFI), Comparative Fix Index (CFI), Tucker-Lewis Index (TLI) (also known as Non-normed Fit Index-NNFI) and Root Mean Squared Approximation of Error (RMSEA) were employed in this study for ensuring the overall measurement model fit. Concerning CMIN/DF, a ratio of equal to 1 or less than 1 indicates the hypothetical model is over fitted (Hair et al 1998), and a ratio of 2 to 1 or 3 to 1 shows an acceptable hypothetical model (Min and Mentzer 2004). GFI ranges from 0 to 1, with .90 or greater representing an acceptable fit (Hair et al. 1998). AGFI values falling between .9 to 1 indicates a good fit (Hair et al 1998). CFI ranges from 0 to 1, with .9 or greater representing an acceptable fit. An acceptable threshold for NNFI/TLI is also .9 or greater. RMSEA values run on a continuum from 0 to 1, with values falling between 0 .05 to 0.08 deemed acceptable (Hair et al 1998). The TLI, CFI and RMSEA are relatively independent of sample size effect (Hair et al. 1998). Final deletion of measurement items was identified through examination of such indicators as offending estimates, squared multiple correlations, standardized residual covariance, and modification indices. Offending estimates such as negative error terms, standardized coefficients exceeding or very close to one, and very large standard errors associated with any estimated coefficients were checked (Hair et al. 1998). Squared multiple correlations were also reviewed to locate any relatively small values that indicate the portion of a variable's variance that is accounted for by its predictor that is minimal at best. The overall measurement model fit indices for both TL and SCO constructs are summarized in Table 02.

Table 02: Model Fit Indices TL and SCO

Fit indices	TL	SCO	Acceptable limit
CMIN/DF	2.466	1.916	Ratio of 3 to 1
GFI	.918	.966	0.90 or greater
AGFI	.921	.951	0.90 or greater
CFI	.942	.918	0.90 or greater
NNFI/TLI	.913	.906	0.90 or greater
RMSEA	.046	.041	0.05 or less

Source: Author constructed

According to the results in Table 02, all model fit indices are in acceptable limit (i.e. CMIN/DF, GFI, AGFI, CFI, TLI, and RMSEA value for TL are 2.464, 0.918, 0.921, 0.942, 0.913 and 0.046 respectively. CMIN/DF, GFI, AGFI, CFI, TLI, and RMSEA value for SCO are 1.913, 0.966, 0.951, 0.918, 0.906, and 0.041 respectively) suggesting a satisfactory overall fit of both measurement models.

Diagnosis indicators for evaluating components of the measurement model such as standardized residuals and modification indices, and the direction, magnitude, and statistical significance of the parameter estimates between indicators and latent variables were also examined (Garver and Mentzer 1999) for both TL and SO measurements. For both of the measurement models, standardized residuals are below 2.58 at 0.05 alpha level and modification indices are below 7.88, (results are not shown due to space limitation) (Garver and Mentzer 1999). The standardized parameter estimates for both of the measurement models are more or less close to 0 .70 and exhibit the correct sign and magnitude. Critical ratios of regression weight of the items are statistically significant ($\alpha \leq 0.05$) for every first and second order latent variables. Strong evidence that the constructs are unidimensionl exists when the parameter estimates are greater than .70, are statistically significant, and are in the right direction (Garver and Mentzer 1999).

Reliability

The internal consistency of the first order factors of TL and SCO was assessed through reliability analysis (Malhothra 2005). The standardized Cronbach's Alpha for all the dimensions exceeds threshold value 0.7 (Results are not reported in the text). Scales that receive alpha score over 0.7 are considered to be reliable (Malhothra 2005).

Convergent and discriminant validity

The convergent and discriminant validity for the TL and SCO scales were evaluated by the three comparison models suggested by Widaman (1985). The three comparison models are referred to as model 1, model 2 and model 3. Model 1 was developed with individual measurement items as unique factors in a construct (39 for TL and 22 for SCO), model 2 with individual items loaded on one unique trait (items of TL on TL and items of SCO on SCO), and model 3 with individual items loaded on any one of the appropriate first order factors that, in turn, are loaded on the respective second order factors. The comparison of these models yields evidence of convergent (Model 1 with Model 2) and discriminant (Model 2 with Model 3) validity if the differences in chi-square values are significant (Widaman (1985); Bienstock et al 1997; Mentzer et al 1999; Min and Mentzer 2004).

Table 03 contains the chi-square statistics for Models 1, 2 and 3 and the results of a comparison of the three models to assess the significance of the differences between the fit for the three models. Of the three comparison models, Model 3 provides the best overall fit, in terms of chi-square. The difference in the chi-square statistics for Model 1 and Model 2 (For TL, x 2 = 629.8 and df 60, for SCO x 2 = 581.5 and df = 141) is significant at the $\alpha = 0.0001$, thereby demonstrating evidence of the convergent validity of the TL and SCO items. The difference in the chi-square statistics for Model 2 and Model 3 (For TL, x 2 = 221.1 and df = 130, and for SCO x 2 = 144.4 and df = 68) is also significant at the $\alpha = 0$ .0001, thereby demonstrating evidence of the discriminant validity of the dimensions of the TL and the SCO.

Table 03: Three Comparison Models–Convergent and Discriminant Validity-Test

	TL	SCO
Model 1		
X^2_1	1265.2	1124.6
DF_1	358	317
Model 2		
X^2_2	635.4	543.1
DF_2	298	276
Model 3		
X^2_3	414.3	398.7
DF_3	168	208
Model 1- Model 2		
$X^2_1 - X^2_2$	629.8	581.5
$DF_1 - DF_2$	60	141
Model 2 - Model 3		
$X^2_2 - X^2_3$	221.1	144.4
$DF_2 - DF_3$	130	68

Source: Author constructed

DISCUSSION

The central purpose of this study is to answer the fundamental question that arises as to whether the TL has been instrumental for the manufacturing related business firms to cultivate supply chain oriented culture in Sri Lankan context. In line with this purpose, the objective of this study is set to examine the association between the TL style and the degree of SCO in manufacturing related business firms in Sri Lanka. In line with the objective, the hypothesis ".there is a strong positive association between the TL style and the degree of supply chain orientated culture in the manufacturing related business firms in Sri Lanka." was developed.

The criteria in the Table 01 were adopted to determine the degree to which the strategic leaders of the respective firms reflect the characteristics of TL style. Multiple Discriminant Analysis (MDA) was performed to test whether the groups were correctly classified. The MDA is appropriate when the dependent variable is nonmetric and independent variables are metric (Malhothra 2005). To run the MDA, the sample was divided into two parts - analysis sample (32 firms) and validation sample (13 firms). The analysis sample was used for estimation of Discriminant function and the validation sample was reserved for validating the Discriminant function (Malhothra 2005). The results of

MDA are given in Table 04 and 05. The results in Table 04 show the Canonical Discriminant function – eigenvalues. The eigenvalue associated with the first function is 19.718, and this function accounts for 99.5 percent of the explained variance. The canonical correlation associated with this function is 0.976. The square of this correlation indicates that 95 percent of the variance in the TL qualities is explained or accounted for by this model. The second function has a small eigenvalue of 0.089 and accounts for only 0.286 percent of the explained variance. The square of canonical correlation of this function indicates that 0.082 percent of the variance in the TL qualities is explained or accounted for by this model. Because the eigenvalue and canonical correlation are larger, the first function is likely to be superior.

Table 04: Canonical Discriminant Function-Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	19.718[a]	99.5	99.5	.976
2	.089[a]	.5	100.0	.286

First 2 canonical discriminant functions were used in the analysis.

Source: Author constructed

Table 05 reports the results that are used to determine the significance of the discriminant function. The value of Wilks'λ is 0.044 if no function is removed. The Wilks' λ transform to a chi-square of 85.704, with 8 degrees of freedom, which is significant beyond the 0.01 level. The Wilks' λ is near to zero and, thus, the two functions together significantly discriminate among the three groups.

Table 05: Canonical Discriminant Function- Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	.044	85.704	8	.000
2	.918	2.351	3	.503

Source: Author constructed

However, when the first function is removed, the Wilks'λ associated with the second function is 0.918, which is close to 1 and, even, is not significant at the 0.05 level. Therefore, the second function does not contribute significantly to group differences. Some idea about the relative importance of predictors in discriminating the degree of reflection can be obtained by examining the absolute magnitude of the standardized discriminant function coefficients and the structure correlations (Malhothra 2005). Generally, predictors with relatively large coefficients contribute more to the discriminating power of the function, as compared with predictors with smaller coefficients, and are, therefore, more important (Malhothra 2005).

Table 06: Standardized Canonical Discriminant Function Coefficients

	Function	
	1	2
LICMN	-.584	.167
LISMN	1.057	.502
LIMMN	.146	-1.691
LIIMN	.431	1.025

Source: Author constructed
LIIMN - idealized influence mean;
LICMN - individualized consideration mean;
LISMN - intellectual stimulation mean; and
LIMMN - inspirational motivation mean.

An examination of the absolute magnitude of the standardized discriminant function coefficients and the structure correlations reported in Table 06 and 07 respectively indicates that the intellectual stimulation and the inspirational motivation are the most important predictors in discriminating the three groups.

Table 07: Structure Matrix

	Function	
	1	2
LISMN	.852*	-.236
LIMMN	.638*	-.607
LIIMN	.569*	.164
LICMN	.410	-.458*

Source: Author constructed
*Largest absolute correlation between each variable and any discriminant function.

The mean values of the responses given for the supply chain orientation instrument were calculated to determine the degree of supply chain orientation the manufacturing related business firms have cultivated in their firms. Table 08 reports the mean value of the SCO classified by the categories of the TL style.

Table 08: Mean of SCO Classified by TL Categories.

DOTLR	SCO Mean	Std. Deviation
LDREF	2.0120	.14378
MDREF	3.1665	.17595
HDREF	3.8129	.35413
Total	3.2516	.73951

Source: Author constructed
Note: DOTLR = Degree of Transformational Leadership Reflection; LDREF=Low Degree of Reflection;
MDREF = Moderate Degree of reflection; and
HDREF= High Degree of reflection.

According to the table, the highest mean value of SCO (3.8129) appears in the firms where the managers reflect higher degree of TL qualities and the lowest (2.0120) appears in the firms where the managers reflect lower degree of TL characteristics. These

figures suggest that the differences among the mean values of the degree of SCO in the categories of TL style increase as the degree of TL qualities of managers increases. In order to test the statistical significance of these differences, One-way ANOVA was performed.

Table 09: Measures of Association

	Eta	Eta Squared
SCOMEAN DOTLR	.931	.867

Source: Author constructed

The results of the test are reported in Table 09 and 10. To determine whether the TL characteristics have an effect on the degree of SCO, the eta 2 ($\eta 2$) values in Table 09 was considered. The eta 2 is a measure of the variation in the dependent variable that is explained by the independent variable. The $\eta 2$ value (0.867) which is given in Table 09 is near to 1. It suggests that the degree of TL qualities has a strong effect on the degree of SCO.

The statistical significance of the effect of TL characteristics on the degree of SCO was determined by taking F value into account. The F value (136.839) of the test given in Table 10 is significant at $\alpha = 0.000$. Thus, the results clearly indicate the sign of statistically significant differences among the mean values.

Table 10: Results of ANOVA Test

			Sum of Squares	df	Mean Square	F	Sig.
SCOMEAN DOTLR	Between Groups	(Combined)	20.861	2	10.430	136.839	.000
	Within Groups		3.201	42	.076		
	Total		24.062	44			

Source: Author constructed

To determine among which groups the true difference lies, Scheffe's S was calculated. This test was selected since it is a conservative test that is robust to violations of assumptions (Cooper and Schindler 2003). The result of Scheffe's S test which is reported in Table 11 discloses that the true difference lies among all the three groups. This suggests that variations in SCO are explained by TL qualities of the managers. These results strongly support the hypotheses of the study.

Table 11- Scheffe Multiple Comparisons

(I) DOTLR	(J) DOTLR	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
L DREF	M DREF	-1.15443*	.11796	.000	-1.4538	-.8551
	H DREF	-1.80084*	.10924	.000	-2.0781	-1.5236

	M	L	1.	.		.8551	1.45
DREF	DREF		15443*	11796	000		38
		H	-	.		-.8859	-
	DREF		.64641*	09439	000		.4069

Source: Author constructed

*The mean difference is significant at the 0.05 level.

CONCLUSION

This study attempted to explore the association between TL and the degree of SCO in Sri Lankan context. It examined a descriptive hypothesis and did not examine the causal hypothesis, where the determination of degree of SCO by TL was inferred. The study discloses that TL style has a strong effect on the degree of SCO. The study also reveals that the intellectual stimulation and the inspirational motivation are instrumental for reflecting higher degree of TL qualities. Following implications and normative suggestions can be made for practical managers through this study. As TL style has a strong effect on the degree of SCO, managers should improve their TL qualities. However, since the intellectual stimulation and the inspirational motivation play a big role in TL qualities, managers must pay much attention to these two qualities. Major observational behaviours of inspirational motivation are setting high standards, visualizing exciting new possibilities, providing continuous encouragement for subordinates, focusing subordinates' attention on "what it takes" to be successful, making employees aware of essential work-related issues, showing determination to accomplish what managers set out to do, expressing managers' confidence on the ability to achieve organizational goals, talking optimistically about the future, talking enthusiastically about what needs to be accomplished, and articulating a compelling vision of the future. Moreover, the intellectual stimulation can be reflected through encouraging employees to express their ideas and opinions, encouraging to address problems by using reasoning and evidence, rather than unsupported opinion, questioning the traditional ways of doing things, emphasizing the value of questioning assumptions, re-examining critical assumptions to question whether they are appropriate, encouraging employees to rethink ideas which had never been questioned, seeking differing perspectives when solving problems, suggesting new ways of looking at how subordinates do their jobs, getting subordinates to look at problems from different angles, and encouraging non-traditional thinking to deal with traditional problems (Bass and Avolio, (1994). However, further research should be carried out to examine the causal hypothesis, where the determination of degree of SCO by TL is inferred.

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