How Do Transformational Leadership, Communication and Supply Chain Management Affect Commitment to Change through Readiness for Change?

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Abstract: This study aimed to determine the effect of transformational leadership, communication and supply chain information sharing system on a commitment to change and examine the mediating effect of readiness for change. The data were collected through a survey of 320 health workers in the hospitals of East Java who were involved in the implementation plan of the hospital service system and PL-SEM was used to test the hypotheses. The results of statistical analysis showed that transformational leadership and communication had a positive influence on the commitment to change, and the readiness for change significantly mediated the relationship between transformational leadership and commitment to change. However, it did not mediate communication and commitment to change. The study was carried out cross-sectional in government hospital institutions so that the limitations occurred in recognizing the development of the phenomenon under study.

Keywords: Readiness for change, Communication, Supply chain information sharing system, Affective commitment, Transformational leadership

1. Background

Health systems throughout the world nowadays are investigating more effective ways to provide services in the health sector. When the effectiveness of health services was formerly measured by looking at the development of treatment costs, the emphasis now is on improving the quality and results of the treatment [1]. The change in effectiveness emphasis occurs due to the increased public awareness on the quality of health services [2].
If an organization failed to report its change system in a proper manner may also result in the failure of its change activity. A proper supply chain information sharing system (SCISS) will present the organization point of view stand behind the change activity in a proper way in order for a better understanding of the employees. [12]

Around the globe, in the information sharing literature, it is witnessed that the attempts of the change by any organizations failed due to weak supply chain information sharing system (SCISS). With the passage of time, organizations changes or upgrade its system etc. Organizations are in need to design a proper supply chain information sharing system (SCISS) to communicate the change they want to bring. Supply chain information sharing system (SCISS) varies organization to organization [13]. Some organizations prefer strong supply chain information sharing system (SCISS) where others give preference to strong supply chain information sharing system (SCISS).

Supply chain information sharing system (SCISS) is basically a system designed by the organization to share its information in and outside the organization. Supply chain information sharing system (SCISS) is designed in agreement with the culture of the organization [14]. If the system is not in agreement with the demand of the culture, then it might not provide the expected results. Whatever the organization preferences are but it can't be ignored that in the recent era, the supply chain information sharing system (SCISS) has become the need of every organization [15].

Communication is the basis for gathering information about the organizational context. The study conducted by Trombetta and Rogers [16] which involved 512 nurses, resulted in the presence of a relationship between communication and commitment. During and after the change, effective communication facilitates the organization to overcome employees' uncertainty. Information reduce the uncertainty associated with the change so that communication is a source to strengthen the commitment to change [9].

Transformational leadership is a charismatic and visionary leader who is capable of identifying, providing, and promoting employees' confidence. Expounding these complex relationships could help provide good managerial practices to increase the success of every change effort.

This study contributes to the research questions by first reviewing theories of leadership, communication, RC, and CC, followed by the effects of TL, communication, RC, and CC. The context of organizational changes will be conducted, supported by human resource practices. The researchers further suggest several implications for the organization and future research.

2. Hypotheses development
This section provides the literature about the understudy variables along with their relationship and based on these literature hypotheses are developed in this section.

2.1 Transformational leadership and readiness for change
Leadership plays a crucial role in every organizational change. It is an important factor to enhance members' attitudes toward the development or achievement of organization goals [17]. A number of researchers correlating leadership behavior with management change includes Bakari, Hunjra [18] who conducted a study on authentic leadership and readiness for change involving 258 employees from three major hospitals in Pakistan [19]. Leadership in the health care center has an important role in enhancing organization performance [20]. Motivation as a condition that is able to move employees to be able to achieve certain goals. Motivation is considered as a condition or energy in a person that can move that person to take directed action. In management, motivation is generally aimed at human resources and especially to subordinates. It was motivating for questioning about how to be able to direct the power and potential of employees or subordinates for wanting to work productively in order to achieve goals. Supported by Abbasi [21], 234 employees from three different organizations showed that both TL and RC have a positive relationship. Thus, the first hypothesis is:

H1: Transformational leadership has a positive influence on readiness for change.

2.2 Transformational leadership and commitment to change
The TL based on the principle of exchange, transformational and charismatic leadership involve the communication of vision, values shifting, encourage innovation, and promote self-efficacy [22]. Judge & Piccol (2004) state that transactional leadership is most effective during the period of stability when conditions of the change are in the period of reinforcement. The idealized influence that is a leader must become a good role model who is followed by subordinates so that it will foster respect and trust on him [23]. Intellectual stimulation, namely, the leader must be able to provide stimulation to his subordinates to come up with new ideas or opinions and create new innovations under his guidance and direction. Individualized consideration, namely, the leader must pay attention, listen to and understand the needs of his subordinates. Supply Chain (information flow) Management system is the company standard and procedures to flow the information of the management. It decides the channel for proper transfer, storage and maintenance of the organization information. A strong Supply Chain (information flow) Management system leads to a strong communication relationship between all
the section and departments of the organization. There are many issues within the organization between leadership and employees arises due to communication gap. Conversely, transformational and charismatic leadership styles are more appropriate with the conditions of change. Thus, the second hypothesis is:

**H2:** Transformational leadership has a positive influence on a commitment to change.

### 2.3 Communication and readiness for change

Communication is absolutely important to reduce the negative influence on employee's cognitive and affective processes in relation to changes, so they will be less prepared to adapt with the changes [24]. Communication is the main mechanism to make organization members willing and ready for change. People tend to be more cynical about change if the quality of communication is poorly managed. In particular, Hameed et al. (2019), state that employees who receive timely, relevant and useful information about organizational change will consider the change itself more positive, and they become more willing to support the change. In short, the quality of communication contributes to convincing employees that change is necessary by offering adequate justification, reducing uncertainties related to change, and playing an important role in shaping employees readiness for change [25]. Thus, the third hypothesis is:

**H3:** Communication has a positive influence on readiness for change.

### 2.4 Communication and commitment to change

Conceptually and empirically, communication is increasingly associated with a commitment to change [26]. Organizational commitment can be enhanced through a definite communication about organization desires, and performance [27]. Based on some definitions explained above, it can be concluded that leadership is a way of influencing individuals or groups in a company to achieve common goals. Motivation is considered as a condition or energy in a person that can move that person to take directed action. In management, motivation is generally aimed at human resources and especially to subordinates. It is motivating for questioning about how to be able to direct the power and potential of employees or subordinates for wanting to work productively in order to achieve goals. Based on the opinions above, it can be concluded that motivation is a desire and encouragement in employees to carry out their duties and responsibilities. The example of effective leadership in a company is leadership that has a serving characteristic. In other words, a leader who is expected in an organization is the one who is able to serve subordinates, not ask to be served. An effective leader will try to serve his subordinates because by serving subordinates well, he will be able to stimulate others to follow the orders in carrying out the work. Leadership in a company has three important aspects. Research by Rafferty and Restubog (2010) results in a positive correlation between perceived quality of merger-related information and affective commitment to change among employees. Thus, the hypothesis is:

**H4:** Communication has a positive influence on a commitment to change.

### 2.5 Supply chain information sharing system and readiness for change

In the change literature, it is witnessed that humans, most of the time, not prefer the change. All around the globe, the most number of change attempts are failed due to failure in employee's readiness to change [28]. One of the main reason stands behind is the weak supply chain information sharing system (SCISS). Supply chain information sharing system (SCISS) of any organization explains the organization viewpoint behind the organization policies. Supply chain information sharing system (SCISS) defines the organization policies, standards, procedures etc. in a detailed way for better understanding [29]. The change activity of any organization can't succeed until unless the employees are not prepared for that particular change that will bring into the system [30]. Once the employee becomes mentally ready for the change, then it will accept it easily; otherwise, there are a number of complexities. Here the supply chain information sharing system (SCISS) plays its role to convince the employees for change [15]. Supply chain information sharing system (SCISS) present the pros and cons of the change in order to make the people ready for this particular change.

**H5:** Supply chain information sharing system (SCISS) has a positive influence on Readiness to change.

### 2.6 Supply chain information sharing system and commitment to change

Once the employee of any organization become ready due to a solid supply chain information sharing system (SCISS) for any change that the organization wants to bring by, then the story not ends here [29]. The organization will have to maintain its employee's mentality for change until unless that particular change activity not completed. Here supply chain information sharing system (SCISS) again plays its role [31]. The organization with its supply chain information sharing system (SCISS) time to time remain in touch with its employees to recall that pros and cons stand behind that change activity. Supply chain information sharing system (SCISS) do not give space to organization employees to leave this change topic. It recalls again and again to employees that this change is beneficial for them in order to build a strong commitment [32]. Once the employee is committed towards the change activity, then the change process will end in a successful completion.
H6: Supply chain information sharing system (SCISS) has a positive influence on Commitment to change

2.7 Mediating role of readiness to change

Commitment to change is "the power (mindset) that binds individuals toward necessary actions for the successful implementation of change initiatives" [33]. In addition, continuance commitment to change is a sense of acknowledgement that there must be costs associated with the change for the occurring failure. A number of factors related to the content or nature of certain change initiatives are revealed by those who have intensely discussed commitment to change, namely the level and turbulence of change [34], participation, reward, history of change, procedural justice [35], authentic leadership [18], individual factors including practical intelligence and individual behavior; the process of change including communication and participation, the context of change including the trust in management and change history [36] reciprocal relationship with readiness for change and advocacy for change.

Literature witnessed that there is a nexus between supply chain information sharing system (SCISS) and readiness for change. Whether this nexus can have positive or negative directions. Many of times the direction of the nexus varies country’s culture [37]. If the supply chain information sharing system and readiness for change have a positive relation in one country but on the other hand, it can be negative in the other one. Studies also proposed that readiness for change actively mediates with supply chain information sharing system (SCISS).

Leadership can affect commitment to change. Leadership can also affect readiness for the change needed to prepare the targets for change which consequently affect the commitment to change [38], one can expect that an indirect leadership related to the commitment to change and readiness for change has a mediating role. Thus, the whole hypotheses resulted are as follow:

H7: Readiness for change has a positive influence on a commitment to change
H8: Readiness for change mediates the transformational leadership to a commitment to change
H9: Readiness for change mediates the communication to the commitment to change
H10: Readiness for change mediates the supply chain information sharing system to the commitment to change

3. Methodology

The quantitative research method was employed in the design of the present study to answer the research objectives. The population in this study were all health workers in the southern part of East Java who was involved in the plan of implementation. This study collected the data by means of questionnaires and for this sake around 410 questionnaires were distributed by personal visit. After two weeks, only 320 questionnaires were returned and considered as valid for analysis that represents around 78.05 percent response rate. For the sake of analysis, PLS-SEM has been employed by the study. The variable that are used by the study have following items; the predictors such as transformational leadership (TL) has five items, communication (CM) has six items and supply chain information sharing system (SCISS) has four items. In addition, the mediator such as readiness to change (RC) has also has four item and dependent variable such as commitment to change (CC) has five items. These variable are shown in Figure 1 given below:

4. Results

The findings include the validity that consist upon discriminant validity along with convergent validity and path analysis for hypotheses testing. Firstly, this study executed the convergent validity and proved as valid because the values of Alpha and CR are not lower than 0.70 and the values of AVE and loadings are also not smaller than 0.50. These are shown in Table 1.

<table>
<thead>
<tr>
<th>Items</th>
<th>Loadings</th>
<th>Alpha</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC2</td>
<td>0.740</td>
<td>0.727</td>
<td>0.830</td>
<td>0.550</td>
</tr>
<tr>
<td>CC3</td>
<td>0.748</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC4</td>
<td>0.693</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC5</td>
<td>0.783</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CM1</td>
<td>0.745</td>
<td>0.789</td>
<td>0.854</td>
<td>0.539</td>
</tr>
<tr>
<td>CM2</td>
<td>0.753</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CM3</td>
<td>0.713</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CM4</td>
<td>0.718</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CM6</td>
<td>0.740</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC1</td>
<td>0.713</td>
<td>0.724</td>
<td>0.827</td>
<td>0.545</td>
</tr>
<tr>
<td>RC2</td>
<td>0.768</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC3</td>
<td>0.755</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC4</td>
<td>0.713</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCISS1</td>
<td>0.724</td>
<td>0.785</td>
<td>0.808</td>
<td>0.513</td>
</tr>
</tbody>
</table>
Secondly, this study executed the discriminant validity and proved as valid because the values of Heterotrait Monotrait (HTMT) ratios are not higher than 0.85 that is the indication of no extensive correlation among the variables. These are shown in Table 2.

<table>
<thead>
<tr>
<th>Table 2. Heterotrait Monotrait ratio</th>
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<tbody>
<tr>
<td>CC CC</td>
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<tr>
<td>TL TL</td>
</tr>
</tbody>
</table>

Thirdly, the path analysis show that positive association among the TL, RC and CC and accept H1 and H2. Moreover, it also show that the positive nexus among the communication RC and CC and accept H3 and H4. In addition, supply chain ISS has positive association with RC and accept H5 while insignificant link with CC and reject H6. Furthermore, readiness to change also has positive association with CC and accept H7. Moreover, RC has positive mediation among the TL and CC, communication and CC, supply chain ISS and CC and accept H8, H9 and H10. These links are shown in Table 3.

<table>
<thead>
<tr>
<th>Table 3. Path analysis</th>
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<tbody>
<tr>
<td>Relationships</td>
</tr>
<tr>
<td>CM -&gt; CC</td>
</tr>
<tr>
<td>CM -&gt; RC</td>
</tr>
<tr>
<td>RC -&gt; CC</td>
</tr>
<tr>
<td>SCISS -&gt; CC</td>
</tr>
</tbody>
</table>

5. Discussion and conclusion

This study examined the impact of TL, supply chain ISS, communication and RC on a CC and the effect of leadership and communication on RC sequentially. The rapid changes in the environment of business globally required demands and opportunities, this change is strongly applied with the help of a strong supply chain information sharing system (SCISS). The researchers suggested that organizational commitment is a crucial factor for constructing employees' readiness for change which is very important as well for the success of organizational changes [15]. However, research on the relationship between commitment and readiness for change was rarely carried out, and the results on the effect of its interrelation were various. The importance of supply chain ISS can't be ignored in a global world for successful completion of change activities. The present study provided a new approach to understanding the role of commitment to the readiness for change simultaneously in the application of information technology in hospitals for the professions of nurses, doctors, management, lab officers, and pharmacists.

This study has the aim to predict the effect of supply chain information sharing system on readiness for change and CC in the fifth and sixth hypothesis. From the results, there is a positive relationship reflecting. This study aimed to predict the effect of readiness for change on the CC in the seventh hypothesis. From the results of the analysis conducted, a positive relationship between readiness for change and commitment to change was obtained. This was in line with the results of the study by Piazza [16] which involved 258 employees from three different hospitals in
Pakistan. RC is an important factor for the success in implementing change initiatives since it can reduce the resistance and enhance the probability of change adoption. Commitment to change could be enhanced by the quality of clear and precise communication regarding organizational intentions activities [19].

The hypotheses eighth and ninth were intended to recognize the effect of TL and communication on a CC by mediating RC. From the SEM analysis results in Table 4, it was identified that readiness for change mediates the effect of leadership on a commitment to change in hypothesis six, but the prediction in hypothesis seven was not supported by the analysis conducted. Hence, readiness for change failed to mediate the effect of communication on the commitment to change. The hypotheses ten was intended to recognize the effect of supply chain information sharing system on the commitment to change by mediating readiness for change. The results identify that readiness for change acts as mediator in the relation.

Hence, if the organization wants to develop and maintain the CCs, it should pay more attention to the factors of leadership, communication, participation, and relation with the superiors. Furthermore, the findings of this study proven that transformational leadership and communication are positively related to a commitment to change; however, readiness for change acts as a mediator. The empirical findings above highlighted the important role of readiness in shaping the interrelation of TL and CC.

There are some shortcomings of the present study which lead to improvements for future research. First, this research has examined the mediating role of RC as a mechanism that enables leadership and communication to have an impact on a commitment to change. It will help broaden understanding of the effects of leadership and communication on a commitment to change. In future research, the supply chain ISS can be employed as a mediator or moderator [39].

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