



SCALE FOR MEASURING TRANSFORMATIONAL LEADERSHIP IN PUBLIC SECTOR ORGANIZATIONS IN SRI LANKA: WITH SPECIAL REFERENCE TO MINISTRIES OF WESTERN PROVINCIAL COUNCIL

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ABSTRACT

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The most accepted Multifactor Leadership Questionnaire (MLQ) is heavily applied to measure the transformational leadership in private sector and central government organizations than provincial council organizations in Sri Lanka. Thus this paper describes the development of a 21 item instrument for assessing transformational leadership in provincial council organizations in Sri Lanka with special reference to the western provincial council. To do so, both qualitative and quantitative methods were applied in three fundamental stages recommended by Churchill (1979). Initially a qualitative research was undertaken in five ministries in the western provincial council within Colombo district through interviews with 15 senior and middle level administrative officers from different back grounds which produced 21 items with four factors emerged. These 21 -items were included in a questionnaire and quantitative study was undertaken with the same respondents who were currently involved in the service in the Western Provincial Council. 60 questionnaires were distributed and 56 questionnaires were returned and found to be useful 56, which represents a 93% response rate. More than half (52) of the respondents were female between the age of 40-55. To ensure the reliability and validity of the measures of transformational leadership construct, mainly reliability test, factor analysis, was used. Finally, 21 items were deducted into 10 items and a new scale was developed to measure the transformational leadership in public sector organizations with three dimensions idealized influence, inspirational motivation, intellectual stimulation and. Regarding the limitations of the study in this respect, only the senior and middle level managers were considered. The sample size was 60 and it was selected only from the western provincial council with the use of purposive sampling technique. Further studies with large sample size which covers the all provincial councils using newly developed scale to measure the transformational leadership and replication studies with other organizations would be useful for further generalizations of the newly developed scale.

Contribution/Originality: This study is one of very few studies which have developed scale for measuring transformational leadership in the public sector organizations in Sri Lanka. Such a study is significant that its leadership development is at crucial stage.

1. INTRODUCTION

The Provincial council system was established in 1988. Since the year 1988 the Provincial Councils are functioning for a period of twenty nine years as agents of the government. The Provincial Councils have now

established several ministries and as a result there have emerged two state services, a Central and Provincial Public Services, changing the administrative landscape at the regional level (Banda, 2009). The 13th amendment of the constitution facilitates devolving the legislative, executive and judicial power of the government to the Provincial Councils. The foundation of the existing devaluation is based on three lists of powers, namely, received list, provincial list and concurrent list. Accordingly, provision has made to entrust the provincial council 37 subjects including law and order, agriculture and agrarian services, local government, education and health services etc.

The executive power to conduct the work pertaining to those subjects entrusted to the provinces is with the governor appointed by the President of the Republic. The power entrusted by the governor of the province is not applicable once the appointment of the Chief Minister is made. Thereafter the Governor of the Province has to work on the advice of the Chief Minister. The Provincial Chief Secretary who is the Chief of the provincial administration is appointed by the Hon, President. However, despite the provincial public service commission was established for administration of the every provincial council, the leadership of the administration does not come under the same institution, the reason being that they are members of all island services controlled by the Central Public Service Commission. Thus, administrative leadership and their leadership style is an important in all institutions in the Provincial Councils.

Leadership is a measure of how well the leader accomplishes the organizational goals. Thus the leadership is fundamental for both private sector and public sector organizations. The most accepted Multifactor Leadership Questionnaire is heavily applied to measure the leadership styles of private sector and public sector than the Provincial Councils. Since its inception there are many criticisms regarding the administrative leadership in the Provincial Councils. it is observed that the literature, there are lack of studies have applied to measure the level of Administrative leadership in the Provincial Councils. Also, there is a need of research to develop leadership measures for the public service in Sri Lanka as Sri Lankan Public services has given least attention for developing leadership measures to measure their administrative leadership, Thus, this study main purpose is to develop measures to examine transformational leadership style of public sector officers in the public sector with special reference to the Western Provincial Council. Therefore, the objective of this study was two-fold: (1) to develop items for measuring leadership in the Public sector in Sri Lanka (2) to evaluate their reliability and validity.

2. LITERATURE

According to Sekaran and Bougie (2013) measurements are the assignments of numbers or other symbols or characteristics of objects according to a pre- specified set of rules. It is not an easy task in measuring more abstract and subjective attributes. Therefore researcher utilizes the questionnaire which was introduced by Bass and Avolio (1995) with some modification to match with local context. Moorhead and Griffin (2012) define leadership in terms of both the process and the property. As a process, leadership is the use of non-coercive influence to direct and coordinate the activities of group of members to meet a goal. As a property, leadership is the set of characteristics and attributes to those who are perceived as using such influence successfully. They state that influence is a common element of both perspectives. It is the ability to effect the perceptions, beliefs, attitudes, motivation and behavior of others (Moorhead and Griffin, 2012). Early leadership research primarily attempted to identify important traits and behaviors of leaders (Mahoney *et al.*, 1960). Traits theories assume that successful leaders are born and that they have certain innate qualities which distinguish them from non-leaders. They attempted to identify stable and enduring characters traits that differentiated effective leaders from non-leaders. Nevertheless, the difficulty in categorizing and validating these characteristics has led to widespread criticism of this approach. In the late 1940s most researchers began to shift from the trait approach and started to look at leadership as a style and behavior. Style and behavior theorists switched the emphasis from the characteristics of the leader to the behavior and style the leader adopted (Likert, 1961). The behavioral approach to leadership attempted to identify behaviors that differentiated effective leaders from non-leaders. Further, the behavioral approach was intended to

determine what behaviors are associated with effective leadership. Michigan State and Ohio state studies each identified two kinds of leader behavior: one focuses on job factors and the other on people factors. The leadership grid further redefined based on behavioral approach. Regarding the trait theories of leadership, their major weakness is that ignore of the important role that situational factor plays significantly in determining the effectiveness of leaders (Mullins, 1999). It is therefore shifted to situational and contingency theories of leadership. Newer situational theories of leadership attempted to identify the appropriate leadership styles on the basis of the situation. Fiedler's LPC (least preferred core-workers) theory states that leadership effectiveness depends on a match between the leader's style and favorableness of the situation (Fiedler, 1967). Situation favorableness, in turn, is determined by task structure, leader-member relations, and leader position power. According to House (1971; 1996) the path-goal theory focuses on appropriate leadership behavior for various situations. The path-goal theory pressurized the nation regarding directive, supportive, and participative aspects. This is an achievement-oriented leader behavior which may be appropriate, depending on the personal characteristics of the subordinates and the characteristics of environment. Unlike the LPC theory, this view presumes that leaders can alter their behavior to best fit the situation. Vroom's decision tree approach suggests that appropriate decision making style is based on situation characteristics (Vroom and Yetton, 1974). This approach focuses on deciding how much of subordinate participation is included in the decision making process. The situational and the contingency perspective is such that leadership effectiveness depends on the leader's diagnosis and understanding the situational factors. Recent studies on leadership have shifted from Transactional to Transformational leadership with their subordinates (Bass and Avolio, 1993). If one goes through the literature of transformational leadership there are many interpretations. Basically, transformational leadership focuses on the basic distinction between leading for change and leading for stability.

2.1. Transformational Leadership

According to Burns (1978) transformational leadership occurs when one or more persons get engaged with others in such a way that leaders and followers raise one another to higher levels of motivation and morality, and the results in transforming have effected on both the leaders and the followers.

Table-1. The Concept of Transformational Leadership – a Summary of Literature

Author(s)	Definition	Dimensions
1. Bass (1998)	Transformation leadership motivates followers to do more than they originally expected to do	Idealized influence Inspirational motivation Intellectual stimulation Individual consideration
2. Burns (1978)	A way that leaders and followers raise one another to higher level of motivation and morality	Motivation Morality
3. Bass (1985)	Transformational leadership focuses on social values and appears in times of distress and change	
4. Yukl (1999)	Transforming the values and priorities of followers and motivating them to perform beyond their expectations	Motivation Values and priorities of followers Expectations of subordinates
5. Avolio and Bass (2004)	Transformational leaders motivate and inspire followers to achieve extraordinary	Idealized influence Inspirational motivation Intellectual stimulation Individualized consideration
6. Bass and Avolio (1990); Howell and Avolio (1993); Howell and Hall-Merenda (1999)	Those persons who demonstrate four independent and mutually reinforcing attributes that inspire followers and achieve more than expected	Charisma Inspirational motivation Intellectual stimulation Individualized consideration

Transformational leaders throw themselves into a dynamic relationship with followers who will feel elevated by it and become more active themselves (Krishna, 2001). Transformational leadership motivates others to the

extent more than they originally thought possible (Bass and Avolio, 1994). Bass (1985) defined a transformational leader one who motivates followers to do more than they originally expected to do (cited by Jayakody and Abesekara (2011)). According to the literature in general there are four factors in transformational leadership which are idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Table 1 shows a summary of concepts and dimensions of transformational leadership in selected literature for this study.

Table 2 shows the dimensions of transformational leadership and its items which are selected from Multifactor Leadership Questionnaire (MLQ) form 06, Dr. Al Restivo to develop measuring instruments in this research.

Table-2. Dimension and Items of transformational Leadership

Dimension	Items
Idealized influence	make others feel good to be around me Others have complete faith in me Others are proud to be associated with me
Inspirational motivation	Express with a few simple words what we could and should Provide appealing images about what we can do Help others find meaning in their work
Intellectual stimulation	Enable others to think about old problems in new ways Provide others with new ways of looking at puzzling things get others to rethink ideas that they had never questioned before
Individualized consideration	Help others develop themselves Let others know how I think they are doing Give personal attention to others who seem rejected

Source: http://alrestivo.com/Downloads_files/Multifactor%20Leadership%20Questionnaire.pdf

2.2. Validity and Reliability of Measuring Instruments

Reliability and validity are two different important characteristics of any measurement procedure. According to Sekaran and Bougie (2013) the reliability of a measure indicates the extent to which it is without bias and hence ensures consistent measurement across time and across the various items in the instruments. Further, they describe the reliability as a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of measures. Reliability refers to the confidence that can place on the measuring instrument to give that, the same numeric value when the measurement is repeated on the same object (Gaur and Gaur, 2013). Validity on the other hand means that the measuring instrument actually measures the property it is supposed to measure.

There are methods suggested by scholars for testing the reliability and validity of a measurement instrument. It is also referred to as ensuring the goodness of measures. In the above measurement instrument for Transformational leadership researcher's first attempt was to establish content and face validity.

Content validity ensures that the measure is inclusive of an adequate and representative set of items that covers the concept. This was established by the review of literature which included the research work of many authors on the subject of Transformational Leadership in their attempts to conceptualize Transformational Leadership.

Face validity is also a measure of content but not as strong as establishing it through a literature review. In the present exercise it was done by showing the questions to a few known people who are experts in leadership research field. Once the content was validated the next step was to test for the reliability.

Reliability of a measure is established by both the consistency and the stability. The reliability is whether the items measuring a concept fit with each other once they are taken together as one set. It measures how well the items are positively correlated to one another. The more these items are correlated to each other, the more the reliability is established. In order to carry out this exercise the questionnaire was distributed among 30 public

managers. All variables of interest were estimated through respondents' perceptual evaluation on the five point Likert scale: the response categories for each item were anchored by 4 (very high) and 0 (very low).

3. METHODOLOGY

Fifteen interviews were conducted on Public Days in May and June 2017 with Administrative officers within the five provincial ministries in the western province where a judgmental sampling approach was used. Interviewees asked open-ended questions about their past experiences about leadership in public sector. Moreover, additional ad-hoc questions were asked to clarify the given responses and enhance the productivity of the interview process. Interviewees were selected from five ministries and their departments within the provincial council. Each interview last between 5-10 minutes and were recorded.

Recorded interviews were studied by following the guidelines of a content analysis to create compositions of all answers. Subsequently statements related to the respondents' leadership styles were carefully highlighted. Researcher formed 21 distinctive statements using multifactor leadership questionnaire model for the content categorization. In order to form the factors statements with similar characteristics were grouped. They are idealized influence, Inspirational motivation, Intellectual stimulation, Individual consideration, Contingent rewards, management by Exception and Laissez-faire. Then a quantitative study was under taken to develop transformational leadership measurement for provincial councils in Sri Lanka.

3.1. Analysis and Results

Resulting 21 items transformed into pilot questionnaire and used to collect data for first stage validation. A five-point Likert scale (Likert, 1932) ranging from (0) 'not at all' to (4) 'always' was used. The sample of the pilot study consisted of 60 respondents from the provincial council. The questionnaire was translated in to Sinhala and both Sinhala & English questionnaires distributed accordingly as required by the respondents. Sixty questionnaires were distributed using non-probability judgmental sampling technique to respondents and they were requested to fill out the questionnaires in a self-administered manner. Fifty eight questionnaires were returned and found to be useful only fifty six, which represents a 93% response rate. More than half (48%) of the respondents were male. The respondents' education level as follows: 67% of respondents had completed their first degree and 27 % had completed post graduate degree and 6 % were Diploma holders.

Mangal and Mangal (2015) suggested that the method or methods employed for estimating the reliability depends on a number of factors, such as the nature of the test and purpose of obtaining a measure of reliability. Further, Chauhan (2015) suggested that the validation of an instrument begins with the computation of Cronbach's alpha coefficient, item-to-total correlation and exploratory factor analysis (EFA). Hence, in this study Cronbach's Alpha was estimated by using collected data. The Cronbach's Alpha value for 21 items was .776 and it shows in the Table1. There was no item to be deleted. Corrected Item-Total Correlation is the correlations between each item and the total score from the questionnaire. In a reliable scale all items should correlate with the total. Hence, it should be looked for items that do not correlate with the overall score from the scale, if any of these values are less than about .3 then there is a problem, because it means that a particular item does not correlate very well with the scale overall. Items with low correlations may have to be dropped. Nunnally (1970) recommended omission of the items (<.3) with low corrected item-to-total correlations. The first stages of this scale development, totally 10 items were deleted from the instrument. Table 2 shows the results of Item-Total Statistics of all items before deleting items which are not correlated well with the overall scale.

Table-3. Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.832	.776	21

Source: Survey Data

Table-4. Item-Total Statistics

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q1	69.95	69.143	.076	.602	.835
q2	70.38	63.257	.461	.504	.822
q3	69.96	67.781	.227	.710	.831
q4	70.30	65.415	.329	.507	.828
q5	70.29	69.262	-.004	.566	.843
q6	71.21	57.008	.753	.876	.804
q7	71.30	57.415	.764	.939	.804
q8	71.43	56.540	.758	.899	.803
q9	71.43	56.395	.741	.942	.804
q10	71.30	58.288	.672	.892	.809
q11	71.07	60.358	.602	.561	.814
q12	71.50	59.018	.607	.714	.813
q13	71.09	61.101	.476	.667	.821
q14	71.20	58.997	.580	.726	.815
q15	73.05	70.524	-.099	.229	.839
q16	72.77	68.472	.131	.530	.834
q17	70.82	67.822	.204	.450	.832
q18	70.93	69.631	.008	.300	.836
q19	70.95	69.797	-.016	.261	.838
q20	71.00	69.855	-.032	.387	.840
q21	70.93	67.377	.178	.617	.833

Source: Survey Data

The KMO value of .718 and p value .001 is satisfactory value for sampling adequacy. The result is shown in Table 4.

Table-5. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.718
Bartlett's Test of Sphericity	Approx. Chi-Square	696.434
	df	210
	Sig.	.000

Source: Survey Data

Then the factor loading obtained from EFA with Varimax rotation, further considered testing the factor and eliminating the poor performing items. Hence, as the second stage of this process of this process – was deleted from the instruments.

Table-6. illustrates the summary of 11 items which loaded to three factors.

Rotated Component Matrix ^a			
	Component		
	1	2	3
q2			.772
q4			.881
q6	.844		
q7	.897		
q8	.901		
q9	.925		
q10	.900		
q11	.449	.522	
q12		.791	
q13		.885	
q14		.876	

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 5 iterations.

Table-7. Summary of Factor Loading

Rotated Component Matrix ^a			
	Component		
	1	2	3
q2			.772
q4			.881
q6	.844		
q7	.897		
q8	.901		
q9	.925		
q10	.900		
q11		.552	
q12		.791	
q13		.885	
q14		.876	

Source: Survey Data

The third stage of this scale development process, reliability and validity were tested for new three factors. The reliability statistics of the data set was ensured with a Cronbach's Alpha value of more than .7 (Flynn *et al.*, 1994) the reliability of the instrument was ensured in term of consistency. Next step of the instrument development was to examine whether the deletion of any items could improve the Cronbach's Alpha value.

When ensuring construct validity Exploratory Factor Analysis with Principal Component Analysis should be carried-out. To examine whether items in the scale measures the theoretical construct of leadership convergent and discriminant validity have to be ensured. If an item loads significantly <.5 (Field, 2009) on the factor, it is measuring the convergent validity is prevalent and if it ensures that no other items are measured by the concept discriminant validity could be established.

Each factor explains a percent of the total variance. According to Kim and Mueller (1978b) factors that do not explain much variance might not be worth including in the final model. It takes some iteration to come up with the optimal number of factors. Reliability and validity analysis of each factor's as follows.

Factor 1

Table-8. Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.961	.961	5

Source: Survey Data

Table-9. Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q6	13.11	15.734	.851	.828	.957
q7	13.20	15.615	.921	.890	.947
q8	13.32	15.168	.901	.854	.949
q9	13.32	14.840	.913	.904	.947
q10	13.20	15.724	.863	.830	.955

Source: Survey Data

The Cronbach's Alpha value for the five items included in factor 1 was .961. There were no items to delete and the values in the column labeled Corrected item-Total correlation are greater than seven.

Table-10. Summary -Factor 1 No of items

No of items		
1	Q6	I am satisfied when others meet agreed-upon standards
2	Q7	I am content to let others continue working in the same ways always
3	Q8	Others have complete faith in me
4	Q9	I provide appealing images about what we can do
5	Q10	I provide others with new ways of looking at puzzling things

Source: Survey Data

All items had strong loadings on the construct, they were supposed to measure indicating unidimensionality and construct validity.

Factor 2

Table-11. Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.842	.839	4

Source: Survey Data

Table-12. Item-Total Statistics

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q11	10.14	7.943	.522	.275	.860
q12	10.57	6.649	.700	.519	.789
q13	10.16	6.683	.701	.537	.788
q14	10.27	6.091	.790	.649	.746

Source: Survey Data

Total Cronbach's Alpha for the four item The Cronbach Alpha value for the items four included in factor 2 was .839. There was an item to be deleted to be deleted. It was Q11 and the values in the column labeled corrected it. It was Q11 and that question was deleted from the scale to increase the Alpha value.

Table-13 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.860	.859	3

Source: Survey Data

The new Croanbach’s Alpha value for the three items included in factor2 was .859. There were no items to be deleted and the values in the column labeled Corrected item –Total Correlation are above .5. Table 14 shows the total statistics for the factor two after deleted Q11. All items had strong loading on the construct.

Table-14. Item-Total Statistics

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q12	7.00	3.927	.698	.507	.836
q13	6.59	3.919	.711	.532	.824
q14	6.70	3.488	.797	.636	.742

Source: Survey Data

Factor 2 summery is shown in the table 15

Table-15. Summary-Factor 2

No of items		
1	Q12	I provide recognition/rewards when others reach their goals
2	Q13	As long as things are working, I do not try to change anything
3	Q14	Whatever others want to do is OK with me

Source: Survey Data

Table-16. Factor3 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.641	.643	2

Source: Survey Data

As shown in the table 16, the Croanbach’s Alpha value for two items included in factor three was .643 and it is greater than .5. There was no item to be deleted and the values in the column labeled Corrected Item-Total Correlation are above .4. Item-Total Statics for factor three is shown in Table 17. All items had strong loading s on the construct.

Table-17. Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q2	4.34	.556	.473	.224	.
q4	4.27	.672	.473	.224	.

Source: Survey Data

Factor 3 summery is shown in the Table 18.

Table-18. Summery –Factor 3

No of Items		
1	Q2	I express with a few simple words what we could and should do
2	Q4	I help others develop themselves

Source: Survey Data

Again to ensure the reliability of this measure Composite Reliability (CR) and Average Varian Extracted (AVE) were calculated using following equations. The Composite Reliability indicates the reliability and internal consistency of a latent construct. A value of CR>0.6 (Fornell and Larcker, 1981) is required in order to achieve composite reliability for a construct. The Average Variance Extracted indicates the average percentage of variation explained by the measuring items for a latent construct. AVE >0.5 (Fornell and Larcker, 1981) is required for every construct.

$AVE = \sum K^2 / n$ K= factor loading of every item n = number of items in a model

$CR = (\sum K)^2 / [(\sum K)^2 + (\sum 1 - K^2)]$.

Average Variance extracted and Composite reliability values for three factors are shown in Table 19. All the values are above the required level.

Table-19. AVE & CR Values

	Average Variance Extracted	Composite Reliability
Factor 1	.785	.873
Factor 2	.734	.606
Factor 3	.686	.798

Source: Survey Data

All AVE and CR values included in Table 19 indicate that there is a good reliability of these measures. In order to provide support for discriminant validity, Pearson correlations among the study factors were computed. For this purpose, composite scores for each factor were calculated by averaging scores representing that dimension. Table 20 shows the significant correlations among the factors. The highest correlation occurred between F1 and F2 (0.436) and reversely, the lowest correlation was found between F2 and F3 (0.284).

Table-20. Pearson Correlation

Correlations				
		f1	f2	f3
f1	Pearson Correlation	1	.436**	.284*
	Sig. (2-tailed)		.001	.034
	N	56	56	56
f2	Pearson Correlation	.436**	1	.207
	Sig. (2-tailed)	.001		.126
	N	56	56	56
f3	Pearson Correlation	.284*	.207	1
	Sig. (2-tailed)	.034	.126	
	N	56	56	56

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

* Correlation is significant at the 0.05 level (2-tailed).

Finally, the developed new scale with three dimensions is as follows.

Table-21. New Questionnaire for Measuring Transformational Leadership of Public Sector

No of Items		Idealized influence
1	Q1	I express with a few simple words what we could and should do
2	Q2	I help others develop themselves
		Intellectual Stimulation
3	Q3	I am satisfied when others meet agreed-upon standards
4	Q4	I am content to let others continue working in the same ways always
5	Q5	Others have complete faith in me
6	Q6	I provide appealing images about what we can do
7	Q7	I provide others with new ways of looking at puzzling things
		Inspirational Motivation
8	Q8	I provide recognition/rewards when others reach their goals
9	Q9	As long as things are working, I do not try to change anything
10	Q10	Whatever others want to do is OK with me

4. DISCUSSION AND CONCLUSION

This paper aims to develop a measurement scale measure transformational leadership of public sector administrators' in the public sector as a case. 21 items of Multifactor Leadership questionnaire were selected with seven dimensions after making some modification. They are idealized influence, inspirational motivation,

intellectual stimulation, individualized consideration, contingent rewards, management- by- exception and liasse-faire. After that quantitative study was employed to purify the scale items, examine dimensionality, reliability, factor structure and validity. Finally, 10-item scale with three factors such as idealized influence, inspirational motivation, intellectual stimulation were developed. This study contributed to the conceptual and methodological advancement of leadership of public sector administrators' and public sector literature by developing new scale to measure transformational leadership of public sector administrators in the provincial councils in Sri Lanka.

4.1. Limitation and Future Studies

The findings of this research should be interpreted in the light of the following limitations. The first limitations with a sample distribution, having the respondents fill out two questionnaires due to time and follow up constraints. These second limitation is the use of judgmental sampling technique as one of the non- probabilistic sampling techniques. Perhaps the use of one of the probabilistic techniques would provide the chance of generalizing the results more confidently. The sample size was 60 and it was selected only from the western provincial council. Also the original questionnaire was translated in to Sinhala and sometimes the real meanings were expected from the items should be changed.

As a closing note, further studies can be recommended with large sample size which covers the all island using this newly developed scale to measure the transformational leadership of public sector administrators in the provincial councils and replication studies with other public organizations would be fruitful for further generalizations of the newly developed scale.

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