



Development of Interpersonal Soft Skills Learning Model Based TLTD to Improve Hospital Nurse's Competency in Timor-Leste: A Cross- Sectional Study

Soares D^{1*}, Nursalam², Efendi F³, Yusuf A², Sukartini T², Triharini M³, Martins N⁴, Sriyono³ and Ahsan⁴

¹Department of Health, National Institute of Public Health, Timor-Leste

²Professor in Doctoral Program, Faculty of Nursing, Universitas Airlangga, Indonesia

³Teacher at Faculty of Nursing, Universitas Airlangga, Indonesia

⁴Daslo Research and Development, Universidade da Paz (UNPAZ), Australia

Research Article

Volume 8 Issue 1

Received Date: January 12, 2024

Published Date: February 29, 2024

DOI: 10.23880/nhij-16000308

*Corresponding author: Domingos Soares, Department of Health, National Institute of Public Health, Timor-Leste, Tel: +670 78371327; Email: domingoss.ins@gmail.com

Abstract

Introduction and Purpose: Nurses are expected to be competent in practice based on the domain of standards and interpersonal soft skills (ISS). Nurses are faced with inadequate physical assessment 28%, formulating diagnoses 56%, plans 34%, implementation 31%, and evaluation 37.5%, and communication skills 41%. Aims to develop an ISS learning model based on transformative learning theory and digitalization (TLTD) to improve nurses' competencies.

Method: Used Explanatory cross-sectional involved 190 practitioner nurses. Variables of individual characters (X1), facilities (X2), Social environment support/SES (X3), TLTD (X4), ISS (X5), and nursing competencies (Y) were measured. Data was collected using a checklist questionnaire, conducted on 6 June to 10 August 2022 at Dili, Baucau, and Maliana hospitals. Used descriptive and inferential analysis with SEM-PLS.

Results: Five of the 11 hypotheses of statistical p-value < 0,05 and T-Test > 1,96, including X2>X4, X3>X5, X4>X5, and X5>y, to form ISS learning model. The characteristic of respondents were 81,8% young adults, 67.9% women, 57.8% undergraduates, judging the previous training 35% was unsuccessful, and 45.8% did not meet expectations. Learning facilities that are still lacking include policies 23.7%, curriculum 23.4%, guideline 22.7%, modules 27.9%, infrastructure 20.3%, social environment support 24.2% low, organizational support, 30.0% low peer support and 26.3% low family support. The average TLTD is 25.3% to 34.2%, ISS 22.1% to 30.5%, and nurse competence 25.3% to 30.5%.

Suggestion: Result of the study become base to improve nurse's competencies.

Conclusion: Learning model was formed by facilities, SES, TLTD, ISS, and nurses' competencies.

Keyword: Learning; Leadership; Nurse's Competencies

Abbreviations: ISS: Interpersonal Soft Skills; TLTD: Transformative Learning Theory and Digitalization; ICT: Information Communication Technology; INS: Instituto Nacional de Saude; HoREX: Hospital Regional Eduardo Ximenes; HR: Hospital Referral; HTMT: Heterotrait-Monotrait Ratio.

Introduction

Nurses are expected to be competent in practice based on ethics-legal, professional nursing, leadership-management, and education-research, professional, personal and quality development in the era of globalization [1]. Able to apply interpersonal soft skill as team work, leadership, interpersonal communication, discipline, self-confidence, honesty, ethical thinking, problem solving and adapting [2,3]. The placement of human resource is less evenly distributed in number, composition and productivity [4], lack of knowledge and rejecting changes in nursing care [5].

Hospital Nacional Guido Valadares (HNGV) Dili, nurses have misbehaved in patients [6], less responsible in nursing practice [7,8]. Angry, yelling, rude to patients in Baucau [9], patient hygiene is less important [7], lack of ethics [10], interpersonal communication (Rohi, 2019) and application of clinical skills [11]. The use of Information Communication Technology (ICT) in learning is still lagging behind in Timor-Leste [12]. Interpersonal soft skills (ISS) learning digital-based model does not yet exist, so the division of nurse competency boundaries is not clear and not in accordance with ASEAN standards [13]. Instituto Nacional de Saude (INS) Timor-Leste was provide training in management, clinical, communication, ethics and research to improve quality and efficiencies of services [12], but the problem has not been resolved, due to the lack of clarity of learning standard. It is necessary to develop a suitable clinical learning model to ensure the quality of services [14].

Data on 443 (20%) health workers (175 doctors, 150 nurses and 118 midwives) in Timor-Leste in Community health centres and hospitals showed that learning opportunities were not adequate 52%, physical assessment skills were 28% and average performance scores were 65% Hou X, et al. [8]. The ability of HNGV nurses to do assessment 15 (47%), diagnoses 18 (56%), plan 11 (34%), implementation 10 (31%), evaluation 12 (37.5%) and 13 (41%) communication skills are still lacking (Rohi, 2019). Implementation clinical management-leadership 50%, ethics-right of the patients 27%, patient security and safety in HNGV 28% [15]. Factors of learning, culture, social environment support, facilities, ethical dimension, aesthetics, existence and technical greatly influence the application of nurse competence in achieving the perspective quality of nursing care [16, 17], use of ICT

for communicating in nursing services [18]. Therefore, nurses need to learn throughout life to prepare better skills, knowledge and attitudes in era of technological change and the professional development [19]. Develop of ISS learning model based TLTD can improve the competencies [20].

Four stages apply in implementation are: pre-test, conventional learning, digitally learning and post-test. A learning model to maintain collaboration-coordination of participants and facilitators were believed to create positive changes in nurse competence. Competent nurses in the application of knowledge, skills, behaviour's and creating environmentally friendly nursing services through digitalization learning [21]. Current study aimed to develop an ISS learning model based on TLTD towards improving nurse competencies.

Material and Methods

Study Design

Design was used Explanatory research with cross sectional approach and adapted the STROBE Statement-Checklist especially for Cross-Sectional model [22].

Population, Sample and Sampling

The population consisted of 272 nurse's practitioner who works at inpatient room in HNGV Dili, Hospital Regional Eduardo Ximenes (HoREX) Baucau and Hospital Referral (HR) Maliana Timor-Leste. The sample was being nurse's practitioner with the size selected technique was used the Rule of the Thumb: 5-10 x total indicators, and calculated: 5 x 38= 190 respondents and used simple random sampling.

The Inclusion criteria are:

- Nurses practitioner in basic nursing education,
- Nurse with civil service and contract status,
- The work duration is at least 1 year,
- Able to be respondents.

Exclusion criteria are:

- Nurses who are on education, annual and maternity leave,
- Physically-psychologically ill,
- Working in administration unit.

Instruments

Questioner was composite by six types are:

- Individual characteristic 16 item questions,
- Learning facilities 12 items,
- Social environment support 6 items,
- TLTD 35 items,

- ISS 31 items and
- Nurse competencies 37 items.

Question was scored by a likert scale 1 to 5 were validity and reliability tested with SEM-PLS software.

Procedure

Author was conducted meeting with hospitals executive director to ask the permission to start data collection activities. Data was collected at three hospitals during 6 June to 10 August 2022, with 20 to 30 minutes for each respondent to complete the checklist.

Data Analysis

Was make clearing, coding, entering the data to the computer and then analysis with Smart PLS for descriptive and inferential analysis to access the outer model, inner model and hypothesis.

Ethical Consideration

Ethical clearance was provided by Ethical committee from Instituto Nacional de Saude (INS)-MoH Timor-Leste

Individual Character

Indicators	Category	Frequency	%
Age	Teenagers: 24 years old	9	4.7
	Young adult: 25-49 years.	154	81.8
	Older adult: 50-59 years	19	10
	Elderly : 60 years old	8	4.2
	Total	190	100
Gender	Male	61	32.1
	Female	129	67.9
	Total	190	100
Education	SPK	11	5.8
	D3	69	36.3
	S1	110	57.9
Work Experience	> 10 years	71	37.4
	Already worked 5-9 years	58	30.5
	Already worked 1-4 years	61	32.1
	Total	190	100
Learning experience	Successful	123	65
	Unsuccessful	67	35
	Total	190	100

with RN.863 MS-INS/DE/V/2022, Dili, 31/05/2022. Researcher also was goted licencing by all hospital executive directors for access to nurses for take part in the study. Researcher was provided basic introduction about team competition, objectives, duration and data collection mechanism to the participants and giving inform consent for signature requirement.

Results

Overview of Research Locations

The result indicated that HNGV were located in Dili. It is still not clearly visible the professional nursing practice, standards of practice, management, research and educators. HoREX Baucau is Regional hospital, is lack of the ability of nurse's care conducting based on standard, not been free to carry out nursing care, always depending on the instructions only. HR Maliana indicated that more of them perform collaborative functions only (ex. giving medicine), not conducting and using research finding in carrying out nursing care, room management is not clear so affected to the quality of care.

Learning expectations	Meet expectation	103	54.2
	Unmeet expectation	87	45.8
	Total	190	100
Working location	HNGV	131	68.9
	HoREX Baucau	36	18.9
	HR Maliana	23	12.1
	Total	190	100

Table 1: Description Characteristics of Respondents' on Age, gender, education level, length of work, June 2022 (N=190).

In Table 1 of 190 respondents with age 81.8% were young adults: 25-49 years old, 67.9% female, education was a Bachelor's degree 57.8% and 35% rated previous training

as unsuccessful and 45.8% said previous learning did not live up to expectations.

Learning Facilities

No	Indicators	Category	f	%
1	Policy	Low	45	23.7
		Medium	71	37.4
		High	74	38.9
2	Learning curriculum	Low	45	23.5
		Medium	72	38
		High	73	38.5
3	Learning Guideline	Low	43	22.7
		Medium	62	32.7
		High	85	44.6
4	Module	Low	53	27.9
		Medium	68	35.8
		High	69	36.3
5	Infrastructure	Low	39	20.3
		Medium	60	31.4
		High	91	47.9

Table 2: Respondent's perception for Learning Facilities June 2022 (N=190).

The results of the study in Table 2 on 190 respondents mentioned that policy 23.7%, curriculum 23.4%, guideline

22.7%, module 27,9% and infrastructure 20,3% is still low.

Social Environmental Support Factors

No	Indicator	Category	f	%
1	Organizational Support	Low	46	24.2
		Medium	66	34.7
		High	78	41.1

2	Peer support	Low	57	30
		Medium	60	31.6
		High	73	38.4
3	Family support	Low	50	26.3
		Medium	47	24.7
		High	93	48.9

Table 3: Frequency of Social environmental support factors (n=190).

Based on the Table 3 that 24.2% organizational support and peer support for nurses to keep up with learning 30.0%

stated was still low. Family support 26.3% is low.

Frequency of TLTD in Learning

No	Indicators	Category	f	%
1	Development of self-reflection	Low	46	24.2
		Medium	71	37.4
		High	73	38.4
2	Strategies of critical reflection	Low	52	27.4
		Medium	53	27.9
		High	85	44.7
3	Supportive social environment	Low	52	27.4
		Medium	54	28.4
		High	84	44.2
4	Use of art, literature, film and drama	Low	45	23.7
		Medium	65	34,2
		High	80	42,1
5	Holistic, affective and spiritual process	Low	60	31.6
		Medium	50	26.3
		High	80	42.1
6	Basic skills using a computer to prepare and access material	Low	56	29.5
		Medium	47	24.7
		High	87	45.8
7	Skills using the internet to access the material	Low	48	25.3
		Medium	43	22.6
		High	99	52.1
8	Using the smartphone in teaching and learning to access material	Low	51	26.8
		Medium	44	23.2
		High	95	50
9	Reference search Technic	Low	53	27.9
		Medium	45	23.7
		High	92	48.4

Table 4: Frequency of TLTD in learning June 2022 (N=190).

Above Table 4 respondents stated that the development of self-reflection 38.4% high, strategy for critical reflection 44.7% high, supportive social environment 44.2% high, use of art, literature, film and drama 42.1% high, holistic,

affective and spiritual processes 42.1% applied in previous training is still high. Basic skills of using computers 45.8%, internet 52.1%, smartphones 50.0% and reference search techniques 48.4 is already high.

Frequency of ISS in Learning

No	Indicators	Category	f	%
1	Team work	Low	22.1	22.1
		Medium	15.8	15.8
		High	62.1	62.1
2	Leadership	Low	26.8	26.8
		Medium	18.9	18.9
		High	54.2	54.2
3	Interpersonal communication skills	Low	28.9	28.9
		Medium	14.7	14.7
		High	56.3	56.3
4	Discipline	Low	27.9	27.9
		Medium	17.4	17.4
		High	54.7	54.7
5	Self-confident	Low	30.5	30.5
		Medium	16.8	16.8
		High	52.6	52.6
6	Honesty	Low	30	30
		Medium	14.2	14.2
		High	55.8	55.8
7	Think ethically	Low	30	30
		Medium	16.8	16.8
		High	53.2	53.2
8	Problems solving	Low	28.4	28.4
		Medium	18.9	18.9
		High	52.6	52.6
9	Adaptability	Low	28.4	28.4
		Medium	17.9	17.9
		High	53.7	53.7

Table 5: Frequency of ISS learning for respondent June 2022 (N=190).

Based on Table 5, all indicators are already high; Teamwork 62,1%, leadership 54,2%, communication skill 56,3%, discipline in service 54,7%, confidence 52,6%,

honesty 55,8%, ethical thinking 53,2%, problem-solving ability 52,6% and adaptability 53,7% high.

Description of Nurses Competencies

No	Indicators	Category	f	%
1	Nurses practice based on the ethical and legal	Low	58	30.5
		Medium	33	17.4
		High	99	52.1
2	Professional nursing practice	Low	49	25.8
		Medium	54	28.4
		High	87	45.8
3	Leadership and management	Low	53	27.9
		Medium	65	34.2
		High	72	37.9
4	Education and research	Low	52	27.4
		Medium	68	35.8
		High	70	36.8
5	Professional, personal and quality development	Low	48	25.3
		Medium	45	23.7
		High	97	51.1

Table 6: Frequencies of Nurses competencies June 2022 (N=190).

Based on the Table 6 above, indicated majority of indicators is already high: ethical and legal nursing practice 52,1%, Professional nursing practice 45,8%, leadership-management 37,9%, education and research 36,8%, professional, personal and quality development 51,1%. But also more mentioned that have categorized in low.

Learning Model Development

Outer Model: The analysis outer model intends to find out whether the indicator is valid to explain the latent variables

in the study included: convergent validity, discriminant validity and reliability. The rule to read the test results is that if the loading factor (Outer loading) value > 0.05 it is mean the existing indicator is valid to explain the construct on the latent variable and if Cross loading value > 0.05 then it is mean the existing indicator is valid to explain the construct/latent variable. In the significance aspect test, if it appears that the statistical t value of the existing indicator > 1.96 , it is mean significant (Figure 1).



Figure 1: Construct algorithm (Outer Model Valid) an ISS learning model based on TLTD of nurse's competencies, June 2022.

Based on Figure 1 above the majority of existing indicators have an outer loading value greater than 0.05 but there are 5 indicators less than 0.05 (age factor X1.1), gender (X1.2), education level (X1.3), experience (duration) of work

(X1.6) and location of work (X1.7), then these 5 indicators are excluded from the latent variable X1. After issuing the indicators mentioned above, further test results are as figure 2 follows (Figure 2).

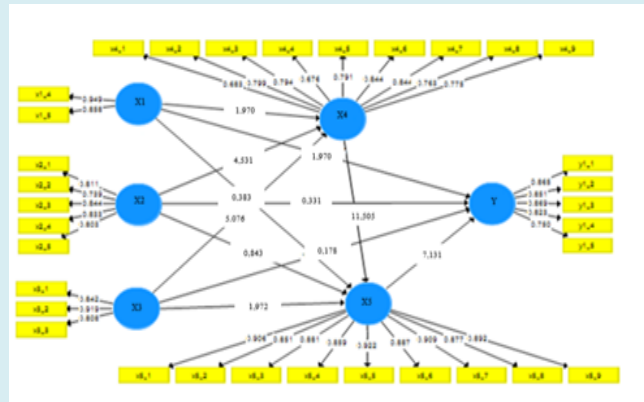


Figure 2: Algorithmic Construct (Outer Model Valid) ISS learning model based on TLTD of nurse competencies, June 2022.

a) Convergent Validity

	Average Variance Extracted (AVE)		Average Variance Extracted (AVE)
(X1)	0.818	(X4)	0.603
(X2)	0.651	(X5)	0.787
(X3)	0.735	(Y1)	0.693

Table 7: Convergent validity values June 2022 (N=190).

Based on the Table 7 above, Convergent validity above variables, all indicators already have outer loading and cross loading values > 0.05. However, it met the requirements

capable of effectively describing lateen constructs of variables and better to be used in conducting further analysis in the development of soft skill learning models.

b) Discriminant Validity

	X1	X2	X3	X4	X5	Y1
X1: Individual character	0.905	0.905	0.905	0.905	0.905	0.905
X2: Learning facilities	0.453	0.807	0.807	0.807	0.807	0.807
X3: Social environmental support factor	0.371	0.683	0.858	0.858	0.858	0.858
X4: Transformative Learning Theory and Digitization (TLTD)	0.422	0.689	0.677	0.777	0.777	0.777
X5: Interpersonal soft skills learning	0.284	0.5	0.424	0.71	0.887	0.887
Y1: Nurses competence	0.293	0.365	0.297	0.531	0.614	0.833

Table 8: Description of the Discriminant Validity values for respondents, June 2022 (N=190).

Based on the Table 8 above, Discriminate validity outer loading values X1, X2, X3, X4, X5 and Y1 > of the cross loading values. The Heterotrait-Monotrait Ratio (HTMT) is values from all variables < 0.90. This means that the root of the AVE value: high validity and the AVE root value of each variable

must be greater than the next latent variable. The root value of AVE meeting X1-X1: 0.905, X3-X3: 0.858, X2-X2: 0.807, X5-X5: 0.887, X4-X4: 0.777 and Y1-Y1: 0.833. It is all mean that discriminant validity value is already good or better.

c) Description of Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
(X1)	0.79	0.927	0.9	0.818
(X2)	0.867	0.877	0.903	0.651
(X3)	0.818	0.821	0.893	0.735
(X4)	0.917	0.922	0.932	0.603
(X5)	0.966	0.967	0.971	0.787
(Y1)	0.891	0.925	0.918	0.693

Table 9: Description of Reliability Value for respondents June 2022 (N=190).

Based on the above Table 9 indicated that the analysis results of Cronbach's Alpha, Composite Reliability, rho-A reliability indicated that 6 variables worth more than 0.7, it means all variables is reliable to be used and meet internal

consistency. Variables also have an AVE value of more than 0.5 which means that the variable is valid convergent (Figure 3).

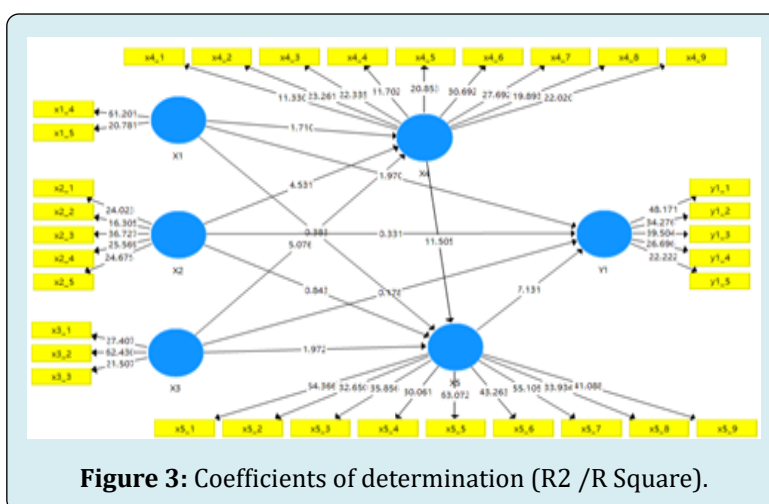


Figure 3: Coefficients of determination (R2 / R Square).

Inner Model: Structural model analysis (Inner model) that connects latent variables with the aim of assessing the goodness of fit through the following three ways:

a) **Coefficients of Determination (R2/R Square):** The coefficient of determination (R2/R Square) used to

find out how much the contribution or strength of the exogenous variable is to the endogenous variable which a force is explaining the model that R2 overcomes as the predictive power in a sample. R2 values range from 0 to 1, which uses guidelines i.e. R2 values of 0.75, 0.50 and 0.25 can be considered substantial, medium and weak.

	R Square	R Square Adjusted	Coefficient of Determination
Transformative Learning Theory and Digitalization (X4)	0.56	0.56	Middle
Interpersonal soft skill learning (X5)	0.51	0.5	Middle
Nurses competence (Y1)	0.39	0.38	Low

Table 10: Results of the coefficient of determination of the development of the ISS model based on TLTD of nursing competence, June 2022 (N=190).

In the Table 10 above shows that the three endogenous variables have a coefficient of determination (moderate). Where these three variables are already worthy of further

use in building this research path model. R Square (R2) value in latent variabel TLTD (X4) with a value of 0.56 or 56.0%, it is mean that the TLTD variable can be decomposed by

individual, facility and social environment support factors that have been available by 56.0% and the remaining 44.0% is a contribution from other variables that are not included in the model. R Square value (R²) on the latent variable ISS (X5) with a value of 0.51 or 51.0%. It can be explained that the variation of individual, facility and social environment support factors and TLTD variables contributed to the

ISS learning variables by 51.0% and the remaining 49.0% contribution from other variables. R Square (R²) value on the Nurse Competency variable (Y1) of 0.39 (39.0%). Remaining 61.0% contributed other variables that were not studied. This means that variations of individual, facility, social environment support factors, ISS learning variables contributed to nurse competency variables by 39.0%.

b) Predictive Relevance

	SSO	SSE	Q ² (=1-SSE/SSO)	Predictive relevance of Path Models
Transformative Learning Theory and digitalization (X4)	1710	1150.912	0.327	Medium
Interpersonal soft skill learning (X5)	1710	1042.423	0.39	Medium
Nurses competence (Y1)	950	716.701	0.246	Medium

Table 11: Predictive Relevance Test Results.

Table 11 shows that the Q²>0 values, it means that ISS learning model based on TLTD is of medium predictive relevance and the model is already worth using in the study. Predictive relevance is tested through Blindfolding calculations which aims to assess the predictive relevance level of this structural model. Where viewed from the value

of Q Square (Q²), which states that if the value of Q² > from 0, then the configuration model is already relevant [23]. The rule of interpretation of the value of Q², if the value of Q² is 0 (a small predictive relevance), Q² 0.25 (medium predictive relevance) and Q² 0.50 (large predictive relevance) of the composed path model.

c) Hypothesis Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEVI)	P Values	Note
(X1) -> (X4)	0.109	0.109	0.064	0.71	0.044	Insignificant
(X1) -> (X5)	-0.022	-0.031	0.065	0.383	0.351	Insignificant
X1 -> Y1	0.121	0.126	0.062	1.97	0.025	Significant
X2 -> X4	0.385	0.386	0.085	4.531	0	Significant
X2 -> X5	0.083	0.086	0.098	0.843	0.2	Insignificant
X2 -> Y1	0.053	0.025	0.106	0.331	0.37	Insignificant
X3 -> X4	0.374	0.369	0.074	5.076	0	Significant
X3 -> X5	-0.134	-0.132	0.068	1.972	0.025	Significant
X3 -> Y1	-0.013	-0.017	0.071	0.178	0.43	Insignificant
X4 -> X5	0.753	0.75	0.065	11.505	0	Significant
X5 -> Y1	0.577	0.567	0.08	7.131	0	Significant

Table 12: Hypothesis test results.

Based on the Table 12 above, the next path that has an indirect influence with the lowest contribution is the individual characteristic (X1) to the Nurse's Competence

with an estimated value of 0.121. Significant means there is an influence between the variables, then the variables that affect each other (Figure 4).

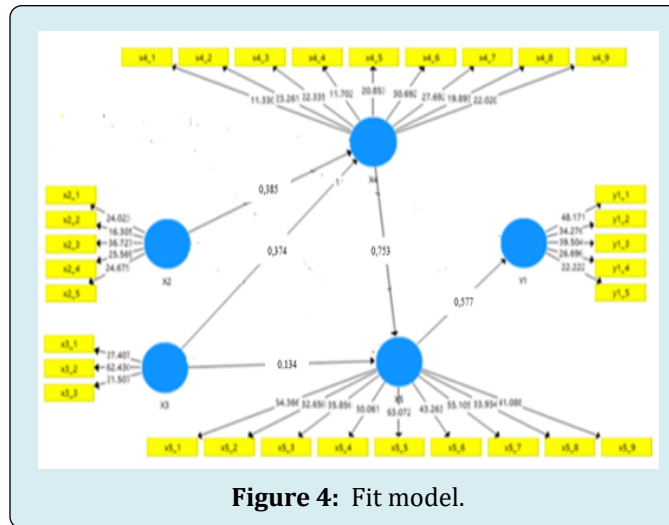


Figure 4: Fit model.

Discussion

Current study founded that HNGV, HoREX and HR Maliana are still not clearly visible the professional practice, lack of the ability to apply the nursing care process, problem in management, not clear standards of practice, no conducting research and use the finding in the practice, all depends on the instructions and collaborative functions. This condition is still in line with previous research related that lack of nursing care, management and leadership processes [15]. The learning facility factor is still low, module does not yet exist, facilities and infrastructure to support the learning process still low. These reality is not in accordance with the opinion of (Ob, 2020) which states that teaching materials that are interesting for the five senses of students to be able to see, hear, smell, taste and touch, greatly facilitate facilitators and participants during learning process, so that it will run well, effectively and efficiently. Therefore, a training that is not supported by adequate facilities in terms of availability based on learning needs, learning objectives will be difficult to achieve.

The social environment support stated that organizational support and peer support for nurses to follow learning as still low. This fact is far from being an opinion that if the support of a conducive, comfortable, safe and harmonious environment, will have a positive stimulus impact on participants and be motivated and make it a reference for continuous learning. The nurses' situation and conditions in the hospitals, it is time to create social support from hospitals and the support of fellow nurses needs to be improved. Good and effective organizational, peer and family support will motivate a nurse in learn ISS to improve the competence of nurses.

The TLTD stated that it already a high level, but there are still some respondents mentioned it is still low such as:

development of self-reflection, critical reflection strategies, social environment supportive, and the use of art, literature, film and drama, holistic, affective and spiritual. It is according to the concept of which encourages learning participants and facilitators to use the TLT steps. The causes are the facilitator has not been able to use the learning according to Mezirow stages in learning so far in the hospital.

All indicators of ISS in values upper then 74%, it is mean that ISS was doing well by nurses. This result strongly agrees with the opinion of Nursalam Efendi [2] & Harmon DT [3] which can outline 9 indicators of ISS that need to be deepened by a health worker (nurses). So, we can see that it is subjectively the respondents stated that ISS is already high in implementation, but the objectivity may be have different. Therefore, it needs to be explored more deeply in the next research. Nurse's competencies indicated one indicator achieved 60.8% and other four is under then 60%, it is means that the nurses' competences were applied in the hospital not yet maximally. The results of this nurse competency research are close to the ASEAN standards which concern 5 domains of competence [13]. However, currently it still requires a more actively begin to learn and apply the ISS learning to improving the nurses' competence.

Five hypotheses such as X1-X4, X1-X5, X2-X5, X1-Y1. X3-Y1 no direct influence each other, but six hypotheses formed a new model for ISS learning based TLTD, such as: Facility factor (X2) on TLTD (X4), social environment support (X3) on TLTD (X4), TLTD (X4) on ISS learning (X5), social environment support (X3) on ISS learning (X5), facility factor variable (X2) on nurse competence (Y1). It is already according with the conceptual developed by Honkavuo L [20] related to informatics nursing, blended clinical education becomes an antecedent of the research developed by (Sayani, 2015). It is to improve the competence of nurses based on the ASEAN rule. Therefore, the variable components that

have succeeded in forming a model of learning ISS are very reasonable and respond to existing realities. These six variables are interdependent with each other.

Conclusion

There are 11 hypotheses discussed in this study, was tested with SEM PLS met 6 hypotheses is significant a relationship. This able to build a model of interpersonal soft skills learning based on the TLTD. Lack of funding support and geographical challenges.

Acknowledgement

We would like to thank for all participant, INS Timor-Leste was provided approval letter for data collection and Instituto Superior Cristal for funding support.

References

- Affara FA (2009) ICN Framework of Competencies for the Nurse Specialist. ICN Regulation Series.
- Nursalam E (2012) Education in Nursing. Penerbit Salemba Medika.
- Harmon DT (2021) Your Soft Skills are Showing: Organizational Efforts to Develop Soft Skills. Rossier School of Education, University of Southern California, California.
- Cassiani SHB, Aguirre-Boza F, Hoyos MC, Barreto MFC, Pena LM, et al. (2018) Competencies for Training Advanced Practice Nurses in Primary Health Care. *Acta Paulista de Enfermagem* 31(6): 572-584.
- Camargo FC, Iwamoto HH, Galvao CM, Andrade RB, Masso GC, et al. (2018) Competences and Barriers for the Evidence-Based Practice in Nursing: An Integrative Review. *Rev Bras Enferm* 71(4): 2030-2038.
- Moniz O (2020) Factors Influencing the Implementation of Caring Behavior of Nurses in the Perinatologia Room of The National Hospital Guido Valadares (Hngv) Dili Timor-Leste. *Journal of Chemical Information and Modeling* 21(1): 1-9.
- Price JA, Soares AIFS, Asante AD, Martins JS, Williams K, et al. (2016) "I Go I Die, I Stay I Die, Better to Stay and Die in My House": Understanding the Barriers to Accessing Health Care in Timor-Leste. *BMC Health Services Research* 16(1): 1-15.
- Hou X, Witter S, Zaman RU, Engelhardt K, Hafidz F, et al. (2016) What Do Health Workers in Timor-Leste Want, Know and Do Findings from a National Health Labour Market Survey. *Human Resources for Health* 14(1): 1-10.
- Bedford DG (2014) Formative Research, Reducing Preventable Child Deaths from Pneumonia, Diarrhoea and New-born Complications in Timor-Leste. *Anthrological*.
- Bertone MP, Martins JS, Pereira SM, Martineau T, Alonso-Garbayo A (2018) Understanding HRH Recruitment in Post-conflict Settings: An Analysis of Central-level Policies and Processes in Timor-Leste (1999-2018). *Human Resources for Health* 16(1): 1-12.
- Luan BM, Lopes P, Soares D (2020) Nurses Viewpoints on the Quality of Care: A Qualitative Study in Timor-Leste. *Research Square* pp: 1-17.
- Superhighway AI, Paper AW (2019) Regulatory Policies and ICT Trends: Insights from Timor-Leste.
- Aungsuroch Y, Gunawan J (2015) Nurse Preparation towards ASEAN Economic Community 2015. *International Journal of Health Sciences and Research* 5(3): 365-372.
- Caporiccio J, Louis KR, Lewis-O'Connor A, Son KQ, Raymond N, et al. (2019) Continuing Education for Haitian Nurses: Evidence from Qualitative and Quantitative Inquiry. *Ann Glob Health* 85(1): 1-7.
- Carter J (2020) Hospital Nacional Guido Valadares. *Hospital Wide Survey Report*.
- Moradi Y, Ahmadi F, Sadeghi A, Oshvandi K (2019) Conceptualizing and Determining Core Clinical Competencies in Nursing Students: A Qualitative Study. *International Nursing Review* 66(4): 530-540.
- Campbell VK (2010) The Role of Theory in Clinical Prevention Research. *Family Practice* 27(4): 357-358.
- College of Nurses of Ontario (2019) Entry-to-Practice Competencies for Registered Nurses CNO 16: 41037.
- Bartosiewicz A, Luszczki E, Rozanski A, Nagorska M (2019) Analysis of Determinants of Readiness for Professional Development among Polish Nurses. *International Journal of Environmental Research and Public Health* 16(10): 1-12.
- Honkavuo L (2020) Digital Teaching in Nursing Education: A Quantitative Study on Nursing Students Views. *International Journal of Caring Sciences* 13(2): 837-846.
- Steppingstones Partnership Inc. Learning in a Digital World: Applications to Nurse Learning and Education.

22. Intarached P, Chunuan S (2023) Factors Predicting Intention to Use Contraceptive Implants among Pregnant Adolescents in Lower Southern Thailand: A Cross-sectional Study. Pacific Rim International Journal of Nursing Research 27(1): 154-168.
23. Hair JF, Risher JJ, Sarstedt M, Ringle CM (2019) When to Use and How to Report the Results of PLS-SEM. European Business Review 31(1): 2-24.

