



THE RELATIONSHIPS BETWEEN ONLINE LEARNING READINESS & LEARNING STYLES AMONG REGISTERED NURSES IN GOMBAK DISTRICT



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KLINIK KESIHATAN TAMAN EHSAN



CONTENT OUTLINE



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BACKGROUND

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REFERENCES



Let's cultivate a culture of curiosity, scientific rigor and collaboration so that every client benefits from the best that nursing science has to offer



ACKNOWLEDGMENT



BACKGROUND

POPULATION SERVED :

± 965 600

TOTAL HCW : 1216

TOTAL NURSES :

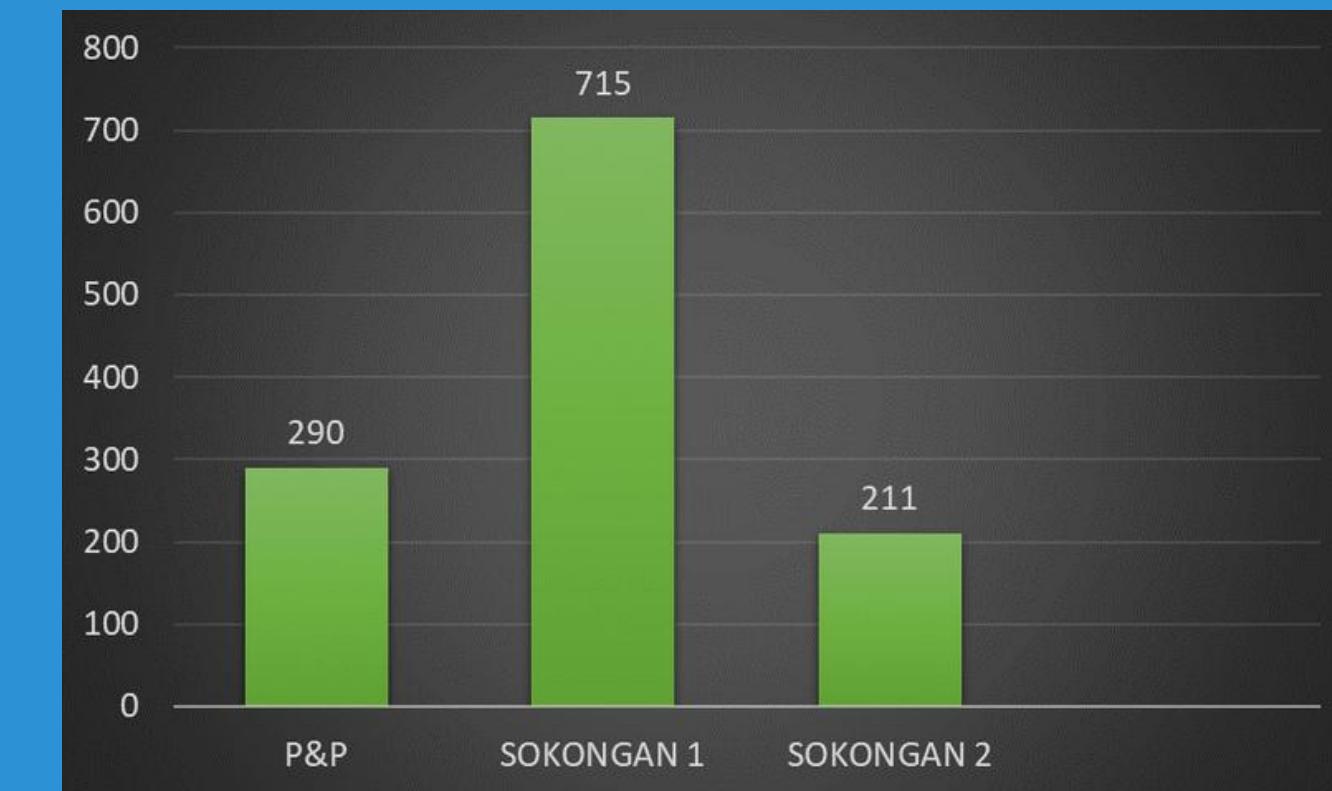
361 NURSES

CONSIST OF :

10 KK AND 4 KD

TOTAL HCW

PERCENTAGE OUT OF
TOTAL HCW



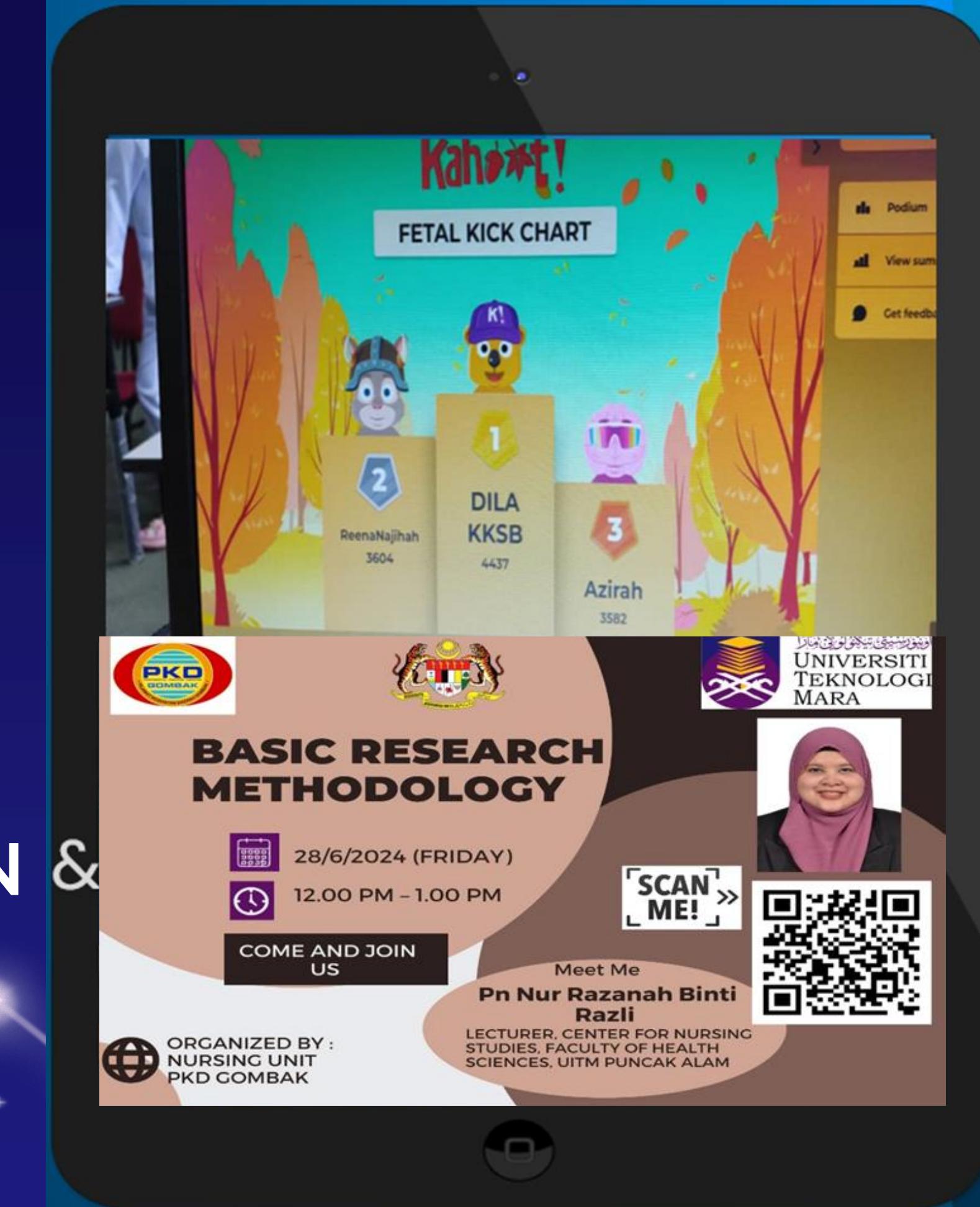
NURSES ONLINE LEARNING

APPROACH : ONLINE PLATFORM

REGULARITY : MONTHLY

TIME : FRIDAY (12 NOON - 1 PM)

PRESENTER : NURSING PROFESSION &
PROFESSIONAL TRAINER



FACE TO FACE



LIMITED
RESOURCE/QUANTITY OF
SEMINAR ROOM

IMPOSSIBLE TO GATHER
LARGE NUMBER OF
NURSES AT SAME TIME

NEED TO CHOOSE
SUITABLE DATE TO
ATTEND PHYSICALLY

ABLE TO DELIVER INFO OR
ANY UPDATE FASTER

NO LIMITED
PARTICIPANT

CAN BE CONDUCTED
ANYTIME IN
PARTICIPANT SETTING

VIRTUAL



**ANJURAN
UNIT KEJURURAWATAN
PKD GOMBAK**

PENGURUSAN STRESS

PUAN NORHANIZA BINTI SAID
PEGAWAI PSIKOLOGI
(KAUNSELING)

E CERTIFICATE GIVEN

14 MAC 2025 (JUMAAT)

12.00 PM - 1.00 PM

**ANJURAN
UNIT KEJURURAWATAN
PKD GOMBAK**

**TIME AND CLINICAL DECISION
TOOLS FOR WOUND CARE
MANAGEMENT**

DR THAYALA SRIDHAR A/L PICHAIKAREN
PEGAWAI PERUBATAN U13
KETUA UNIT PENJAGAAN LUKA
HOSPITAL SELAYANG

14 FEBRUARI 2025 (JUMAAT)

12.00PM - 1.00PM

**ANJURAN UNIT KEJURURAWATAN
PKD GOMBAK**

**PERANCANG
KELUARGA
(KAEDAH PIL)**

PUAN SITI NOOR MARIAM BT AHMAD
KETUA JURURAWAT UNIT CDC

Google Meet

20 JUN 2025 (JUMAAT)

RELEVANT TOPIC

1. CLINICAL
2. PROFESSIONAL DEVELOPMENT
3. PSYCHOLOGY TRAINING
4. CUSTOMER RELATION



ONLINE LEARNING

Numerous studies have used online learning in nursing education and shown that it produces learning results that are both equal to and more satisfying than traditional learning.

Online learning is more flexible, accessible, convenient, cost-effective, and increases learning opportunities (Lahti, Hatonen & Valimaki, 2014).

LEARNING STYLES

Appropriate CNE should include consideration of different ways of learning observed between different generations of nurses. (Kataoka-Yahiro et al., 2011). Assessment of nurses' online learning readiness can provide suggestions regarding learning program design and delivery.

CONTINUOUS EDUCATION

According to Tachtsoglou et al. (2019) the current environment requires nurses to be constantly trained and educated as the world of healthcare continues evolving.

Heavy workloads, time or energy constraints and lack of learning opportunities or support from supervisors were the key barriers to nurses' participation in continuing education programs (Shahhosseini & Hamzehgardeshi, 2015)

PROBLEM STATEMENT

LITERATURE GAP

There is **little research** that explores nurses' experiences with 'online' learning.

Most literature has **only focused on attitudes** toward online learning, but, research on online **learning readiness is not widespread**. Online learning readiness is required to make sure the users are capable of using the online learning environment technology in the best way possible.

Most of the literature had only focused more on online learning among **nursing students**.

STATISTIC

Younger generation of nurses is more familiar with online education than the older ones. (Kataoka-Yahiro et al., 2011)

Education must be treated as an **ongoing lifelong process** (Arslanian-Engoren et al., 2011).

Public more knowledgeable and technologically savvy, higher demand and expectation to healthcare

SITUATION

<70% attendance rate in online learning

Limited resources : limited quantity and size of seminar room make it impossible to gather large number of nurses at the same time

AIM AND OBJECTIVES



OBJECTIVE 1

To determine the level of online learning readiness among registered nurses in Gombak district, Selangor.



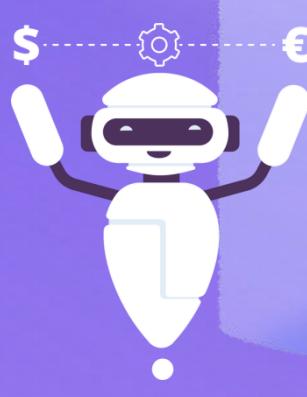
OBJECTIVE 2

To determine the types of learning styles among registered nurses in Gombak district, Selangor.



OBJECTIVE 3

To determine the association between selected demographic factors with online learning readiness among registered nurses in Gombak district, Selangor.



OBJECTIVE 4

To determine the relationship between online learning readiness and learning styles among registered nurses in Gombak district, Selangor.



METHODOLOGY

- DESIGN & STUDY SETTING
- SAMPLING & SAMPLE SIZE
- INSTRUMENTS
- DATA ANALYSIS



METHODOLOGY

Study design : Cross-sectional

Study setting : PKD Gombak

- Gombak District is an administrative district located in the state of Selangor
Covering 65,008 hectares.
- Gombak borders with other districts and it is an area with constant population mobility



INCLUSION CRITERIA



- Nurse working in any of the health or rural clinics
- Employed permanently
- Having at least one year of experience practicing as RN in the subject clinic.
- Willing to participate and consented

EXCLUSION CRITERIA



- Registered nurses who are on long leave such as maternity leave, study leave, or unpaid leave.
- Registered nurses who refused to participate in the study.

SAMPLING METHOD

The sampling method in this study is Proportionate Stratified Random Sampling to maximize the representation of the characteristics of the said population, because each stratum will have a fractional representation in the study

SAMPLE SIZE

1. determination overall sample size
2. determination of sample quantity from each of the stratum

Finite Population Correction Factor:

$$n_a = \frac{n_r}{1 + \frac{(n_r - 1)}{N}}$$

Proportionate stratified random sampling formula:

$$n_h = (N_h / N) * n$$

n_h = Sample size for h th stratum

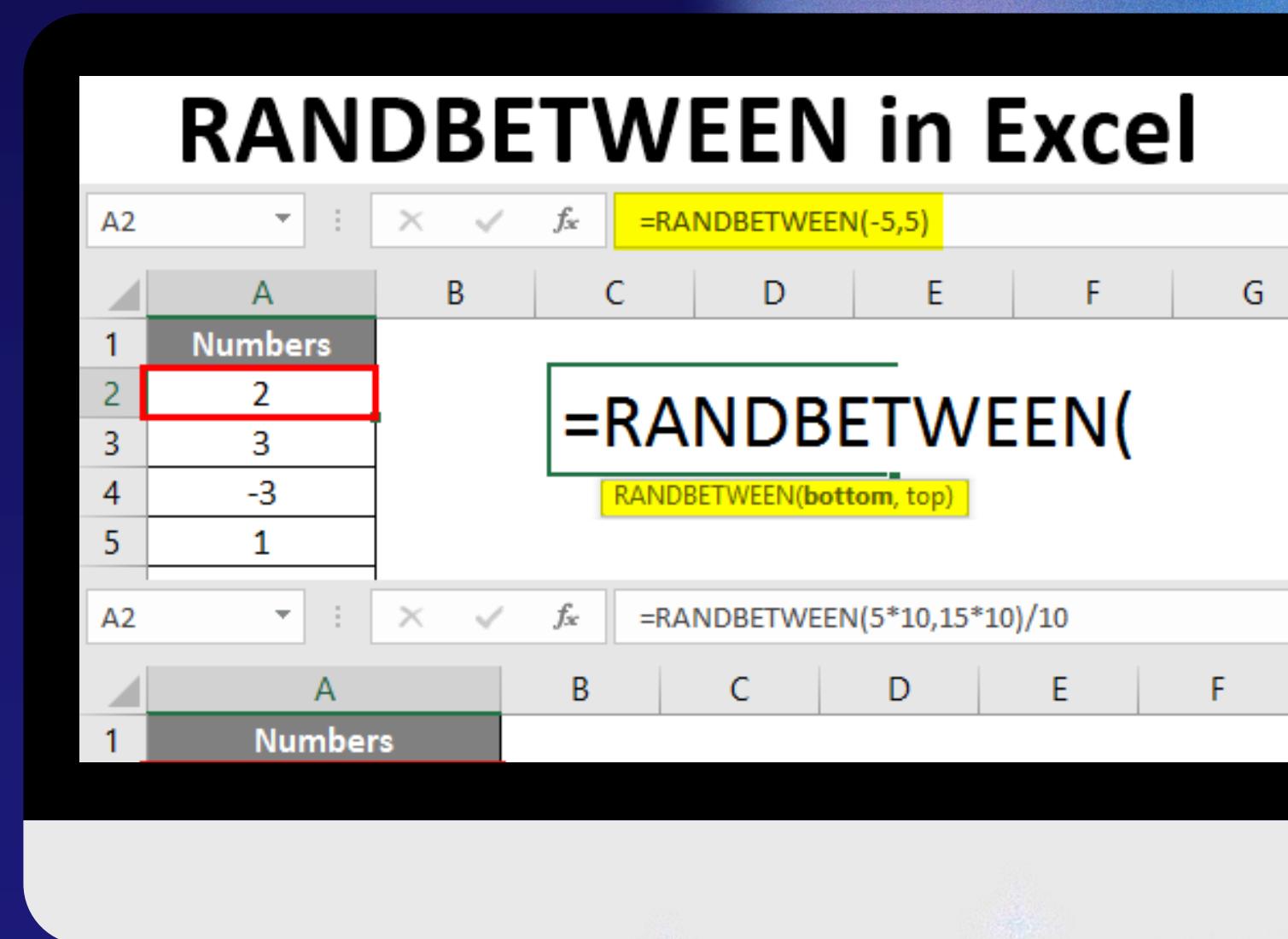
N = Entire population size

N_h = Population size for

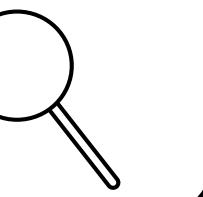
n = Entire sample size

SELECTION OF PARTICIPANTS RANDOMIZATION TECHNIQUE

- Names of the nurses in the Target Population Sampling Frame will be encoded using Microsoft Excel
- The names of the nurses will be categorized according to the clinic where they are working in
- Random number generator in Microsoft Excel will be used to assign unique random identifiers for each of them (by using the Excel RANDBETWEEN function)
- Top most sorted identifiers will be selected.



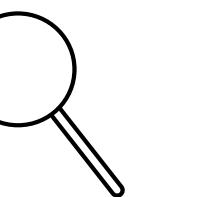
Online Learning Readiness Scale (OLRS)



- 18 items
- 6-point Likert scale
- 5 sub-factors

- Computer and internet self-efficacy
- Self-directed learning
- Learner control
- Motivation for learning
- Online communication self-efficacy

LEARNING STYLES SCALE (LSS)



- 22 items
- 6-point Likert scale
- 5 learning styles

- Solitary VS. Sociable
- Competitive
- Imaginative
- Perceptive
- Analytic

OBJECTIVE 1

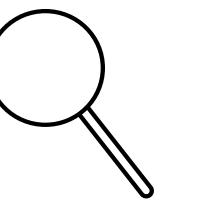


Table 1. Mean and Standard Deviation of online learning readiness (by Category) (n=198)

ORLS Dimensions	Mean (SD)	Level
Overall Online Learning Readiness	4.43 (0.81)	High
Computer/ internet self-efficacy	4.56 (0.91)	High
Self-directed learning	4.50 (0.87)	High
Learner control	4.32 (0.89)	Moderate
Motivation for learning	4.47(0.89)	High
Online communication self-efficacy	4.33 (0.94)	Moderate

Mean value (Low = 1.00–2.66; Moderate = 2.67–4.34; High = 4.35–6.00)

OBJECTIVE 2

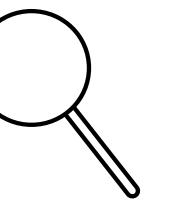


Table 2. The proportion of learning style preferences at individual levels between nurses (n=198)

Learning styles	Frequency (%)		
	Low	Middle	High
Solitary	15 (7.6)	158 (79.8)	25 (12.6)
Competitive	18 (9.1)	154 (77.8)	26 (13.1)
Imaginative	22 (11.1)	149 (75.3)	27 (13.6)
Perceptive	3 (1.5)	176 (88.9)	19 (9.6)
Analytic	41 (20.7)	129 (65.2)	28 (14.1)

OBJECTIVE 3

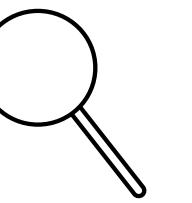


Table 3. One way ANOVA results regarding online learning readiness according to nurses' education level (n=198)

Online learning readiness	Certificate		Diploma		Degree		F (2,195)	p value
	M	SD	M	SD	M	SD		
Overall online learning readiness	4.22	0.89	4.55	0.73	4.43	1.16	3.75	0.025*
Computer/internet self-efficacy	4.29	1.05	4.69	0.77	4.73	1.21	4.55	0.012*
Self-directed learning	4.29	0.99	4.63	0.76	4.40	1.28	3.47	0.033*
Learner control	4.12	0.11	4.43	0.08	4.27	0.71	2.72	0.068
Motivation for learning	4.31	0.11	4.57	0.07	4.25	0.48	2.03	0.134
Online communication self-efficacy	4.10	0.12	4.44	0.78	4.53	0.34	3.01	0.051

*p<0.05

OBJECTIVE 4

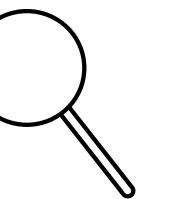


Table 4. Correlation between learning styles and online learning readiness (n=198)

Variable	Learning styles	Pearson correlation	Sig. (2-tailed)
Online learning readiness	Solitary	-0.91	0.20
	Competitive	-0.93	0.195
	Imaginative	-0.24	P<0.001*
	Perceptive	-0.14	0.053
	Analytic	-0.25	P<0.001*

*Correlation is significant at the 0.01 level (2-tailed).

DISCUSSION

The current environment of care and delivery, including academic, occupational, administrative and research settings, **requires nurses to be constantly trained and educated** as the world of healthcare continues evolving (Tachtsoglou et al., 2019).

Online learning has been applied in nursing education in many studies, and demonstrated **equal learning outcomes** and greater satisfaction than traditional learning (Lahti et al., 2014).

Public more knowledgeable and technologically savvy, higher demand and expectation to healthcare

Based on Kataoka-Yahiro et al. (2011) the **younger generation** of nurses is more familiar with **online education** than the older ones. However, in this study, there were no significant different between age and online learning readiness among registered nurses

Since the research design was descriptive cross-sectional study, this study design does not cover the exploration on **causations** between variable.

However, the findings of this study may aid **nurse managers and educators** in different healthcare settings to provide appropriate support and resources to meet nurses' online learning needs

CONCLUSION

These findings indicate that variation of learning styles is not the primary factor that explains online learning readiness

Readiness is one of the important factors of effective learning, and understanding nurses' readiness for online learning is an essential element to consider when implementing an effective virtual learning.

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This Cross Sectional study
might provide baseline data for
further research such as Action
Research.....



RESEARCH LEVEL IN NURSING



**NURSING
RESEARCH
UTILIZATION**

USING THE EBP



**NURSING
RESEARCH**

QUALITATIVE &
QUALITATIVE, META
ANALYSIS REVIEW



**NURSING
RESEARCH
REVIEW**

LITERATURE REVIEW,
SCOOING REVIEW,
INTEGRATIVE REVIEW,
SYSTEMATIC REVIEW



**ADVANCED
NURSING
RESEARCH**

ADVANCED QUALITATIVE,
ADVANCED QUANTITATIVE,
MIXED METHOD APPROACH





WHEN NURSING LEADS, HEALTHCARE FOLLOWS

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