

## Impact of Transformational Leadership on Organizational Commitment, Job Satisfaction and Patient Safety Culture

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**Abstract:** Patient safety is considered as the most important matter in the medical field as well as the quality of services safety which is also acknowledged as a priority by all health services providers Hospital must be able to create a safety culture in its duty of providing health services, and such culture could be developed by the support of transformational leadership, organizational commitment and job satisfaction. In the previous studies, the patient safety culture was shaped through the transformational leadership, organizational commitment and job satisfaction, use multiple regression analysis, only assessed whether the variables are the predictor of the patient safety culture formation and found that those above was a significant predictor for patient safety culture. In this study, the researchers analyses the impact of transformational leadership on organizational commitment, job satisfaction, and patient safety culture which were not previously studied. The objective of the study; first, to find out to what extent the impact of transformational leadership on organizational commitment; second, to find out to what extent the impact of transformational leadership on job satisfaction; and third, to find out to what extent the impact of organizational commitment and job satisfaction on patient safety culture. The study used a questionnaire which was distributed to 105 respondents who are all the nursing staff providing direct contact and services to the patients in a private hospital in Tangerang, Indonesia. The method of the data analysis of this study is the Structure Equation Model (SEM). The result of the study found that the transformational leadership had an impact towards the increase in organizational commitment and jobs satisfaction and the study found that there was an impact of organizational commitment and job satisfaction on patient safety culture. So, it is concluded that the formation of patient safety culture is impacted by both organizational commitment and job satisfaction. While the organizational commitment and job satisfaction are impacts by the transformational leadership.

**Keywords:** Transformational leadership, organizational commitment, job satisfaction, patient safety culture.

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### I. Introduction

Patient safety culture can be formed when a practice of patient safety becomes a part of work routine. When the culture is formed the mindset and behaviour of patient safety becomes a habit. (Reiman, Pietikainen and Oedewald, 2010) defined the patient safety culture as, "the willingness and capability of an organization to comprehend and aware of risk and jeopardy as well as the willingness and capability of taking action towards safety". Efforts and collaboration of all staff are needed to build a patient safety culture, and this starts with a leadership which can communicate the vision of patient safety culture. It is therefore very important that the nursing leadership comes out as a proof of the impact of behaviour changes upon patient safety culture on the nursing staff. Safety culture is highly impacted by organizational transformation, such as leadership transformation, thus leadership plays a significant role in the implementation of patient safety culture. The new paradigm of current leadership defined as to how the leaders strive to transform their subordinates to work harder in making achievement, and the kind of leadership that can do such thing is the transformational leadership.

Avolio, Zhu, Koh and Bhatia (2004) stated that the transformational leadership has a close linkage to the formation of organizational commitment. Mullen (2005) proposed that the *transformational safety-specific* leadership is the best model of leadership that can be used to undertake safety culture. Transformational leadership bolsters a concept which says the act of a visionary leader will promote his/her subordinate to contribute to the collective goal making (Bass, 1985; Bass and Bass, 2008). Emery, College, Barker and Fredonia (2007) said that the transformational leadership will improve job satisfaction and organizational commitment. Meyer and Allen (1991) approach on the formation of organizational commitment of which the affective commitment will be formed based on the emotional bound which is related to the transformational leadership, the common vision, value and behaviour therefore establish the organizational commitment which in the end will form a safety culture. The linkage between nurse job satisfaction and patient safety has a significant

correlation and is strongly positive where the higher the job satisfaction, the better the behaviour of patient safety which is performed by nurse. (Lee, 2014).

This research is the replication of research with modifications from *Williams (2014)* entitled ‘*Nurses organizational commitment, job satisfaction, and perception of their managers leadership style as predictors of perception of patient safety culture*’. These studies were conducted in Ohio, the United States and concluded that there is a positive relationship between the perception of the nurse patient safety culture, organizational commitment, job satisfaction, nursing and leadership style of their Manager. Replication is done to examine whether similar thing applies also on different research contexts and with different method. Based on the background and questions outlined above, then researchers interested in examining further the influence of transformational leadership in nursing managers, organizational commitment, job satisfaction and patient safety culture.

On the research of *Williams (2014)* that raised the topic of ‘*Nurses organizational commitment, job satisfaction, and perception of their managers leadership style as predictors of perception of patient safety culture*’, which do his research using the method of multiple regression of the relationship of organizational commitment, job satisfaction and perception of nursing leadership style against her manager as a predictor of patient safety culture. According to *Williams (2014)* previous study only revealed a correlation relationship and no empirical questions on other influential variables. Therefore, in this research which is the study of the correlation of quantitative assess whether the variable has a predictive relationship between transformational leadership in nursing, organizational commitment, job satisfaction and patient safety culture. This research method using multiple regression and correlation analysis of Pearson to evaluate the relationship between the predictor variables and the criterion variable. Pearson correlation analysis to measure the strength of the relationship between variables and analysis of multiple regression analysis was used to test the hypothesis of the nursing managers leadership style, organizational commitment and job satisfaction is significant Predictor or not as predictors of patient safety culture. The results obtained from the analysis of the correlation of Pearson found the perception of patient safety culture has a significant positive correlation relationship with organizational commitment, job satisfaction and leadership style managers of nursing. The result of the analysis of multiple regression showed a significant predictive relationship between the perception of a culture of patient safety with organizational commitment, job satisfaction and leadership style. Of existing variables, job satisfaction has the most significant contribution was followed by organizational commitment. But the result of leadership style is not a very meaningful contribution showed as a predictor variable from patient safety culture. The object of research from previous research conducted on the developed countries and in this research the object done in developing countries and with category of type B hospitals in Indonesia which have a difference in terms of leadership, commitment organizational culture and job satisfaction, safety.

However, so far there is no research that investigate patient safety culture which outcome influenced by organizational commitment, job satisfaction and influenced transformational leadership to organizational commitment and job satisfaction that did not exist in previous research.

## **II. Literature Review**

### **Transformational Leadership**

Leadership style is defined as the leader’s behaviors, characteristics, and overt and covert mannerisms that drive the attainment of goals and objectives (Bass and Bass, 2008). *Bass (1985)* Transformational leadership theory supports the concept that leaders ‘visionary actions promote their followers’ contributions to the attainment of a collective and mutually attainable goal. The transformational leadership implementation makes the subordinates feel trusted, appreciated, and they will be loyal and respect their supervisor which in the end will make the subordinates motivated to perform better work than the expected one. Bass added to the initial concepts of *Burns (1978)* to help explain how transformational leadership could be measured, as well as how it impacts follower motivation and performance. The extent to which a leader is transformational, is measured first, in terms of his influence on the followers. The followers of such a leader feel trust, admiration, loyalty and respect for the leader and because of the qualities of the transformational leader are willing to work harder than originally expected. These outcomes occur because the transformational leader offers followers something more than just working for self-gain; they provide followers with an inspiring mission and vision and give them an identity. The leader transforms and motivates followers through his or her idealized influence (earlier referred to as charisma), intellectual stimulation and individual consideration. In addition, this leader encourages followers to come up with new and unique ways to challenge the status quo and to alter the environment to support being successful. Finally, in contrast to *Burns*, Bass suggested that leadership can simultaneously display both transformational and transactional leadership.

There is a potential relationship between safety culture and leadership characteristics according to *Baer and Frese (2003)* and there is also a potential relationship between the leadership of the Manager of nursing, behavior and attitude of nurses regarding safety culture according to (*Squires, 2010; Wong and Cummings,*

2007). In other studies, said that there is an interaction relationship between organizational commitment and job satisfaction of nurses (Avolio et al., 2004; Lok and Crawford, 2004) but there was a gap in the literature correlating specific leadership with organizational commitment and job satisfaction on nurses and whether there is any correlation with the nurse's attitude to security practices and culture.

The variable of Transformational Leadership is measured by using the transformational leadership which was developed by Carless, Wearing and Mann (2000), in which the more concise alternative scale is developed for the leadership questionnaire of the *Multifactor Leadership Questionnaire (MLQ)* introduced by Bass and Avolio (1995). *Global Transformational Leadership (GTL) Scale* consists of one dimension which is the transformational leadership along with seven items as the measurement of complex transformational leadership behaviour and based on the original transformational leadership by Bass (Carless et al., 2000). The seven items that are measured based on the *Global Transformational Leadership (GTL) Scale* are to what extent the leaders are able to, among others; (1) Communicate the clear and positive vision about the future, (2) Treat the staff as the individual, support and motivate staff development, (3) Motivate and acknowledge staff, (4) Build trust, involvement and collaboration among team members, (5) Promote thinking about the issues in new ways and assumption, (6) Have values and clear practices when delivering instruction, (7) Deliver a pride and give credit to others as well as show respect to others. (Carless et al., 2000, page 393).

### **Organizational Commitment**

Organizational commitment is the degree to which a nurse emotionally and psychologically identifies with the philosophy, mission, and values of his or her organization and thereby extends effort to help achieve strategic initiatives. It is viewed in the perspective of three dimensions: "a) a strong belief in and acceptance of the organization's goals and values; b) a willingness to exert considerable effort on behalf of the organization; and c) a definite desire to maintain organizational membership" (Mowday, Porter and Steers, 1983). There are three components that partake in the organizational commitment; (1) affective commitment of which someone emotionally bound to the organization. This type of commitment comes up and develops along with the existence of comfort, safety, and benefit of which felt by someone in his/her organization, and this kind of feeling cannot be provided by other organizations, (2) sustainable commitment is someone's perception on the risk which will take place if he/she quit the organization, this means the commitment is based on the remuneration/salary scheme, and sacrifice of being involved in an organization, (3) normative commitment; is a matter of moral ethic which is embedded into the organization.

Affective commitment is shaped by a work condition and expectation as well as psychological bounding level with the organization based on how good the employee feels about the organization. Meyer, Stanley, Herscovitch, and Topolnysky (2002) stated that the employee organizational commitment is a psychological bounding towards the organization. An employee that holds a good organizational commitment is deemed valuable for the organization of which in its turn the organization will achieve expected results awaited by such employee to achieve job satisfaction. Organizational commitment is unlike the job satisfaction where the organizational commitment defined as to the loyalty to an organization. In the context of acute treatment, organizational commitment is very important as a nurse who commits to the organization would tend to work harder within any condition regardless of the benefit they will get (WD, 1998).

Variable of organizational commitment is measured by the indicator of organizational commitment according to the Organizational Commitment Questionnaire (Mowday, Steers, and Porter, 1979) which makes use of three factors assessing the mechanism of trust and acceptance of the organization's goal, a desire of hard-working, and desire to work in the organization.

### **Job Satisfaction**

When job satisfaction is linked with the theory of leadership from Bass (1985) some of these relationships were obtained as follows; (1) transformational leadership will increase job satisfaction and will infuse mission and intellectual stimulation. Transformational leaders also encouraged his followers to be able to take more responsibility and be autonomous so that by running the task will give you satisfaction and increased achievement, (2) transformational leaders focus on the development of someone so employees feel that someone cares for their needs. Basically, job satisfaction is an individual thing in nature. A person is usually satisfied with what he/she does if the work is considered as suitable to the expectation, and suitable to the person's goal of working. If someone desires something, that means that person is having an expectation, thus he/she will be motivated to act towards the goal or expectation achievement. If the expectation is fulfilled, someone will feel satisfied.

The relationship between nurse job satisfaction and patient safety have important and positive strong correlation, which is where the higher level of satisfaction it works will higher to conduct patient safety act of nurses (Lee, 2014). On research from Drake (2015), the behavior of the patient safety culture is not significantly

affected by the level of education and experience a nurse leader, but a safety culture is significantly influenced by the job satisfaction and a sense of respected by staff nurses.

Job satisfaction is often depicted in its relation to the intrinsic and extrinsic impact. Intrinsic factor is related to the aspect of work. Extrinsic factors are the individual perception of the status of satisfaction at work in their context (Mohrman, Cooke and Mohrman, 1978). Job satisfaction within the organization leads to a good work performance as it can enhance employee productivity. A person that is satisfied with the job will feel content about his/her job, and it will encourage them to improve their performance. Discontentment at work can be expressed in a several ways, for example the attitudes or action other than resignation, such as complaining, disobeying, embezzlement of organizational properties, or avoiding job responsibilities (Robbins and Judge, 2007). Therefore, Robbins used five indicators of job satisfaction which are among others: (1) satisfaction with remuneration, (2) satisfaction with the job itself, (3) satisfaction with work promotion, (4) satisfaction with supervisor's attitude, and (5) satisfaction with the colleague.

Variable of job satisfaction is measured by the job satisfaction indicator of *Mohrman Cooke Mohrman Job Satisfaction Scale (MCMJS)*. Mohrman et al., (1978) developed the scale which used to do employee' satisfaction self-measurement and the rate of job satisfaction. The survey consists of eight questions which assessed the satisfaction by using two Categories: intrinsic and extrinsic satisfaction. Mohrman et al., (1978) identified the intrinsic satisfaction as the satisfaction that is come from the aspect of a job or the job itself, while the extrinsic satisfaction refers to the satisfaction that is come from the context or situation where the respondent performs the job.

### **Safety Culture**

A safety culture in organizations form the beliefs, values and behavior of the individual because it could create advantages or disadvantages (Helmreich, 2000). However, Wiegmann, Zhang, and Von, (2004) revealed in the more general term by saying the values shared among members of the Organization, which deals with security issues and the Organization's desire to learn from the errors, the ability to contribute to and integrate their members at each level, the power to influence the behavior of individuals, and a state that is relatively stable, durable and robust against changes (Wiegmann et al., 2004).

Healthcare services industry has been striving to build a culture where the people making mistake are not only to be blamed but will be ashamed with the mistake, despite it is clear that most of the mistake is caused by process a system failure (Navarlaz et al., 2007; Feng et al., 2008). There are six behaviors that are needed to develop the safety culture and must be owned by a leader according to Singer et al., (2007), they are: prepare and communicate a clear safety vision, encourage staff to achieve the vision, take efforts actively to develop safety procedure, giving a good example, focus on the main issue rather than individual mistake, continuously undertake evaluation in order to make improvement.

Affective commitment is an employee's connection with his or her employer (Meyer & Allen, 1991). That connection with the organization often drives the employees' willingness to pursue the goals and objectives of the organization. It instills a sense of loyalty. With affective commitment, employees remain employed with an organization because of a desire or a personal connection ultimately to achieve goals and objectives. Research of Sarac, Flin, Mearns, and Jackson (2011), suggested that the Organization's Safety Culture is formed by a variety of factors, among others; leadership style, organizational goals, safety policies and procedures. Similar with (Ware, 2014) that has a meaningful relationship of organizational Commitment towards organizational safety. In the Research from Soryani, Syah, and Pujo (2018), organizational culture was very influential on organizational commitment and job satisfaction. The strongest indicator that formed the organizational culture was the comfortable feeling of all employees to the appreciation and positive cultures that can provide space for them to work optimally

*Hospital Survey on Patient Safety Culture (HSPSC)* of *The Agency for Healthcare Research and Quality (AHRQ)* (Gershon, Stone, Bakken, and Larson, 2004) assessed the patient safety culture through three aspects: (1) unit level that covers: *supervisor or manager action promoting safety, organizational learning* (continuous improvement), cooperation within units in hospital, open communication, communication feedback regarding mistake, not blaming on mistakes, manpower management, (2) hospital level that covers: management support on patient safety culture, cooperation within units in hospital, patient transfer and transition, (3) Output that cover: perception of all staff in hospital in regard with patient safety, frequency of incident reporting, patient safety ranking, total number of incident report within the last one year.

### **III. Hypothesis Development**

To build safety culture needs the organizational commitment and job satisfaction of which both formations need a good transformational leadership. Someone in an organization is not able to perform a job, which is a part of organizational work culture, without the organizational commitment and job satisfaction. A good role-model leader is needed to form commitment and build satisfaction within a practice of the safety

culture at work (Singer et al., 2007). Improved transformational leadership system, organizational commitment as well as job satisfaction will be more effective in enhancing the patient safety culture so that the services quality provided to the patient would become better.

The transformational leadership motivates desired changes within an organization by making morality and ethics central to the leadership process (Burns, 1978). This leader, therefore, focuses more attention on the charismatic and affective elements of leadership and emphasizes intrinsic motivation and follower development. Managers with a transformational leadership style are more often considered effective by their followers and their teams have higher productivity. Transformational leadership has a close linkage to the formation of organizational commitment, Mullen (2005) proposed that the *transformational safety-specific leadership* is the best model of leadership that can be used to undertake safety culture. Transformational leadership bolsters a concept which says the act of a visionary leader will promote his/her subordinate to contribute to the collective goal making (Bass, 1985; Bass and Bass, 2008). Emery et al., (2007) said that the transformational leadership will improve job satisfaction and organizational commitment. Affective commitment is shaped by a work condition and expectation as well as psychological bounding level with the organization based on how good the employee feels about the organization. Meyer et al., (2002) stated that the employee organizational commitment is a psychological bounding towards the organization. An employee that holds a good organizational commitment is deemed valuable for the organization of which in its turn the organization will achieve expected results awaited by such employee to achieve job satisfaction. Organizational commitment is unlike the job satisfaction where the organizational commitment defined as to the loyalty to an organization. In the context of acute treatment, organizational commitment is very important as a nurse who commits to the organization would tend to work harder within any condition regardless of the benefit they will get (Corser, 1998). Based on the above description, the author proposed the hypothesis the following hypotheses: H<sub>1</sub>: Transformational leadership will improve organizational commitment.

When job satisfaction is linked with the theory of leadership from Bass (1985) some of these relationships were obtained as follows; (1) transformational leadership will increase job satisfaction and will infuse mission and intellectual stimulation. Transformational leaders also encouraged his followers to be able to take more responsibility and be autonomous so that by running the task will give you satisfaction and increased achievement, (2) transformational leaders focus on the development of someone so employees feel that someone cares for their needs. Basically, job satisfaction is an individual thing in nature. A person is usually satisfied with what he/she does if the work is considered as suitable to the expectation, and suitable to the person's goal of working. If someone desires something, that means that person is having an expectation, thus he/she will be motivated to act towards the goal or expectation achievement. If the expectation is fulfilled, someone will feel satisfied. Krause (2007) the effective safety leader will improve commitment of organization and Emery et al., (2007) said that the transformational leadership will improve job satisfaction and organizational commitment. Squires (2010) described within the relations between leadership model and safety, the other variable other than leadership was identified, it is job satisfaction, and according to Williams (2014), Job Satisfaction has a meaningful impact to the patient safety culture, and leadership influenced job satisfaction, however, there are other discontentment variables which influence it. Emery et al., (2007), revealed that Transformational leadership will increase job satisfaction and organizational commitment. Based on the above analysis, the author proposed the hypothesis: H<sub>2</sub>: Transformational leadership will improve job satisfaction.

Meyer and Allen (1991) approach on the formation of organizational commitment of which the affective commitment will be formed based on the emotional bound which is related to the transformational leadership, the common vision, value and behaviour therefore establish the organizational commitment which in the end will form a safety culture (Senge, 1990). The safety culture in an organization shaped trust, values, and individual behaviour, it therefore may either make benefit or loss (Helmreich, 2000). However, Wiegmann et al., (2004) expressed in a more common term that joint values among organization members, those related to safety matters, and organizational will to learn from mistakes, capability to contribute and integrate each member on every level, power to influence individual behaviour, and a relative stable situation, endurance and strong against changes (Wiegmann et al., 2004). Ware (2014) said that organizational commitment has a meaningful linkage towards organizational safety. According to Horwitz and Horwitz (2017), organizational commitment and structural empowerment have a significant meaning to the patient safety culture. Based on the above analysis, the author proposed the hypothesis: H<sub>3</sub>: Organizational commitment will improve safety culture.

The linkage between nurse job satisfaction and patient safety has a significant correlation and is strongly positive where the higher the job satisfaction, the better the behaviour of patient safety which is performed by nurse (Lee, 2014). Fowler, Sohler and Zarillo (2009) said dissatisfied job will make unsafe behavior because the safety procedures and systems will be avoided. In Drake' study (2015), the patient safety culture behaviour was not significantly influenced by the education level and experience of a nurse leader, but safety culture was significantly influenced by job satisfaction and respect showed by nurse staff. Squires (2010) said In association leadership style with safety, obtained that there are other variables in addition to leadership,

the variable is job satisfaction. Williams (2014), Job Satisfaction has a meaningful impact to the patient safety culture, and leadership influenced job satisfaction, however, there are other discontentment variables which influence it. Based on the above analysis, the author proposed the hypothesis: H<sub>4</sub>: Job satisfaction will improve safety culture.

Based on the above description, the research model can be depicted as follows:



**Figure1.** Research Model

#### IV. Research Method

The study was performed to all nursing staff (at the Emergency Room, Intensive Care Unit, Operating Theatre, and Adult, Mother and Children wards) of Ciputra Hospital, Citra Raya Hospital in Tangerang, Indonesia. The aspects that were put in the study are transformational leadership, organizational commitment, job satisfaction, and safety culture. The study was conducted in October 2017 with the method of the study was survey. This study was based on the descriptive analysis with the causality model or influence connection. Data collection was undertaken by distributing the questionnaire to all participants. Sample collection would use the *non-saturated sampling*, and the technique used was the *purposive sampling*. Data analysis method in this study is SEM statistic, the data was processed by using statistic software. The researcher determined the amount of minimal sample in this study by using sample from Sugiyono (2016). Saturated sampling is the technique of sampling decision if all population members are used for sample. The other term for saturated sample is the census which used all population members as the sample. This study involved 105 respondents who are all staff working in the hospital. The collected data was then processed to measure the variables of the study by using Likert scale which is suitable to each used tool. The analysis result was then interpreted prior to the final phase which is the conclusion, and after that, the recommendation was prepared.

#### Measurement

Pre-Test was conducted with 30 participants; the study used the confirmatory factor analysis by performing the validity test and by seeing the value of the Kaiser-Meyer-Olkin measure of sampling (KMO) and measures of sampling adequacy (MSA). In this test, the gained value must be higher than 0.5 which means the factor analysis is right or proper to use and is able to further proceed (Malhotra, 2004). The result of pre-test, all the variable of transformational leadership was valid, some of variable of organizational commitment was not valid and eliminated seven questioners with the result eight questioner was valid, all variable of job satisfaction was valid, and one questioner of variable safety culture was eliminated.

The measurement of transformational leadership variable used the Global Transformational Leadership (GTL) Scale which consists of seven question (Carless et al., 2000). The scale used in the measurement and with the value of Kaiser-Meyer-Olkin measure of sampling (KMO) and measures of sampling adequacy (MSA) resulted KMO > 0.5 and MSA > 0.5, and the study had Cronbach alpha 0.869.

The measurement of organizational commitment variable used the Organizational Commitment Questionnaire which consists of 15 questions by assessing the organizational commitment rate and the effect of affective commitment on the organization (Mowday et al., 1979). The scale obtained from the measurement with the value of the Kaiser-Meyer-Olkin measure of sampling (KMO) and measures of sampling adequacy (MSA) resulted KMO > 0.5 and MSA > 0.5, and the eight valid questions, while the seven are invalid because two component matrix are obtained when included into the data processing so they were excluded from the questionnaire. The result gained on this variable coefficient Cronbach alpha 0.734.

The variable of job satisfaction is measured by using job satisfaction indicator of Mohrman Cooke Mohrman Job Satisfaction Scale (MCMJS) by Mohrman et al., (1978). The result gained is all questions are valid with KMO > 0.5 and MSA > 0.5 and Cronbach alpha value is 0.932.

The variable of patient safety culture is measured by using the Hospital Survey on Patient Safety Culture (HSPSC) of The Agency for Healthcare Research and Quality (AHRQ), (Nieva & Sorra, 2003). The result of the measurement identified one invalid question which one questioner is having two component matrix when it was included into data analysis so it was excluded from the questionnaire, and each Cronbach alpha

value is  $> 0.6$ . The reliability test with the value of Alpha Cronbach  $> 0.6$  which means reliable, so it can be said that indicators of transformational leadership, organizational commitment, job satisfaction and patient safety culture can be considered as reliable for the data collection tools within the study.

## V. Result Analysis and Discussion

### Result Analysis

The Respondent Demography Descriptive Analysis consists of a range of group that covers weekly working hour, the tenure at the current unit, the tenure of being a nurse, educational background, work location, educational background and current working unit. Participants in the study were predominantly work at adult ward (40%). There were more work more than 36 hours per week (83%) than less 36 hours per week (17%). Fifty-five participants (50%) reported working on current units for 1-5 years, whereas 19% less than 1 year and 15% of participants had work for 6-10 years, or work for 16 – 20 years ( $n=6$ ) and more than 20 years ( $n=4$ ), respectively. Of the 105 participants, nearly half had worked as a registered nurse for 10 years or less ( $n = 56$ , 53%), closely split between 1 to 5 years ( $n = 41$ , 39%) and 6 to 10 years ( $n = 19$ , 18%). Nearly a third of the participants had worked as a registered nurse for more than 10 years ( $n = 31$ , 29%). The majority of participants had a nursing school diploma ( $n = 78$ , 75%) and 25% of participants had a bachelor's degree in nursing. The analysis of the difference responds in this study is due to several differences which are; (1) response to the working hour per week towards the organizational commitment and job satisfaction, (2) response to the safety culture and nursing work tenure towards manager's expectation and act, (3) responses to the education level towards the organizational commitment, job satisfaction, and manager's expectation and act.

The examination used SEM analysis test. The first hypothesis test is that the transformational leadership will improve organizational commitment. Before being tested with SEM, the first step of the model analysis is to examine the program output towards the possibility of offending estimate. Based on the recommendation of *Hair et al.* (2008), the proper observation variable as the indicator on the construct or latent variable must have the factor load bigger than 0.5 so the model used has a good suitability, in addition, the factor load of t-value must be bigger than its critical value ( $>1.96$ ). The analysis of the study construct indicator validity indicates that not all indicators are valid as not all loading factors have good suitability ( $>0.50$ ) such as the variable of *Organizational Commitment*, *Safety Culture* on the teamwork dimension, Employee variable, Response to Error, overall Perception, Supervisor expectations and actions, and frequency of events reported variables. While on the variables of *Transformational leadership* and *Job Satisfaction* and the other variables all is valid with the t-value  $> 1.96$  at the significance level 0.05. The next test used the Construct Reliability of which the measurement result of *construct reliability* and *variance extracted*.

According to *Bagozzi and Yi* (1988) the requirement of good reliability is having *construct reliability*  $> 0.6$  and *variance extracted*  $> 0.5$ . *Ghozali and Fuad* (2008) added that the reliability requirement can be seen from only one method. Based on the above measurement, the value of *construct reliability* of all indicators (*transformational leadership*, *organizational commitment*, *job satisfaction* and *safety culture*) have well met the reliability requirement ( $>0.6$ ) although the value of the *variance extracted safety culture* is 0.33. Structural model analysis was carried out to find out the causality linkage of structural model, and to what extent the independent variable is able to describe the dependent variable. In other word, the structural model analysis is used to find how far the transformational leadership influences the organizational commitment and job satisfaction, and how far both organizational commitment and job satisfaction influence safety culture altogether.

Based on structure model equation indicates the  $R^2$  value of each equation.  $R^2$  value is functioned to indicate how far the independent variable can describe the dependent variable. The result that could be analysed is the impact of TRL (*Transformational Leadership*) on to the OCT (*Organizational Commitment*) which had  $R^2$  of 0.21. This indicated that 21% variant of the Transformational Leadership could be explained by the *Organizational Commitment* variable, while the other 79% was explained by the other variables which are not included in this study, and TRL (*Transformational Leadership*) on the JBS (*Job Satisfaction*) had  $R^2$  of 0,24. This indicated that 24% variant of the *Transformational Leadership* could be explained by the Job Satisfaction variable, while the other 76% was explained by the other variables which are not included in this study. The JBS (*Job Satisfaction*) and OCT (*Organizational Commitment*) explained the CST (*Culture Safety*) which is 53%, the rest of it, 47%, was explained by the other variables which are not included in this study.

The structural model was evaluated against five criteria: The chi-square ( $\chi^2$ ) likelihood ratio statistic, the goodness-of-fit index (GFI), the normed fit index (NFI), the comparative fit index (CFI), and the root mean square error of estimation (RMSEA). Based on the result, some tests indicated the adequate suitability which are among others, the *chi-square* test of the model was not statistically significant  $\chi^2$  (258,  $N=105$ ) = 384.68,  $p= 2.22$ , which indicates that the model fit the data. The model yielded acceptable fit indices for all indices except two. The other fit measures attained the recommended target values. The values of GFI was 0.77, which indicates a marginal fit. The NFI was 0.79, which below the target of 0,90. The CFI was 0.09, which indicates a

good fit, and the RMSEA 0.069, which indicates a good fit. The critical *N* for the model was 76.32, which below the target of 200.

Overall, the fit indices an acceptable model fit with data. Based on the above result, it can be concluded that the *goodness of fit* of all models fulfilled the qualifications.

There are four hypothesis that were tested in this study, and based on the test result, the four hypothesis are supported by the data.

**Table 1. Structural Relationship Test Result**

Hypothesis	Hypothesis Statement	Value of <i>T-Value</i>	Description
H <sub>1</sub>	Transformational leadership will improve organizational commitment	4.18	Data supported hypothesis
H <sub>2</sub>	Transformational leadership will improve job satisfaction	4.56	Data supported hypothesis
H <sub>3</sub>	High commitment to the organization will improve safety culture	2.60	Data supported hypothesis
H <sub>4</sub>	High level of job satisfaction will improve safety culture	2.65	Data supported hypothesis

## VI. Discussion

The result of the first hypothesis test (H<sub>1</sub>) identified that the analysis result supported the H<sub>1</sub> hypothesis which is there is an impact of the transformational leadership of 4.18 onto the organizational commitment. This indicated that the organizational commitment was influenced by the transformational leadership. The better of transformational leadership style, the higher the organizational commitment of the nurse staff of Ciputra Hospital Citra Raya Tangerang. The results of this research are increasingly strengthened previous research results conducted by Thorne Monique (2010), Frankel (2008), Emery and Barker (2007) which says that transformational leadership will improve organizational commitment, that means the better implementation of transformational leadership style will increase commitment of organizational. Similar statements with statements from Krause (2007) who said the leadership will make the culture of an organization.

Based on structure model equation indicates the R<sup>2</sup> value of each equation. R<sup>2</sup> value is functioned to indicate how far the independent variable can describe the dependent variable. The result that could be analysed is the impact of TRL (*Transformational Leadership*) on to the OCT (*Organizational Commitment*) which had R<sup>2</sup> of 0.21. This indicated that 21% variant of the Transformational Leadership could be explained by the *Organizational Commitment variable*, while the other 79% was explained by the other variables which are not included in this study. Because of that transformational leadership did not show a significant correlation that can described organizational commitment on affective commitment. The study has provided new knowledge that nursing transformational leadership style must explore the other dimension such as continue commitment and normative commitment to meet all aspect of organizational commitment.

The result of the second hypothesis test (H<sub>2</sub>) identified that the analysis result supported the H<sub>2</sub> hypothesis which is there is an impact of the transformational leadership of 4.56 onto the job satisfaction. This indicated that the job satisfaction was influenced by the transformational leadership. The better of transformational leadership style, the higher of job satisfaction of the nurse staff of Ciputra Hospital Citra Raya Tangerang. TRL (*Transformational Leadership*) on the JBS (*Job Satisfaction*) had R<sup>2</sup> of 0.24. This indicated that 24% variant of the *Transformational Leadership* could be explained by the Job Satisfaction variable, while the other 76% was explained by the other variables which are not included in this study. The instrument has eight questions: four questions evaluate the elements of motivation and job satisfaction, namely self-esteem, development opportunities, achievement, and job expectations. The second four questions evaluate the perception of job dissatisfaction: being respected as an employee and treated fairly, a sense of knowing or understanding what is happening in the workplace, amount of supervision, and the opportunity to be engaged. Based on the result still need to be explore what the main indicator that will significant impact from transformational leadership due to job satisfaction.

The result of the first hypothesis test (H<sub>3</sub>) identified that the analysis result supported the H<sub>3</sub> hypothesis which is there is an impact of the organizational commitment of 2.60 onto the safety culture. This indicated that the safety culture was influenced by the organizational commitment. The higher of organizational commitment, the higher impact of safety culture on nurse staff of Ciputra Hospital Citra Raya Tangerang. The result of the first hypothesis test (H<sub>4</sub>) identified that the analysis result supported the H<sub>4</sub> hypothesis which is there is an impact of the job satisfaction of 2.65 onto the safety culture. This indicated that the safety culture was influenced by the job satisfaction. The higher of job satisfaction, the higher impact of safety culture on nurse staff of Ciputra Hospital Citra Raya Tangerang. The JBS (*Job Satisfaction*) and OCT (*Organizational Commitment*) explained the CST (*Culture Safety*) which is 53%, the rest of it, 47%, was explained by the other variables which are not included in this study.



## **VII. Managerial Implications**

In the hospital industry everywhere, nurse is considered as one of the most important components in the healthcare services, and it is an asset of the hospital in determining the quality of healthcare services given the nurse is one of the biggest Human Resources component, and the nurse has a direct contact to patient healthcare services as well. It is therefore very important that a hospital must strive to create situation and condition of which will make the nurse feel satisfied and have commitment which in the end will lead to the good work safety culture. Safety culture will not grow automatically, there are several factors that influence the safety culture on someone.

The study researched three factors that play a role in establishing the safety culture, they are; transformational leadership, organizational commitment and job satisfaction. The result of the study proved that there is the impact of transformational leadership on to the variable of organizational commitment and job satisfaction on to the safety culture. In other word, transformational leadership will improve the organizational commitment and job satisfaction, thus it can increase the safety culture as well. Transformational leadership may influence organizational commitment by encouraging the followers to think critically by way of new approaches, and by involving the followers into the process of decision making, by inspiring them about loyalty and development to each follower. In an organization, leadership is highly necessary to provide instruction of all employees' work in realizing organization's goals. It is therefore important to focus on the development and mentoring for their followers so that they can take more responsibilities which in the end will enable them to be leader. This would make the leaders able to show their individual consideration by listening to and take care of the needs for the followers to make achievement and develop as well as act as mentor or trainer, and to encourage them to take bigger responsibilities to fully develop their potentials. To be able to improve transformational leadership, a training and education on a leader's competence is needed of which needs a competence training on the leadership essence, position competence and leadership competence.

The competences that may be applied into Ciputra Hospital Citra Raya are among others the leadership essence competence; (1) *Act with integrity* which implements the consistent act according to the important values despite hard situation to take action, (2) *Spirit of excellence*, by implementing a motivation and willingness to do and perform better by showing the best performance, (3) *Continuing Improvement and Innovation*, it is expected that employee would be able to express the willingness to learn new skill and knowledge in a sustainable manner which will enhance the effectiveness within the work environment, (4) *Team Collaboration*, the efforts and capability to encourage collaboration and teamwork among working units. The other competence is the position competence which consists of; (1) *Conceptual Thinking*, a leader is able to identify the pattern or linkage among the situations which are seen unclear one to another, (2) *Initiative*, this attitude made a leader motivated to identify problem, constraints or opportunity, and to take action to tackle with current and future issues, (3) *Relationship Building*, it is expected to have a capability and efforts to build, develop and maintain strategic relations and partnership with various parties in a sustainable manner, (4) *Problem solving and Decision Making*, this competence is very important in the leadership so that the leader would understand the process, from what is the problem to the decision making through the identification process understanding, problem solving to solution and decision making. The last competence that can be implemented is the leadership competence itself which consists of; (1) *Managing your people*, the ability to inspire the team/subordinates, and to act to ensure the effectiveness of the team as well as to show enthusiasm in seeing the development of the team/subordinates. The competence covers the efforts to balance both wishes and efforts of managing work performance, to facilitate the capability development of the team, and to take a right action in ensuring the work achievement as well as the optimal team development, (2) *Passion for business*, it is expected to have commitment and capability in making a right decision in order to provide an added-value for the company by way of good understanding and services context, (3) *Strategic orientation*, a leader must have the capability to prepare a plan and strategy which cover short-term and long-term strategy in a proper, comprehensive and creative yet realistic manner in order to ensure the achievement of strategic guidance of the company.

In addition to the above competences, a training on the improvement of the communication, coaching and mentoring capability is needed within the managerial implementation so these capabilities could be a strong foundation of how a leader makes an organizational commitment within the work environment. A communication skill in term of hospital business is a very important part because a mistake in the communication would bring a fatale impact for patient services. The communication skill is focused on the understanding guidance on how to improve communication by developing a good interaction; building the self-esteem, empathy, involvement, share and support to the interlocutors, so a good work environment could be developed, and the communication could also be built to create a good patient safety culture within the services.

The other managerial implication that the hospital needs to undertake is to always map the specific performance indicator, survey on the work environment dynamics, and patient safety indicator. This would emphasize the services indicator standard towards the staff in performing their work, and leader can assess by

doing a joint coaching. Job satisfaction is often depicted in its relation to the intrinsic and extrinsic impact. Intrinsic factor that is related to the connection to the aspect of work. The extrinsic factor includes the individual status perception or the satisfaction with the work within a certain context. In general, there are five indicators of job satisfaction which are among others; (1) satisfaction with remuneration, (2) satisfaction with the job itself, (3) satisfaction with work promotion, (4) satisfaction with supervisor's attitude, and (5) satisfaction with the colleague. Therefore, a survey on the sustainable work environment dynamics is needed regarding the employee satisfaction each year in order to find out whether employee's expectation on the organization or supervisor could fulfil employee's expectation. Within a formation of safety culture, it is adapted from the context of patient safety on the services provided by hospital as a belief, value, behaviour which are linked to patient safety and followed jointly by all teams. In other word, the formation of it is started from a leadership model which can create a culture of the organization of which will shape the patient safety culture, therefore, a specific work performance indicator is needed on each working unit, so monitoring and evaluation on each situation which related to an incident or concurrence of patient safety can be conducted.

In consideration with this matter, it is important for the hospital management to manage and determine proactive services quality standards which means not base the managerial decision on the input of the consumers. It is important to learn directly about the effect of the improved infrastructure, communication ways, and qualified services dimensions which will directly increase the number of consumers. Quality standards and realization of consumer number increase become the main priority of the evaluation rather than the existence of consumer complaint.

### **VIII. Conclusion**

The finding in this study three main things can be concluded, they are: first, The better the transformational leadership, the higher the organizational commitment of which will be able to enhance safety culture, but there is another factor identified of which could not be described on the organizational commitment variable; secondly, The better the transformational leadership, the highest the job satisfaction of which will enhance the safety culture but there is another factor identified of which could not be described on the organizational commitment variable; third, The better the organizational commitment and the job satisfaction the higher the safety culture. While there has been much research regarding transformational leadership, job satisfaction, and organizational commitment and a plethora of studies looking at perceptions of the safety culture, no studies have combined the independent variables of job satisfaction, organizational commitment, and leadership style prior to this study. Therefore, this research adds to the existing empirical evidence that job satisfaction and organizational commitment are significant predictor variables of nurses' perceptions of the patient safety culture. Applying the transformational leadership theory supports the conclusion that improving nurses' perceptions of the safety culture, as influenced by their leaders' transformational leadership styles and their own organizational commitment and job satisfaction, can translate into improving nurses' intentions to perform required safety behaviors.

Not all implication from research can improve the safety culture, Given the extent of care nurse will provide to patient in a variety health care setting and their interventions, nurse are often keep the best practice to protecting patients from unnecessary harm. So many studies have indicated the imperative to improve the patient safety culture due to medical services to reduce medical errors, such as nurses and physician, is often overlooked. The sentinel incident errors have been showing to contribute to caregiver emotional stress, low productivity and provider attrition. Squires et al. (2010) noted that poor safety work environments contribute to an increase in nursing absenteeism and emotional exhaustion. The transformational leadership have a role how to keep everyone have same commitment and clear in satisfaction during work and after that both commitment and satisfaction will develop safety culture on their daily routine work. Therefore, hospital executive leaders must be proactive in identifying key front-line managers who require development of strong transformational leadership skills while addressing barriers to nurses' organizational commitment and job satisfaction that will ultimately influence their perceptions of the safety environment and may lead to improved safety practices.

### **IX. Limitations of Research and Recommendations**

#### **Limitation of Research**

The limitation of the study could be taken as the basis of consideration of further study. This study used a questionnaire as its measuring tool for the purpose of time and work activity saving. However, the questionnaire was biased in term of answer filling. It is likely due to the respondents had not provided real answers or they simply fill out the questionnaire based on the ideal and expected condition instead of the real condition. As a result, the measurement used did not then describe the variables in actual manner. In addition, the limited number of sample and variables which bring impact to transformational leadership, organizational commitment, job satisfaction, and safety culture as well as the number of analysis had disabled researcher to

explore and dig deeper regarding the other factors which impact transformational leadership, organizational commitment, job satisfaction, and patient safety culture.

### Recommendations for Future Research

The study's coverage was still very limited as it just analyzed transformational leadership, organizational commitment, and affective commitment. In the context of study development, further studies may add other variables which impact leadership, organizational commitment, job satisfaction, and patient safety culture. It is also expected that further studies may take other research objects in other services companies, such as banking company, hotel, notary, and etc. More varied data analysis may also be used to gain more objective and representative result with broader coverage.

### References

- [1]. Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational Leadership and Organizational Commitment: Mediating Role of Psychological Empowerment and Moderating Role of Structural Distance. *Journal of Organizational Behavior*. <https://doi.org/10.1002/job.283>
- [2]. Baer, M., & Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior*. <https://doi.org/10.1002/job.179>
- [3]. Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*. <https://doi.org/10.1007/BF02723327>
- [4]. Bass, B. M. (1985). *Leadership and performance beyond expectation*. New York, NY: Free Press. <https://doi.org/10.5465/AMR.1987.4306754>
- [5]. Bass, B. M., & Avolio, B. J. (1995). *MLQ Multifactor Leadership Questionnaire for research*. Mind Garden.
- [6]. Bass, B. M., & Bass, R. (2008). *The Bass handbook of leadership: theory, research, and managerial applications*. Simon and Schuster. <https://doi.org/10.2307/2064114>
- [7]. Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- [8]. Carless, S. A., Wearing, A. J., & Mann, L. (2000). A short measure of transformational leadership. *Journal of Business and Psychology*. <https://doi.org/10.1023/A:1022991115523>
- [9]. Diaz-Navarlarz, T., Pronovost, P., Beortegui, E., & Segui-Gomez, M. (2007). Benefits of direct observation in medication administration to detect errors. *Journal of Patient Safety*. <https://doi.org/10.1097/PTS.0b013e31815b4cc3>
- [10]. Drake, B. D. J. (2015). *Nurse Leader Behavior and Patient Safety*. East Carolina University. Retrieved from <http://thescholarship.ecu.edu/handle/10342/4870>
- [11]. Emery, C. R., College, E., Barker, K. J., & Fredonia, S. (2007). the Effect of Transactional and Transformational Leadership Styles on the Organizational Commitment and Job Satisfaction of Customer Contact Personnel. *Journal of Organizational Culture, Communications and Conflict*.
- [12]. Feng, X., Bobay, K., & Weiss, M. (2008). Patient safety culture in nursing: A dimensional concept analysis. *Journal of Advanced Nursing*. <https://doi.org/10.1111/j.1365-2648.2008.04728.x>
- [13]. Fowler, S. B., Sohler, P., & Zarillo, D. F. (2009). Bar-Code Technology for Medication Administration: Medication Errors and Nurse Satisfaction. *Medurg Nursing: Official Journal of the Academy of Medical-Surgical Nurses*. <https://doi.org/Article>
- [14]. Gershon, R. R. M., Stone, P. W., Bakken, S., & Larson, E. (2004). Measurement of organizational culture and climate in healthcare. *The Journal of Nursing Administration*. <https://doi.org/10.1097/00005110-200401000-00008>
- [15]. Helmreich, R. L. (2000). On error management: lessons from aviation. *British Medical Journal*. <https://doi.org/10.1136/bmj.320.7237.781>
- [16]. Horwitz, S. K., & Horwitz, I. B. (2017). The effects of organizational commitment and structural empowerment on patient safety culture. *Journal of Health Organization and Management*. <https://doi.org/10.1108/JHOM-07-2016-0150>
- [17]. Krause, T. R. (2007). *The Effective Safety Leader: Personality, Values & Emotional Commitment*. Occupational Hazards.
- [18]. Lee, S. B. (2014). *The Relationship Between Nurse Job Satisfaction and Patient Safety*. ProQuest Dissertations and Theses.
- [19]. Lok, P., & Crawford, J. (2004). The effect of organisational culture and leadership style on job satisfaction and organisational commitment. *Journal of Management Development*. <https://doi.org/10.1108/02621710410529785>
- [20]. Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- [21]. Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*. <https://doi.org/10.1006/jvbe.2001.1842>
- [22]. Mohrman, A. M., Cooke, R. A., & Mohrman, S. A. (1978). Participation in Decision Making: A Multidimensional Perspective. *Educational Administration Quarterly*. <https://doi.org/10.1177/0013161X7801400105>
- [23]. Mowday, R. T., Porter, L. W., & Steers, R. M. (1983). Employee-Organization linkages: The psychology of commitment, absenteeism, and turnover. *American Journal of Society*. <https://doi.org/10.2307/2068333>
- [24]. Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*. [https://doi.org/10.1016/0001-8791\(79\)90072-1](https://doi.org/10.1016/0001-8791(79)90072-1)
- [25]. Mullen, J. (2005). *Safety-specific Transformational Leadership: An Experimental Study*. Saint Mary's University. <https://doi.org/10.16953/deusbed.74839>
- [26]. Nieva, V. F., & Sorra, J. (2003). Safety culture assessment: A tool for improving patient safety in healthcare organizations. *Quality and Safety in Health Care*. [https://doi.org/10.1136/qhc.12.suppl\\_2.i17](https://doi.org/10.1136/qhc.12.suppl_2.i17)
- [27]. Reiman, T., Pietikainen, E., & Oedewald, P. (2010). Multilayered approach to patient safety culture. *Qual.Saf Health Care*.
- [28]. Robbins, S. P., & Judge, T. A. (2007). *Organizational Behavior*. Source.
- [29]. Sarac, C., Flin, R., Mearns, K., & Jackson, J. (2011). Hospital survey on patient safety culture: psychometric analysis on a Scottish sample. *BMJ Quality & Safety*. <https://doi.org/10.1136/bmjqs.2010.047720>
- [30]. Senge, P. (1990). *The Fifth Discipline. Measuring Business Excellence*. <https://doi.org/10.1108/eb025496>
- [31]. Singer, S., Meterko, M., Baker, L., Gaba, D., Falwell, A., & Rosen, A. (2007). Workforce perceptions of hospital safety culture: Development and validation of the patient safety climate in healthcare organizations survey. *Health Services Research*. <https://doi.org/10.1111/j.1475-6773.2007.00706.x>

- [32]. Soryani, S., Syah, T. Y. R., & Pujo, R. (2018). The Influence of Organizational Culture on Organizational Commitment and Job Satisfaction. *International Journal of Economics, Commerce and Management United Kingdom*.
- [33]. Squires, M. E. (2010). The influence of perceived fairness and relational leadership on nursing safety climate and work environment. *Influence of Perceived Fairness & Relational Leadership on Nursing Safety Climate & Work Environment*.
- [34]. Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif Dan R&D*. Bandung: Alfabeta.  
<https://doi.org/10.1017/CBO9781107415324.004>
- [35]. Ware, B. A. F. (2014). The Realtionship Between Affective Organizational Commitment and Organizational Safety Climate: A Quantitative Correlational Study, (May), 127.
- [36]. WD, C. (1998). The changing nature of organizational commitment in the acute care environment: implications for nursing leadership. *Journal of Nursing Administration*.
- [37]. Wiegmann, D. a, Zhang, H., & Von, T. L. (2004). Safety Culture : An Integrative Review. *The International Journal of Aviation Psychology*. <https://doi.org/10.1207/s15327108ijap1402>
- [38]. Williams, J. C. (2014). Nurses' organizational commitment, job satisfaction, and perception of their managers' leadership style as predictors of perception of patient safety culture. *Nurses' organizational commitment, job satisfaction & perception of their managers' leadership style as predictors of perception of patient safety culture*.
- [39]. Wong, C. A., & Cummings, G. G. (2007). The relationship between nursing leadership and patient outcomes: a systematic review. *J Nurs Manag*. <https://doi.org/10.1111/j.1365-2834.2007.00723.x>

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