CONFIRMATORY ANALYSIS OF SHARED LEADERSHIP DIMENSION

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Abstract

As a new stream of leadership study, Shared Leadership has attracted a lot of researchers. One of the interesting discussions is the measuring indicator of Shared Leadership. The aim of this research is to investigate the scale of Shared Leadership by doing the confirmatory factors analysis (CFA) among the Z generation in Indonesia. The samples are generation Z team consisting of 216 people from 3 cities, which are Jakarta and Surabaya to represent Western Indonesia and Manado to represent Eastern Indonesia. The data used is processed using SEM-PLS Confirmatory factor analysis. The result shows that two dimensions of leadership, which are TOSL (Task Oriented Shared Leadership) and ROSL (Relation Oriented Shared Leadership) are a good measurement scale for Shared Leadership and can be applied among the Z generation.

Keywords: shared leadership, confirmatory factor analysis, task oriented shared leadership, relation oriented shared leadership

1. Introduction

1.1 Background of the Research

By 2035, Indonesia will have experienced bonus demography, a condition where the number of productive populations will reach two thirds of the total population. A time like such is a rare opportunity, as not all countries are able to achieve this situation and in this short amount of time. Therefore, the nation of Indonesia needs to prepare through developing reliable leaders, as bonus demography can make Indonesia more prosperous if all population of the appropriate working age becomes productive and contributes to the nation. Otherwise, this group of the population could become a burden if they do not have the necessary and required competence.

Research involving how a leader can improve team members' performance has been extensively done (Nisjstad, Berger-Selman, & De Dreu, 2014). This involves seeing the effectiveness a leader has on team performance (Clarke 2013) as well as the influence of shared leadership on team performance (Pearce & Sims, 2002; Wang, Waldmann, and Zhan, 2014). Research completed by Carson, Tesluk, and Marrone, (2007) strengthens and supports that shared leadership is highly effective at improving performance in a complex situation and condition.

Until this moment, there are still ongoing different opinions on how to measure shared leadership empirically (Hoch, 2013; Hoch and Duhlebohn, 2013), due to the various aspects it can be measured by. One aspect is through measuring shared from network analysis, being completed through measuring shared leadership from each team member (Liu et al., 2014). Others also measure shared leadership through the number of nominated leaders (McIntyre and Foti, 2013). Hoch et al., (2010) states that measuring shared leadership is a dynamic process because the behaviour of leaders is shared with team members.

1.2 The Objective of the Research
Aformentioned statement has shown that shared leadership from each member of a team should be treated and spread thoroughly. Even though there are many opinions and research on it, shared leadership for generation Z has not been indepth discussion. The large number of ongoing debates encourages the writer to conduct research with the purpose of identifying which dimension of shared leadership for generation Z has the potential to generate leaders for the future.

1.3 Literature Review
In the era of VUCA (Volatility, Uncertainty, Complexity and Ambiguity), setting up a long-lasting organization relies on the leadership scheme. One of the leadership forms introduced is shared leadership (Merkens & Spencer, 1998). Shared leadership is a type of leadership where the leader is willing to distribute authority, control, and responsibility to members either individually or as a group (Nassif, 2019). Shared leadership is a condition that occurs when a leader distributes responsibilities to their team members (Wu and Cornican, 2016; Jackson, 2000; Lambert, 2002; Pearce & Conger, 2003).

Shared leadership provides a foundation for team members to understand where and when they can contribute their knowledge to other team members, as such increasing the team's abilities to provide high quality knowledge. A leader plays a large role as a source of change of an organization (Fukuyama, 2014). This is supported by Senge (1990) who states that when a leader does this is referred to as a visionary leadership. This is due to how the leader must be able to convey the essence and meaning of the vision that is supported by everyone as that vision reflects the people's vision.

Shared leadership (Muethel and Hoegl, 2016; Carson et. Al, 2007) has three basic characteristics. First, shared purpose which is a condition when a team member shares the same understanding with the team's main purpose and ensures that each step taken focuses on a collective purpose. Second is social support, a form of support done by team members to provide emotional and

psychological support for each other. Third is voice, defined as a condition about how far each team member has ideas on how the team does things to achieve their purpose.

Shared leadership as a quality and process in a team helps create a mechanism to unite team members and strengthens commitment for team success (Nassif, 2018). Wu and Chen (2018) states that shared leadership has implications towards employees' performance. With a shared understanding of a team's main purpose, the existence of emotional and psychological support, and the involvement of team members in collaborating in decision making and responsibilities, then employees will perform better in an organization.

Earlier study by Yukl (2006) mention that Shared Leadership has two dimensions, Task Oriented Shared Leadership (TOSL) and Relationship Oriented Shared Leadership (ROSL). The two dimensions become the foundation of Servant Leadership scale. TOSL is a condition where a leader only focuses on tasks that helps achieve the desired purpose. The focus of this task-oriented approach is on management tasks such as coordination needed or related with activities, administration tasks, supervising product quality as well as preparing financial reports. Leaders with this task-oriented approach aims to achieve the corporation's goals. The RSOL dimension focuses on work satisfaction, motivation, and balance of life of the members. Leaders with an orientation on this relation always builds a good relationship with their members and helps each one (Reily, 1968). Leaders understand that work productivity requires a positive working environment and are willing to take responsibility of the risks well, as each member receives support from the leadership (Graen and Uhl-Bien, 1995).

2. Method

The population of the research are generation Z that has business projects with the numbers totaling 216 respondents spread across 3 cities, which are Jakarta and Surabaya to represent Western Indonesia and Manado to represented Central Indonesia. The selection of the respondents is generation Z due to this generation being the ones who will occupy leadership positions soon. This research uses confirmatory analysis to confirm the two dimensions of shared leadership, which are Task Oriented Shared Leadership (TOSL) and Relation Oriented Shared Leadership (ROSL).

3. Results and Discussion

This study uses factor analysis as a method of analyzing data, as the article aims to determine dimensions of shared leadership variables. The first mechanism of factor analysis used is exploratory factory analysis (EFA), which has a purpose of differentiating character from each operational item. The results of the EFA test are as follows:

Table 1. Result of EFA test

	Exploratory Factor Analysis		
	Factor Loadings		
	Relation Oriented – Shared Leadership	**Task Oriented – Shared Leadership**	Uniqueness
SL21	0.891		0.312
SL22	0.851		0.282
SL19	0.795		0.404
SL23	0.76		0.379
SL24	0.719		0.346
SL18	0.697		0.441
SL15	0.683		0.439
SL16	0.665		0.424
SL17	0.621		0.46
SL25	0.618		0.408
SL20	0.613		0.436
SL09	0.513		0.413
SL14	0.459		0.460
SL04		0.870	0.447
SL03		0.756	0.454
SL05		0.686	0.507
SL07		0.673	0.443
SL06		0.648	0.429
SL10		0.619	0.357
SL02		0.600	0.470
SL08		0.564	0.516
SL12		0.491	0.391
SL01		0.435	0.509
SL13		0.423	0.406
SL11		0.417	0.409
Note. Applied rotation method is promax.			

At the EFA test, as seen on Table 1, all operational item from shared leadership forms two different dimensions, which are Task Oriented Shared Leadership and Relation Oriented Shared Leadership. To avoid bias in this analysis, the entirety of the operational items of this shared leadership is going to be tested using the Confirmatory Factor Analysis (CFA) method. This CFA aims to view the factor loading of each operational item. Additionally, the factor loading advised is > than 0.5 (Hair et al., 2017). The results of the CFA testing are as follows:

Table 2. Result of CFA – TOSL test

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.01	58.397	58.397	7.008	58.397	58.397
2	0.82	6.807	65.204			
3	0.72	5.967	71.171			
4	0.57	4.719	75.89			
5	0.51	4.222	80.112			
6	0.46	3.815	83.927			
7	0.43	3.539	87.466			
8	0.39	3.256	90.722			
9	0.32	2.642	93.364			
10	0.3	2.506	95.87			
11	0.28	2.303	98.173			
12	0.22	1.827	100			
Extraction Method: Principal Component Analysis.						

Table 3. Result of CFA - ROSL test

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.15	62.673	62.673	8.147	62.673	62.673
2	0.75	5.8	68.473			
3	0.59	4.547	73.021			
4	0.55	4.22	77.241			
5	0.5	3.849	81.09			
6	0.47	3.634	84.724			
7	0.41	3.133	87.858			
8	0.37	2.807	90.664			
9	0.31	2.412	93.076			
10	0.28	2.169	95.245			
11	0.23	1.746	96.991			
12	0.22	1.705	98.697			
13	0.17	1.303	100			
Extraction Method: Principal Component Analysis.						

Based on the results of the CFA tests found on Table 2, it is seen that based on the eigenvalue, only 1 component is shaped during the Task Oriented Shared Leadership (TOSL) dimension testing. As such, this shows that the operational item found in the dimension is true and confirmed. Additionally, the testing related with the Relation Oriented Shared Leadership

(ROSL) dimension testing is also completed to view whether the operational item found in the ROSL dimension is confirmed. The result of the CFA testing on the ROSL dimension is as follow

Based on Table 3, it can be seen that an eigenvalue greater than 1 only occurs on 1 component. Therefore, it can be confirmed that the entire operational items found on the ROSL dimension truly represents the dimension. Furthermore, the result of this testing also views values from factor loadings from the operational items. The factor loadings values are as follows:

Table 4. Loading Factor Value and Reliability

Factor	Indicator	Corrected Item Total Correlation	Cronbach Alpha	Std. Est. (all)
Relation Oriented Shared Leadership	SL09	0.727	0.95	0.761
	SL14	0.708		0.732
	SL15	0.731		0.747
	SL16	0.748		0.760
	SL17	0.729		0.740
	SL18	0.714		0.740
	SL19	0.752		0.766
	SL20	0.724		0.755
	SL21	0.789		0.812
	SL22	0.819		0.840
	SL23	0.775		0.792
	SL24	0.792		0.812
	SL25	0.746		0.773
Task Oriented Shared Leadership	SL01	0.667	0.934	0.702
	SL02	0.713		0.733
	SL03	0.708		0.713
	SL04	0.682		0.684
	SL05	0.662		0.675
	SL06	0.727		0.748
	SL07	0.707		0.730
	SL08	0.669		0.700
	SL10	0.778		0.807
	SL11	0.735		0.779
	SL12	0.761		0.800
	SL13	0.733		0.778

Based on Table 4, it is seen that the factor loadings value for each operational item that represents shared leadership dimensions is above the minimal value of 0.5 and hovers around 0.675 - 0.840. As such, it can be stated that the entirety of the operational items used to measure shared leadership variables is valid and deserves further analysis. To add to that, the table above also shows the reliability values for each dimension's hovers at 0.935 and 0.950. The following explains how the entirety of the dimensions related with shared leadership represented by TOSL and ROSL are reliable.

4. Conclusion

After the confirmatory analysis has been completed, it can then be proven that the shared leadership dimensions consist of TOSL and ROSL. For that reason, leaders that implement this

condition can become appropriate leaders for the situation where the coming generation (generation Z) will be lead.

Future Research

We recommend extended research with different generation as sample since every generation has a unique way to interact within a team. Team with different cultural background is a potential topic of study. The cultural context will determine the team dynamics and team leadership in a team.

Acknowledgments

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