

**ASSESSING THE LEAN BEHAVIOR IN HOSPITAL LEAN
IMPLEMENTATION: A CASE STUDY****Kabib Abdullah¹, Ratna Wardani², Zuhrotul Aini³**^{1,2}Magister Kesehatan IIK Strada Indonesia, Kediri Indonesia, RSUD dr. Iskak³TulungagungEmail: kabibabdullah80@gmail.com, ratnawardani61278@gmail.com,
ainizuhri74@gmail.com**Abstract**

The implementation of Lean in several Indonesian hospitals, one of which requires a change in the BPJS financing scheme from Fee for Service to Indonesian Case-Based Groups, where health providers are required to provide services according to their needs without discounts in quality. Applying lean behavior to lean hospital management reduces resistance to any kind of change that must be made to meet all the challenges in the era of public health financing where hospitals must operate efficiently and effectively to survive. Successfully providing health services to the community. This research is a cross-sectional quantitative study. The research instrument is in the form of a questionnaire through the google form link. SEM (structural equation model) analysis with Smart PLS. The results showed that Self Efficacy significantly had a direct effect on Readiness. It was concluded that personality traits such as self-efficacy and personal value have a positive effect on lean behavior when applying Hospital Lean Management RSUD Dr. Purnya Iskak Tulungagung. Readiness and intention also mediate the relationship between personality characteristics and lean behavior. This shows how important it is to pay attention to individual psychological factors and motivations when implementing lean management in a hospital. Developing personality traits and preparing individuals well, can improve the success of lean management in the hospital.

Keywords: *Self-efficacy; Change Readiness; Lean Hospital Management; Intention; Lean behavior; Personal Valence.*

INTRODUCTION

The application of lean has been widely carried out both in the manufacturing and non-manufacturing industry sectors, one of which is in the health sector. Although it has been proven to be effective in increasing productivity, the success of lean implementation is only around 10% or even less (Hamouda et al., 2014). The failure rate of lean implementation in health institutions ranges from 50% to 95%. Where the cause of the failure is the lack of readiness and lack of lean application readiness of each individual (Wei et al., 2005).

In the application of Lean, there is only concern with techniques on how to implement project improvement and how the work is organized and led. however, forgetting the principles of behavior in its implementation, including measuring motivation in the personnel involved, to obtain low trust and commitment (Orr, 2005).

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For the lean program to last a long time and be successful, it needs a change in behavior (*Change*). The behavior in question is Lean Behavior because, with the application of Lean Behavior, the actors are expected to have an increase in problem-solving skills by eliminating waste, increasing efficiency, and increasing productivity in a system (Hamouda et al., 2014).

Many government agencies have adopted lean to improve efficiency and provide quality services to their customers. However, it cannot fully implement and maintain lean. Resistance to change is one of the challenges in implementing lean in the service (Asnan et al., 2015). Change is a fundamental theme in human life. And the average individual generally rejects (resistance) to change (Joshi, 1991). Readiness is one of the behavior resistance modifiers to *change* (Armenakis, 2022).

The dimensions that makeup readiness are content (organizational valence/benefits of change for the organization), process (management support/leader's commitment to supporting change), context (discrepancy/reason for the change is needed), and individual attributes (self-efficacy) or belief that the change can be done and personal valence or benefits obtained by the personal if making changes) (Holt et al., 2007).

Readiness for Change has a positive impact on intentions, there are 2 factors that most influence Usage Intention or intentions, namely Performance Expectancy or Personal Valency and Effort Expectancy or elven-efficacy where both support the existence of usage intention (Kwahk & Kim, 2008).

In the theory of planned behavior, there are three conceptually independent determinants of intent. Namely behavior (*attitude toward the behavior*), subjective norms, and behavioral control (*perceived behavioral control*). *Perceived Control Behavior* can be used to predict the occurrence of a behavior. But in some cases, an only attitude has a significant impact on Intention, on the other hand, the existence of attitude and Perceived Control Behavior can be sufficient to explain the intention, although, in other third parties, predictors make independent contributions (Icek, 1991).

Armitage (2001) describes behavioral intentions (intention) and actual behavior as highly correlated, which means that behavior can be accurately predicted before it occurs. People's behavior is strongly influenced by their belief in their ability (Self-efficacy) to do so ie. by *Perceived Control Behavior*. *Self-efficacy* beliefs can influence the selection of activities, preparation, and effort expended during the performance, as well as emotional mindset and response (Bandura, 2012).

By examining cognitive processes and measuring intentions in adopting lean behavior practices, it was found that attitude factors through cognitive influence on *Intention to use lean behavior*, while *Perceived Control behavior* and *Norm Subjective* did not have a significant effect (Alok et al., 2018). By increasing the strength of the attitude and norm subjective of the individual, it is generally believed that the individual will be directed (intentions) to engage in behavior (Bandura, 2012).

Readiness for change is shown in the attitude of individuals in the face of change. Based on the extent to which members of the organization have a *positive attitude* about

the need for organizational change, as well as the extent to which they believe that change has a positive impact on themselves and the organization (Armenakis, 2022).

According to Yousef (2017), The attitude (Attitude) of an individual or group towards change consists of three things namely, First, affective is a feeling of greater or lesser related to pua, anxiety about change. Secondly, cognitive is the opinion that a person has about the advantages, disadvantages, uses, and needs of change, and about the knowledge and information necessary to deal with it. Third, (*conative*) is the tendency of action that a person may take in the future to oppose a change. The affective component or emotional aspect is usually rooted most deeply as an attitude component, the one that is most resistant to influences that may alter behavior (Azwar, 2013).

The increasing public demand for quality offset by pressure for hospitals to be able to do bigger and better has directed the *Healthcare management* team to reevaluate organizational strategies in providing the best service (Ballé & Régnier, 2007).

The application of lean in several hospitals in Indonesia, one of which is required by the change in the BPJS financing system from *Fee for Service* towards *Indonesia Case Based Groups* (INA CBGs) where health service providers must provide services according to their needs without any reduction in quality. INA CBGs are health care package rates that cover all components of hospital costs, ranging from non-medical services to medical procedures. Hospitals as providers can still be surplus, as long as they can take efficiency measures (<https://bpjs-kesehatan.go.id/bpjs/index.php/post/read/2014/63/Fee-for-Service-Vs-INA-CBGs-Which-Which-More-Profitable>).

Is a smart step in answering all the demands of society and the challenges of the National Health Insurance (JKN) program. RSUD dr Iskak Tulungagung has run a Lean Management Program in the form of a Kaizen Festival, which is currently entering its 3rd year. This event was attended by 50 teams from various work units at rsud dr. Iskak Tulungagung. Based on the report on the implementation of the kaizen festival in 2019, it can be concluded that 12% of project improvement has been aligned with the business process agenda carried out (*Key Performance Indicator*) of each room, installation, or work unit and only 16% of rooms, installations, or work units are still consistently using the Project Improvement as a work standard.

Kaizen is a form of response to changes in better services in the face of changes that the market wants in this case patients to services in hospitals, and this change must be maintained which is manifested in the form of service standards.

In the order above, Lean's success can be seen from the application of Lean behavior in work units. For the implementation of Hospital Lean Management at RSUD dr. Iskak Tulungagung to run sustainably, it is necessary to research to find out the behavior in work units that are still consistent in lean implementation so that it can be used as a role model in lean development in other units, so that Hospital Lean Management can run massively at dr. Iskak Tulungagung Hospital.

Problem Formulation

Does Self Efficacy directly affect Readiness in the successful implementation of Hospital Lean Management at Dr. Iskak Hospital Tulungagung? Does Personal Valency have a direct influence on Readiness in the successful implementation of Hospital Lean Management at Dr. Iskak Hospital Tulungagung? Does Readiness Directly Affect Lean Behavior in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital?

The purpose of this study is to analyze the relationship between *Readiness for Change* and Lean Behavior in the successful implementation of Hospital *Lean Management* at Dr. Iskak Hospital Tulungagung. The benefit of this research is to contribute to the progress and development of science in the health sector related to improving the quality of health services.

RESEARCH METHODS

A. RESEARCH DESIGN

Medical research can be done without following the course of the disease, but by making observations momentarily or during a certain period, and each subject of study is carried out only one observation during the study. Such an observation seems to be a *cross-section called cross-sectional or transverse* research.

From the description above, it is concluded that the research design uses cross-sectional. The research is planned to be carried out on December 1, 2022, to December 15, 2022, where by using a questionnaire distributed to Kaizen Warriors, which in this case is an agent of changed RSUD dr. Iskak Tulungagung and the Head of rooms, Units, and Agencies of the Kaizen Warriors are responsible for running the *Improvement Project* in improving performance in their respective Work Unit.

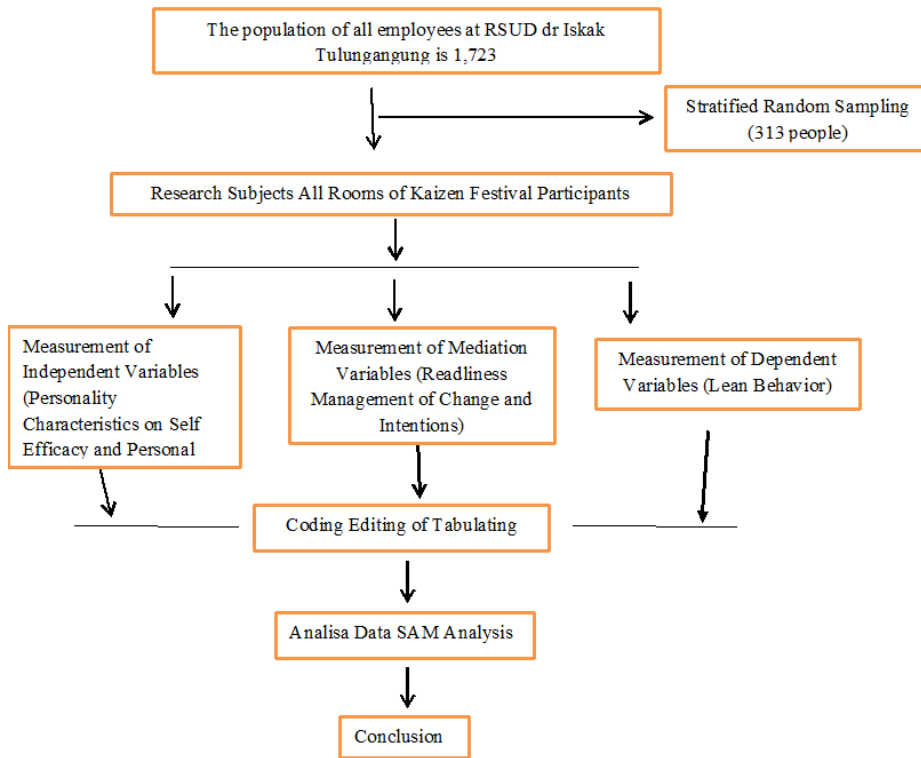


Figure 1. Research Framework

B. Population

A population is a whole subject or object with certain characteristics to be studied. The population in this study was all employees at Dr. Iskak Hospital, Tulungagung Regency who participated in the Kaizen 2020 festival. As of March 2022, the condition of the staff at Dr. Iskak Tulungagung Hospital is 1,782 people (595 civil servants, 1,187 non-civil servants) consisting of 62 biomedical personnel, 30 nutritionists, 10 midwifery personnel, 95 pharmaceutical personnel, 773 nursing personnel, 1 dental nursing staff, 23 public health workers, 51 medical technical personnel, Physical Therapy Staff 2 People, Medical Personnel 114 People, Other Health Workers 9 People, Non-Health Workers 603 People, Sanitarians 8 People.

From the sample, the inclusion criteria were obtained that what represents the population is the room that participated in the Kaizen Festival 2022 with the following room provisions anatomical pathology installation, finance department, planning section, supporting services, cssd & laundry, ems (igd), hcu (Roi / Rti), iccu, icu 1, icu 2 / stroke unit, icu 3, ambulance installation, central surgical installation (ok / ibs), Cardiovascular Invasive Diagnostic Installation (Cath Lab), Pharmaceutical Installation, Emergency Installation, Dental & Oral Installation, Nutrition Installation, Hemodialysis Installation, Financing Guarantee Installation, Security Installation, Microbiology Installation, Paraclinic Installation, Clinical Pathology Installation, Facilities Maintenance Installation, Mortuary Start-up

Installation, Archive Manager Installation, Information Technology Management Installation, Medical Device Testing and Calibration Installation, Clinical Support Installation, Radiology Installation, Drug Rehabilitation Installation, Medical Record Installation, Sanitation Installation, IPCN / PPI, Irna Anggrek, Irna Bougenvile, Irna Cempaka, Irna Dahlia, Irna Flamboyan, Irna Mawar, Irna Nifas / Melati, Irna Wijaya Kusuma, Maternity Room, Public Relations, Nursing Committee, Medical Committee, GM 2nd Floor, GM 3rd Floor, 4th Floor, 5th Floor, Graha Hita Husada Pavilion, Pkrs, Pmkp, Polyclinic, Pulmonary Centre, Sub. Staffing Coordinator, Sub. Equipment Coordinator, Supervisor, Goods & Services Procurement Unit so that the population is as follows, Biomedical Personnel 62 People, 2 Nutritionists 30 People, Midwifery Personnel 10 People, Pharmaceutical Personnel 95 People, Nursing Personnel 765 People, Dental Nursing Personnel 11 People, Public Health Workers 19 People, Medical Technical Personnel 51 People, Physical Therapy Personnel 2 People, Medical Personnel 111 People, Other Health Workers 8 People, Non-Health Workers 562 People, Sanitarians 7 People so that out of the total employees of rsud dr. Iskak Tulungagung a total of 1,723 people.

C. Sample

A sample is part of the number and characteristics possessed by that population. The sample in this study was calculated using the Kreijce Morgan table where from the total employees of dr. Iskak Tulungagung Hospital had a total of 1,723 where with this number obtained the number of samples according to the table was 313 people.

D. Sampling

Sampling is the process of selecting portions of a population to be able to represent a population (Nabilah et al., 2022). Sampling in this study is *stratified random sampling* with a type of *Simple Random Sampling*, namely taking sample members from the population which is carried out by paying attention to the strata in that population.

Using this method, the proportion of respondents was obtained with the following arrangement, Biomedical Personnel 11 Nutritionists 5 People, Midwifery Personnel 2 People, Pharmaceutical Personnel 17 People, Nursing Personnel 139 People, Dental Nursing Personnel 0 People, Public Health Workers 3 Orang, Medical Technical Personnel 9 People, Physical Therapy Staff 1 Person, Medical Personnel 20 People, Other Health Workers 0 People, Non-Health Workers, 102 People, Sanitarian Workers, 1 Person with a total sample of 313 respondents.

E. Research instrument

Instruments are auxiliary moments that researchers use at the time of research using a method. To help the analysis of this study, the researchers used the research instruments used in this study. The instruments used are the Inform Consent Sheet, Data Retrieval Approval, and Questionnaire. researchers use a structured interview technique where the research instrument is in the form of written questions whose alternative answers have been prepared, for Personal Characteristics (Self Efficacy,

Personal Valency), Mediation Variables (Readiness and Intentions), and Lean Behavior Variables.

The data used are primary data and secondary data. Primary data is data taken from a data source, while secondary data is data taken from a second or secondary source (Mujayyanah et al., 2021). This study used questionnaires as primary data and other sources as secondary data. A Likert scale is a tool for measuring subjects into 5 points or 7 points of scale at equal intervals (Radeswandri et al., 2022). A 7-point Likert scale can minimize measurement errors and be more precise Munshi (2014) The Likert scale used in this study is very, very strongly disagree, strongly disagree, disagree, ordinary, agree, strongly agree, very, very strongly agree.

F. Research Location and Time

The location of this study was conducted at Dr. Iskak Hospital, Tulungagung Regency, when the study was conducted in December 2022. In this study, the data collection technique was carried out with the following steps: (a) Obtaining a recommendation letter from the Strada Indonesia Institute of Health Sciences. (b) Before collecting data, researchers ask permission from the director of RSUD Dr. Iskak, Tulungagung Regency. (c) After that prepare the Questionnaire. (d) After that, the researcher distributes the questionnaire to the respondents. (e) After the data is collected, data processing is carried out.

The way to retrieve data is to use a questionnaire that has been compiled in the form of a Google Form to make it easier to retrieve data and recapitulate it, which is directly shared with warriors through certain links so that distance and time are not obstacles in the implementation of this research.

RESULTS AND DISCUSSION

The characteristics of the observed respondents include: gender, age, profession/work unit of the employee, level of education, and Description of the characteristics of the respondents shown in table 1

Table 1 Characteristics of Respondents

Information	Sum	Percentage
Total Respondents	313	100%
Gender		
Man	131	42%
Woman	182	58%
Age (Years)		
20-24	25	8%
25-29	85	27%
30-34	77	25%
35-39	61	19%
40-44	40	13%
45-49	18	6%
50-54	7	2%
55-59	0	0%
Employment Status		
PNS	20	6%
Non PNS	293	94%
Profession		
Biomedical Personnel	11	4%

Information	Sum	Percentage
Nutritionist	5	2%
Power Midwifery	2	1%
Pharmaceutical		
Personnel	17	5%
Nursing Staff	139	44%
Nursing Staff		
Tooth	1	0%
Public Health		
Workers	3	1%
Medical		
Technical		
Personnel	9	3%
Physical Therapy		
Personnel	2	1%
Power Medical	20	6%
Non-Health		
Workers	101	32%
Ophtsitionist		
Refractory		
Energy	1	0%
Sanitarians	2	1%
Education Level		
S2	20	6%
S1	99	32%
D4	10	3%
D3	133	42%
SMA/SMK/SLTP	51	16%
Role in Kaizen		
Coach	8	3%
Implementation	105	34%
Project Leader	20	6%
Warrior	180	58%

From the table above, it can be concluded that out of a total of 313 respondents, most or 58% are of the female sex and the remaining 42% are male. Of a total of 313 respondents, almost some respondents aged 25-29= 27%, 30-34=25%, and 35-39=19%. Of the total 313 respondents, almost all respondents, or 94% have the status of non-civil servants, the remaining 6% are civil servants. Of a total of 313 respondents, most of the respondent's professions, or 44% were nurses and 32% were non-health workers.

Of the total 313 respondents, most of the respondent's education level or 42% were Diploma 3 and 32% were Bachelor of Strata 1. Of the total 313 respondents, almost part of the respondents' role in lean management, or 52% was a warrior and almost part of 34% were Implementers.

A. Variable Characteristics

Questions totaled 54 items using a Likert scale of 0 to 7 (very, very disagree= 1, strongly disagree=2, disagree=3, ordinary = 4, agree = 5, strongly agree = 6, very strongly agree = 7) so that the following results are obtained:

Table 2 Characteristics of Variables

Variable	Code	Mean	Median	Modus	St. Dev
Readiness	RE1	5	7	5	1095
	RE2	6	6	6	1064
	RE3	6	6	7	1079
	RE4	6	6	6	1017
	RE5	6	6	6	1031

Variable	Code	Mean	Median	Modus	St. Dev	
Intentions	RE6	6	6	5	1083	
	RE7	6	6	6	1023	
	RE8	6	6	6	1002	
	RE9	5	5	5	1073	
	RE10	6	4	6	1102	
	IN1	7	5	7	0.886	
	IN2	6	4	7	0.919	
	IN3	6	3	7	0.964	
	Lean Behavior	LB1	6	6	6	1014
		LB2	6	3	6	1000
LB3		6	6	6	0.937	
LB4		6	5	6	1000	
LB5		6	5	6	0.931	
Self Efficacy	SE1	6	6	6	1035	
	SE2	5	6	5	1409	
	SE3	5	6	5	1047	
	SE4	5	6	5	1030	
	SE5	6	6	6	0.989	
	SE6	4	6	5	1614	
	SE7	5	6	5	1075	
	SE8	5	6	4	1409	
	SE9	6	5	6	0.998	
Personal Valency	PV1	5	6	5	1482	
	PV2	4	5	4	1659	
	PV3	5	5	5	1203	
	PV4	4	5	5	1704	
	PV5	3	6	4	1711	
	PV6	6	4	6	1124	
	PV7	3	5	2	1764	
	PV8	6	5	6	0.996	
	PV9	5	6	5	1302	

Regarding the character of the data of the Readiness variable, from table 4 it appears that the average value of the statement item is above 6, which means that respondents tend to strongly agree with the statement item on the Readiness variable. Regarding the character data of the Intentions variable, from table 2 it appears that the average value of the statement item is above 6, meaning that respondents tend to strongly agree with the statement item on the Intention variable, especially in IN1 regarding the pride of working at dr. Iskak Tulungagung Hospital. however, in the IN3 statement item, The middle value does not agree with its indicator, which is about commitment to the hospital.

Regarding the character of the data of the variable Lean Behavior, from table 4 it appears that the average value of the statement item is above 6 meaning that respondents tend to strongly agree with the statement item on the Lean Behavior variable, but in the LB2 statement item The middle value is 3 which means that they do not agree with the statement of the indicator, that is, regarding the moment before the decision-making process, people always collect enough information. Regarding the character data of the variable Self Efficacy, from table 4 it appears that the average value of the statement item is above 5 meaning that respondents tend to agree with the statement item on the *Self Efficacy* variable.

Regarding the character of the data of the variable Personal Valency, from table 2 it appears that the average value of the statement item is above 4 meaning

that the respondent tends to be flat in assessing the personality character in this case Personal Valency, especially in PV5 and PV7 Tends to disapprove of the statement on the *variable Personal valency*, that is, regarding future concerns due to the successful implementation of the idea of improvement.

B. Hypothesis Test

Interpretation to determine the results of the Hypothesis Test by using the values of p-value, t-value, and betha value in looking at the influence, significance, and measuring the value of influence with betha value between variable relationships. as the rule of thumb is if p-value <0.05 , t-value >1.64 on direct and indirect influence.

The value of the Self Efficacy (X1) path coefficient against Readiness (Z1) is 0.00 and the statistical value $t=9.262 > 1.64$, so in conclusion Self Efficacy significantly affects Readiness with a Betha value $=0.512$. The value of the Personal Valency (X2) path coefficient to Readiness (Z1) is 0.00 and the statistical value $t = 5,344 > 1.64$, so, in conclusion, Personal Valency significantly has a direct effect on Readiness with a Betha value $= 0.333$.

The value of the Readiness path coefficient (Z1) to Lean Behavior(Y) is 0.00 and the statistical value $t = 6.577 > 1.64$, then in conclusion Readiness has a significant effect on Lean Behavior with a Betha value $= 0.373$. The value of the intended path coefficient (Z2) against Lean Behavior(Y) is 0.00 and the statistical value $t = 8.454 > 1.64$, then in conclusion Intentions have a significant effect on Lean Behavior with a Betha value $= 0.459$. The value of the path coefficient Readiness (Z1) to intention (Z2) is 0.00 and the statistical value $t = 14.577 > 1.64$, then in conclusion Readiness has a significant effect on Intentions with a value of Betha $= 0.653$.

The value of the path coefficient on personal characteristics in this case Readiness (Z1) to Lean Behavior (Y) through Intentions (Z2) as the mediator is 0.00 and the statistical value $t = 6.956 > 1.64$ and the Betha value is 0.300. The value of the path coefficient on personal characteristics in this case Self Efficacy (X1) to Lean Behavior (Y) through Readiness (Z1) as the mediator is 0.00 and the statistical value $t = 4.611 > 1.64$ and the Betha value is 0.191. The value of the path coefficient on personal characteristics in this case Personal valency (X2) to Lean Behavior (Y) through Readiness (Z1) as the mediator is 0.00 and the statistical value $t = 4.342 > 1.64$ and the Betha value is 0.124.

The value of the path coefficient on personal characteristics in this case Self Efficacy (X1) to Lean Behavior (Y) through Readiness (Z1) and intention (Z2) as mediators are 0.00 and the statistical value $t = 5.369 > 1.64$ and Betha value is 0.153. The value of the path coefficient on personal characteristics in this case Personal valency (X2) to Lean Behavior (Y) through Readiness (Z1) and intention (Z2) as the mediator is 0.00 and the statistical value $t = 4.107 > 1.64$ and the Betha value is 0.100. The value of the path coefficient on personal characteristics in this case Self Efficacy (X1) against Lean Intentions (Z2) through Readiness (Z1) as the mediator is 0.00 and the statistical value $t = 6.755 > 1.64$ and the Betha value is 0.334. The value of the path coefficient on personal characteristics in this case Personal Valency (X2) to Intentions (Z2) through Readiness (Z1) as the mediator is 0.00 and the statistical value $t = 4.874 > 1.64$ and the Betha value is 0.218.

C. Analyzing the direct influence of Self Efficacy on Readiness in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

The results of the current study found that the Character of Personality in this case is Self Efficacy (X1) has a direct and significant effect on the readiness of individuals to carry out change (readiness of change) with a Beta coefficient value of $= 0.512$. So Self Efficacy affects Readiness directly sebesar 51.2% and the rest are influenced by other variables that are not studied. The confidence factor of the respondent's assessment is that change is capable of being made by itself and will make it easier. That is, any increase in the self-efficacy variable of 1 is expected to increase the individual's readiness for change by 0.512. The higher the belief that change can be made, the more prepared the individual will be in the face of change.

D. Analyzing the Direct Influence of Personal Valency on Readiness in the Successful Implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

The results of the current study found that the Personality Character in this case is Personal Valency (X2) has a direct and significant effect on the readiness of individuals to carry out change (*readiness of change*) with a coefficient value of Beta = 0.333. So Personal Valency affects Readiness directly by 33.3% and the rest is influenced by other variables that are not studied. The confidence factor of the respondent's assessment is that changes if made will provide personal benefits. That is, any increase in the Personal Valency variable (X2) of 1 is expected to increase the individual's readiness for change by 0.333. The higher the belief that change will provide personal benefits, the more prepared the individual will be in the face of change.

Based on previous research by [Haffar \(2019\)](#) That personal valency is the dimension that most influence on readiness. Respondents judged that the implications they had were the main reason they made changes for the better. Based on current research, Personality character in this case Personal Valency (X2) has a direct and significant effect on individual readiness to carry out change (*readiness of change*), which means, management needs to prepare staff well so that the implementation of kaizen ideas in the context of implementing changes in work methods (*lean behavior*) can continuously succeed as planned.

E. Analyzing the direct influence of Readiness on Lean Behavior in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

The results of the current study found that Readiness (Z1) has a direct and significant effect on the application of lean principles (lean behavior) in the application of hospital lean management with a coefficient value of Beta = 0.373. So Readiness affects Lean Behavior directly by 37.3% and the rest is influenced by other variables that are not studied. The confidence factor of the respondent's assessment is that changes if made will provide personal benefits. This means that every increase in the Readiness variable (Z1) of 1 is expected to increase the individual's readiness for change by 0.373. The higher the belief that change will provide personal benefits, the more prepared the individual will be in the face of change.

F. Analyzing the direct influence of Intentions on Lean Behavior in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

The results of the current study found that Intentions (Z2) have a direct and significant effect on the application of lean principles (lean *behavior*) in the application of hospital lean management with a coefficient value of $\beta = 0.459$. So Readiness affects Lean Behavior directly by 45.9% and the rest is influenced by other variables that are not studied. The confidence factor of respondents' assessment is that changes if made will benefit them personally.

Based on plan behavior theory [Icek \(1991\)](#) mentions that Intentions are assumed to describe the motivational factors that influence behavior, They are an indication of how hard people are willing to try, about how much effort they plan to do that behavior. As a general rule, the stronger the intentions to engage in a behavior, the greater the likelihood of performance. The results of the research obtained today are that intention significantly affects behavior directly. In other words, the staff and employees at rsud dr. Iskak Tulungagung can apply lean behavior as long as there is an intention to change with the existing challenges. This is to the research results of [Ajzen \(2004\)](#) It is stated that increasing intentions will increase the influence on behavior without intentions then the hypothesis on behavior will be weak.

Based on current research, Intentions (Z2) have a direct and significant effect on the application of lean *principles* (lean behavior) in the implementation of hospital lean management, so management needs to prepare the intention to change in staff properly so that the implementation of lean behavior in lean management can continuously succeed as planned. This is to the results of research that intention has the greatest direct influence on behavior. This means that it is the most important variable in the implementation of hospital lean management at dr. Iskak Tulungagung Hospital.

G. Analyzing the direct influence of Readiness on Intentions in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

The results of the current study found that Readiness (Z1) has a direct and significant effect on the intention to make changes to Intentions (Z2) in the application of hospital lean management with a β coefficient value = 0.653. So Readiness affects Lean Behavior directly by 65.3% and the rest is influenced by other variables that are not studied. The confidence factor of the respondent's assessment is that if the readiness to change is at an adequate level then the intention to change will grow. This means that every increase in the Readiness variable (Z1) of 1 is expected to increase the individual's readiness for change by 0.653. The higher the individual's readiness to change, the more intention to change will also increase. Based on studies conducted by [Kwahk \(2008\)](#) that readiness has a positive impact on intentions. This means that intentions will increase as the readiness value increases. Based on current research, Readiness (Z1) has a direct and significant effect on the intention to change (*intentions*) in the implementation of hospital lean management, so management needs to prepare staff readiness properly so that the intention to apply the principle of lean behavior always grows to every staff.

H. Analyzing the indirect influence of readiness on Lean Behavior through Intentions as a mediator in the successful implementation of Lean Management Hospital at Dr. Iskak Tulungagung Hospital

Analysis of the indirect influence of Readiness to change (*intentions*) as a mediator on the application of lean behavior in Hospital lean management at dr. Iskak Tulungagung Hospital obtained results that support this hypothesis. In current studies, it is proven that the intention to change (*intentions*) is significant to be a mediator of lean behavior with a type of mediation according to (Nitzl et al., 2016) is partial mediation. That is the type of mediation when the direct influence of Readiness on lean behavior is significant along with the indirect influence of Readiness on lean behavior through *intention* to change (*intentions*) is significant.

Based on the studies conducted by Kwahk (2008) that readiness has a positive impact on intentions. This means that intentions will increase as the readiness value increases. Current findings include the fact that the direct influence of readiness on lean behavior is greater than the indirect influence of readiness on lean behavior through intention as a mediator variable.

I. Analyzing the indirect influence of Self Efficacy on Lean Behavior through Readiness as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

Analysis of the indirect influence of Self Efficacy with *readiness* as a mediator on the application of lean behavior in lean management hospital at dr. Iskak Tulungagung Hospital obtained results that support this hypothesis. In the current research, it is proven that readiness is significant to be a mediator for lean behavior with a mediation type according to Nitzl (2016) partial mediation. That is the type of mediation when the direct influence of Self-efficacy on lean behavior is significant along with the indirect influence of *Self Efficacy* on lean behavior through *readiness* is significant. The current findings support the research that has been carried out by (Rafferty & Minbashian, 2019) that an individual's readiness to change (*readiness*) can be a mediator on the influence of *self-efficacy* on behavior that favors change (behavior).

Based on current research, the trust of individuals to be able to make changes (*Self Efficacy* / X1) requires individual readiness to carry out changes (readiness of change) to be able to influence lean behavior in lean management hospitals at dr. iskak Tulungagung Hospital. So that management needs to prepare all staff properly so that the application of lean behavior principles in lean management hospitals continuously can succeed as planned. In the form of getting closer to staff. The goal is to provide a channel for conveying problems encountered in daily work. Assisting staff in solving problems and standardizing the process with SOPs. This can be done by the case manager of RSUD dr. Iskak Tulungagung.

J. Analyzing the indirect influence of Personal Valency on Lean Behavior through Readiness as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

In current studies, it is proven that significant *readiness* to be a mediator for lean behavior with the type of mediation according to Nitzl (2016) is partial mediation. That is the type of mediation when the direct influence of Personal Valency on lean behavior is significant along with the indirect influence of *Personal Valency* on lean behavior through readiness is significant.

K. Analyzing the indirect influence of Self Efficacy on Lean Behavior through Readiness and Intentions as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

Analysis of the indirect influence of Self Efficacy with *readiness* and intention to change (intentions) as a mediator on the application of lean behavior in Hospital lean management at RSUD dr. Iskak Tulungagung obtained results that support this hypothesis. In the current research, it is proven that readiness and intention to change (*intentions*) are significant mediators for lean behavior with a mediation type according to Nitzl (2016) being partial mediation. That is the type of mediation when the direct influence of Self Efficacy on lean behavior is significant along with the indirect influence of Self Efficacy on lean behavior through *readiness* and intention (*intentions*) is significant.

L. Analyzing the influence of Personal Valency on Lean Behavior through Readiness and intentions as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

Analysis of the indirect influence of Personal Valency with *readiness* and intention to change (intentions) as a mediator on the application of lean behavior in hospital lean management at rsud dr. Iskak Tulungagung obtained results that support this hypothesis. In the current research, it is proven that readiness and intention to change (*intentions*) are significant mediators for lean behavior with a mediation type according to Nitzl (2016) being partial mediation. That is a type of mediation when the direct influence of Personal Valency on lean behavior is significant along with the indirect influence of Personal Valency on lean behavior through *readiness* and intention to change (*intentions*) is significant.

M. Analyzing the effect of Self Efficacy on Intentions through Readiness as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

Analysis of the indirect influence of *Self Efficacy* with readiness as a mediator for intentions to change (Intentions) in Hospital lean management at RSUD dr. Iskak Tulungagung obtained results that support this hypothesis. In the current study, it is proven that readiness is significant to be a mediator for Intentions with a type of mediation according to Nitzl (2016) is partial mediation. That is the type of mediation when the direct influence of Personal Valency on Intentions is significant along with the indirect influence of *Personal Valency* on intentions through *readiness* is significant.

N. Analyzing the influence of Personal Valency on intentions through Readiness as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital

Analysis of the indirect influence of *Personal Valency* with readiness as a mediator of intention to change (*Intentions*) in Hospital lean management at RSUD dr. Iskak Tulungagung obtained results that support this hypothesis. In the current study, it is proven that readiness is significant to be a mediator for Intentions with a type of mediation according to (Nitzl et al., 2016) is partial mediation. That is the type of mediation when the direct influence of Personal Valency on Intentions is significant along with the indirect influence of Personal Valency on intentions through *readiness* is significant.

CONCLUSION

Based on the researcher an n entitled '*The Influence of Personality Characteristics (Self-Efficacy, Personal Valency) on Lean Behavior There is the Application of Hospital Lean Management with Readiness And Intention As Mediation Variables At Dr. Iskak Tulungagung Hospital*' it can be concluded: (a) Directself-efficacy on readiness in the successful implementation of Hospital Lean Management at Dr. Iskak Hospital Tulungagung. (b) There is a direct influence of Personal valency on Readiness in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital. (c) There is a direct influence of Readiness on Lean Behavior in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital. (d) There is a direct influence of Intentions on Lean Behavior in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital. (e) There is a direct influence of Readiness on Intentions in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital. (f) There is an indirect influence of Readiness on Lean Behavior through Intentions as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital. (g) There is an indirect influence of Self Efficacy on Lean Behavior through readiness as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital. (h) There is an indirect influence of Personal Valency on Lean Behavior through Readiness as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Hospital Tulungagung. (i) There is an indirect influence of Self Efficacy on Lean Behavior through Readiness and Intentions as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital. (j) There is an influence of Personal Valency on Lean Behavior through Readiness and intentions as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital. (k) There is an influence of Self Efficacy on Intentions through Readiness as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Hospital Tulungagung. (l) There is an influence of Personal Valency on intentions through Readiness as a mediator in the successful implementation of Hospital Lean Management at Dr. Iskak Tulungagung Hospital.

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