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An Assessment of the Effectiveness of a Safety Strategy Training Program on Knowledge Retention in New Nurses

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Nursing Practice at the University of Kentucky

By

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Louisville, KY

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Abstract

Purpose: The purpose of this study was to assess the effectiveness of a lecture-based safety strategy training program on new nurses' level of knowledge about how to reduce errors when providing patient care.

Conceptual Framework: Patricia Benner's Novice to Expert model of knowledge and skill acquisition in nurses was the conceptual framework used for understanding how nurses acquire knowledge, skill and experience as well as their propensity for error at different stages of development.

Methods: This was a quasi-experimental pre-test, post-test assessment of the current lecture format. The instrument used was a survey that asked demographic, safety strategy knowledge, and nurse perception questions.

Results: Mean test scores reflective of knowledge of safety strategies increased following the lecture training but not to a significant level

Conclusion: The lecture format of this program may not be the best way to ensure that new nurses gain adequate knowledge of causes of errors or strategies to reduce them. As well, it may not be adequate to produce lasting culture change of the adoption of these strategies.

Acknowledgments

First and foremost, I thank Dr. Debra Hampton, who has guided me on this complex and often tumultuous path. Her consistent supply of academic expertise and leadership around blending life with school has been a lifeline for me not only where school is concerned, but also in learning to balance the inevitably competing responsibilities of school, work, and family. I would not have completed this program without her wisdom, patience, commitment to holding me accountable, and guidance. I am also grateful to my professors and preceptors, particularly Dr. Pamela Missi, whose impeccable professionalism and dogged commitment to nursing at Norton Healthcare are an exemplary model in nursing leadership. Dr. Kelly Johnson was instrumental in aligning my passion for developing new nurses with Norton Healthcare's commitment to preparing novices with a toolkit for safe practice and why that is paramount. She encouraged me to investigate the efficacy of the plan in place. Dr. Julie Wolford was a resource for narrowing down my scope and focus and keeping it in line with Norton Healthcare's plan for developing new nurses.

Finally, I must acknowledge my beautiful daughters. This endeavor took more time and emotional and mental energy than anticipated. They have supported me, tolerating all manner of missed opportunities for me to be that mom whose is available for everything I could have been in their lives while I was in class or clinical, writing or exhausted. There is no way I can ever thank them for their understanding and generosity. I hope that this experience has shown them what a family can achieve together through sacrifice. Their sacrifices were immeasurably core to the completion of this journey.

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Dedication

This project is dedicated to my Aunt Mary Kerbyson, RN, who encouraged me from the beginning of my nursing journey to strive for advanced education and to follow evidence-based practice. She pushed me to obtain my bachelor's degree at a time in the 1990s when I did not think it mattered. Her understanding that the science of the profession of nursing is critical to improving healthcare was rooted in her belief that nursing is the backbone of healthcare and that nurses must practice using both the scientific process and the moral duty to care for others. I finished my bachelors for her. I pursued this doctorate because I understand how right she was.

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Introduction

With growing opportunities for advanced practice in nursing, turnover of hospital bedside nurses has increased (Nursing Solutions, Inc., 2017; Robert Wood Johnson Foundation, 2012). As a result, hospitals are hiring ever more new graduate nurses into all areas of practice including high risk specialty units. An increase in numbers of less experienced nurses caring for a more complex and vulnerable hospital patient population can be expected to be correlated with increased errors and patient harm. Medical and nursing errors happen frequently, and harm to humans is significantly worse in healthcare than in other complex, high-risk industries such as commercial aviation (Kapur, Parand, Soukup, Reader, & Sevdalis, 2016). In 1999, the Institute of Medicine published their seminal report, *To Error is Human* (Institute of Medicine, 1999), which said that at least 48,000, and possibly as many as 98,000, deaths happen because of human error annually in the United States. The report implored the medical and nursing community to implement a variety of interventions to reduce human error and patient harm events. However, seven years later Balas, Scott, and Rogers (2006) found that over one 28-day period 24% of 502 critical care nurses self-reported actual errors and 33% self-reported near errors. The most common of these was medication administration errors (MAEs), accounting for 56.7% of the total errors (Balas et al, 2006). Procedural, transcription, and documentation errors were also reported. Understanding the changing nursing workforce and its effect on the genuine problem of human error and patient harm is an imperative for healthcare leadership and for nurses.

Norton Healthcare (NHC) is dedicated to safe patient care and reducing harm to patients. In 2015, NHC embarked on a staged approach to embedding a culture of safety, utilizing high reliability and error prevention strategies, into every facet of the organization. Use of these strategies has been shown to decrease error rates ten-fold (Fleming, & Pritchett, 2016). The

program is called Reaching for Zero and its mission is to strive for zero patient harm events. As part of every employee's introduction to this effort and his or her onboarding with NHC, each attends a mandatory two-hour presentation explaining the Reaching for Zero philosophy, knowledge about human error and skill acquisition, and six specific strategies for reducing errors. However, no studies have been done to determine if the safety strategy training program is effective in increasing knowledge of nurses related to error prevention. Does this program really make a difference?

Background

Five studies were found in a review of the literature that show that nurse error relates to experience, among other factors, and that simulation training is more effective than lecture in terms of both nurse satisfaction and decreased error. New nurses make more errors than experienced nurses (Kim, Kim, & Kang, 2016; Roth, Brewer, & Wieck, 2016; Simonsen, Daehlin, Johansson, & Farup, 2014). Years of experience are associated with improved critical thinking, judgment, and skill acquisition (Benner, 1984), which not only decreases error rates in experienced nurses, but in those who are less experienced around them. Kim, et al. (2016) coined the *term tenure* diversity to describe the ratio of new nurses, or those having less than one year of nursing experience, to experienced nurses. They found that as the number of new graduate nurses hired increases, *tenure diversity* decreases and risk for error increases (Kim et al, 2016). Lack of experience of new nurses and the decreasing volume of Benner's expert-level nurses in hospitals requires emphasis on safe behavior training and error prevention strategies. For these strategies to become effective, training should be designed using methods that increase a likelihood of broad spread behavior change.

Research into this subject suggests that simulation training reduces error rates in nurses (Benner et al, 2002; Kim et al, 2016; Roth et al, 2016; Sanko et al, 2017; Simonson et al, 2014). As well, simulation training has been shown to be superior in changing behavior to lecture education (Cooper, 2015; Raleigh, Wilson, Moss Reinke-Piper, Walden, Fischer, & Zakrajsek, 2018; Solymos, O'Kelly, & Criona, 2015). Sanko et al. (2017) found an association between student nurse simulation experience and increased confidence over time as well as a significant relationship between simulation experience and reduction of two nursing errors: administering medications on time and proper hand hygiene performance.

Other studies have found that medication administration errors (MAEs) are the most common mistakes reported and are associated with inexperience, (Kim et al, 2016; Simonsen et al, 2014) lack of judgment (Roth et al, 2016) and environmental interruptions (Kim et al, 2016; Roth et al, 2016; Simonsen et al, 2014). Balas et al. (2006) found that over one 28-day period 24% of 502 critical care nurses self-reported actual errors and 33% self-reported near errors. The most common of these was medication administration errors (MAEs), accounting for 56.7% of the total errors. Factors associated with errors tend to fall into categories: (1) the nurse, (2) his or her environment, and (3) procedure or process problems. Nurse-specific characteristics associated with errors are preparation and training, health (e.g., fatigue and stress), and experience (Benner et al, 2002; Kim et al, 2016; Roth et al, 2016; Sanko et al, 2017; & Simonsen et al, 2016). Experience is manifested by critical thinking, judgment, and situational awareness (Benner et al, 2002; Kim et al, 2016; Simonsen et al, 2014) and takes time to cultivate. The one-year mark was shown in studies to be the delineation where experience reduces error rates (Benner et al, 2002; Kim et al, 2016; Simonsen et al, 2014). Additionally, new nurses with less

than one year of experience tend to underrate their chance for error (Kim et al, 2016) which may lead them be unaware of their own performance gaps or to engage in risk-taking behaviors.

Theoretical Concept

Patricia Benner (1984) provides a framework for understanding nurse development along a continuum of skill and knowledge acquisition as well as judgement and safety. Her model is based on the Dreyfus Model of Skill Acquisition and she posits that developing nursing skills through situational experience is a prerequisite for expertise (Benner, 1984). Brothers Stuart and Hubert Dreyfus, both University of California Berkley professors, analyzed expertise in chess masters and eventually developed and adapted their model to skill acquisition in pilots (Benner, 1984).

As nurses progress through the levels of development, they depend less on rules and abstract principles and more on concrete experience, shifting from processing requiring attention toward automatic processing of both simple and complex tasks that have become easy (Benner, 1984). NHC's safety strategy program is based on Jens Rasmussen's 1983 Skills, Rules, and Knowledge-based (SRK) taxonomy for categorizing three types of human performance (Fleming, E. & Pritchett, A., 2016). Fleming and Pritchett (2016) describe the characteristics of skill, rule, and knowledge-based behavior and they align with Benner's novice to expert levels of development. Fleming and Pritchett (2016) propose that the SRK framework is ideal for the development of training particularly for safe practice in work areas that Rasmussen (1983) describes as requiring a "diverse range of behaviors in real work environments" and "spanning a wide range of work situations from daily routine to stressed encounters with accidental events." Novices and advanced beginners must focus attentively on new skills and perform them much more slowly. While doing so, they encounter the known and expected, but also the unknown, the

unintended, and the unplanned. This requires trouble-shooting and critical thinking. If practiced, NHC's Safety strategies are evidence-based tools that assist a new nurse in safely troubleshooting, decreasing error rates and improving patient safety.

According to Benner (1984), a nurse becomes competent at approximately two to three years of full-time employment in a particular area. It is that length of experience that allows him or her enough repeated exposure to the common daily work so that it becomes easy and he or she can increase the pace and can simultaneously perform other tasks or functions (Benner, 1984). As the nurse then progresses through the proficient and to the expert stage, they begin and then grow their capacity for more automaticity, intuitive judgment based in context, and require less effort to perform accurately and safely (Benner, 1984).

Dr. Benner outlines the five stages of development for nurses, beginning with the novice. As a nurse stays employed or active on a full-time basis in an environment, he or she advances through the five stages in order (Benner, 1984). Additionally, skill and experience vary even within that field or environment depending on frequency of exposure to skills and scenarios. Characteristics of both the novice and advanced beginners compared to those of the proficient or expert nurse explain why errors decrease not only with experience, but with mentoring by proficient and expert nurses. Where proficient and experienced nurses operate at the skill-based behavior level with an error rate of approximately 0.1%-0.3%, new nurses or nurses working in a new environment are more likely to be operating at the rule or knowledge-based level in which error rates are 30-50 % per attempt and 10% respectively (Fleming, & Pritchett, 2016). The characteristics of Benner's first three stages, novice to competent demonstrate the danger of newer nurses training new nurses. However, because the luxury of high ratios of experienced to new nurses is part of a by-gone era, reality and necessity impose a need for safety behavior and

error prevention strategy training that results in reliable integration of those strategies into daily practice. New nurses at NHC, regardless of clinical experience are new to these strategies. Therefore, training in them should be conducted in ways that promote retention and skill deployment.

Purpose

The purpose of this study was to assess the efficacy of the current lecture format for safety strategy training for new nurses at Norton Hospital. The aims of the project were to:

a) Assess for degree of increase in knowledge from baseline to post intervention.
b) Determine nurse perceptions about safety strategy training at Norton Healthcare.

Methods

Design

This study utilized a quasi-experimental, pretest/posttest design to compare baseline knowledge mean scores to posttest knowledge mean scores to determine if scores increased following lecture training. A survey was sent to participants to assess baseline and post lecture training knowledge of safety strategies to reduce error and to assess nurse perceptions of training format as well as use of safety strategies in practice at Norton Hospital.

Setting

This study took place at Norton Hospital (NH) in Louisville, Kentucky. The hospital is one of four adult acute care hospitals within the Norton Healthcare organization. It has 463 inpatient beds and the largest market share of new graduate nurses hired annually.

Sample

Lists of new nurses enrolled in Reaching for Zero classes were received from NHC's Human Resources Workforce Analytics department one week prior to each of the two study classes. Participants for this study included nurses who attended the Reaching for Zero training over a two-month period of time. Registered and licensed practical nurses, eighteen years of age and older who were residents of the United states and who were hired to work in any inpatient unit at Norton Hospital were invited to participate. Exclusion criteria were newly hired nurses who were not enrolled in or did not attend Reaching for Zero training as scheduled.

Measures

Pretest class content knowledge scores were compared to content knowledge posttest scores for a group of nurses who attended the current state lecture format class at Norton Hospital in July and August, 2019 and who agreed to participate in the surveys. Six perceptions questions were also included in the posttest survey. The survey tool is original and was developed by the primary investigator of this study in order to capture retention of key concepts taught in the Norton Hospital specific safety strategy training program; therefore, no prior usage data supports its validity or reliability.

Data Collection

Study approval from both the University of Kentucky Institutional Review Board (IRB) and the Norton Healthcare Office of Research and Administration (NHORA) was obtained prior to data collection. Demographic data, including age, gender, years of clinical experience and highest level of nursing education as well as content knowledge data was collected pre and post class for both months. Thirteen questions assessed baseline and fourteen questions assessed post-training knowledge retention of class content. Six questions on the post survey assessed

perceptions of the class, preferred learning styles, and utilization of safety strategies in current practice. Participants were anonymous and identified only by a personally chosen, four-character unique identifier. However, as unique identifiers did not match for each pretest and posttest, results are compared as unpaired separate groups.

Data Analysis

Descriptive statistics, using means and standard deviations for discreet data were used to assess participant demographic characteristics. Mean pretest and posttest scores were compared using unpaired, one group t-test analysis. Because of the small sample size, ranked Analysis of Variance (ANOVA) was used to test for a correlation between years of experience or highest level of nursing education and raw test scores. Additionally, because of the very small sample size, effect size of these two variables was determined using Chron's f and Cramer's v. To look at perceptions, tables present raw and proportions data and chi-square analysis tests for relationships. All statistical analysis was conducted using StatIQ software embedded in Qualtrics software licensed by University of Kentucky using a 95% confidence level where applicable.

Results

Twenty eight percent of invited nurses took part in the survey resulting in a sample size of nineteen total participants (9 in the pretest group and 10 in the posttest group): 37% male and 63% female. Some of the participants in the pretest and posttest group could have been the same persons, but this was not able to be established based on the survey format. Participants average age was 25.3 (pretest group) to 27.5 (posttest group). Table 1 and 2 includes age and gender information about the participants. Seventy four percent had less than two years of experience. All were registered nurses: 42% Associate-degree prepared, 53% Bachelor-prepared, and 1 Master-prepared nurse (Table 4). Mean safety strategy content knowledge scores for the pretest

and posttest groups were 8.22 and 9.10 respectively (Table 3). This is a difference of 0.88. The analysis showed no significant difference between means ($p = 0.4931$; 98% C.I.).

Interestingly, although scores did not increase significantly following the lecture training, all six new graduate nurses as well as those with up to five years of experience somewhat or strongly agreed that the training did improve their confidence in error prevention. Two nurses with over five years of experience neither agreed or disagreed and strongly disagreed that the training improved their confidence. Knowledge scores were not significantly associated with education level or years of clinical experience (see Table 4 and 5). Safety strategy training did not result in significant improvements in participant's confidence level around error prevention (see Table 6).

Most nurses felt that they are exposed to these strategies in other NHC training and in practice and that leadership reinforces them (Table 7). In general, nurses preferred online learning management system (LMS) education to both simulation and lecture, with lecture being the least preferred. There was no statistical correlation ($P = 0.151$) between years of experience and preferred learning method but effect size was large (Table 8).

Perception amongst participants is that they are otherwise exposed to these safety strategies including while on the unit. Participants experience safety strategy knowledge sharing from leaders, preceptors, trainers in other classes, and peers. They also felt that the lecture format was adequate for imparting knowledge of the strategies but prefer Learning Management System (LMS) education for this content over both simulation and lecture. The literature review for this paper did not provide evidence that online learning management systems are effective for skills training or superior to simulation training.

Discussion

This study was focused on the efficacy of a lecture training program to impart knowledge of safety strategies that reduce errors. Lecture training is inferior to simulation training for training in behavior skills (Cooper, 2015; Raleigh, Wilson, Moss Reinke-Piper, Walden, Fischer, & Zakrajsek, 2018; Solymos, O"Kelly, & Criona, 2015). Simulation training requires more resources to develop and conduct. Healthcare leaders must consider feasibility, which includes both stewardship and effectiveness, when planning and implementing training.

Seventy four percent of participants in this study had less than two years of nursing experience, meaning they were not likely to have achieved even basic nursing competence, and were still functioning at the novice or advanced beginner level and at high risk of error. New nurses learn skills better through simulation training than lecture, have fewer errors and experience more confidence after simulation training (Benner et al, 2002; Kim et al, 2016; Roth et al, 2016; Sanko et al, 2017; Simonson et al, 2014). This study assessed basic knowledge and nurse perceptions of lecture training. The current lecture format in this small sample study cannot be said to have statistically improved knowledge of safety strategies in nurses new to NHC. A posttest score mean of 9.10 out of a total 14 questions represents 5%. Goals for safety strategy training would include basic knowledge assessment scores well above that percentage. A posttest average of 65% is not ideal and while perception is that nurses are exposed and that that is enough, this study does not show in any way if the strategies are practiced correctly routinely or at all.

Limitations

The small sample size limits the generalizability of results of this study to the population of all nurses at NHC or to all employees at NHC. The unintended lack of pairing of pretest and

posttest participants further limits the strength of these results as it does not show individual participant change. Effect size analysis throughout hints that a larger sample size would have yielded statistically significant results in several variables, but not in pretest and posttest scores. While most of the nurses who take this training do so within 30-60 days of hire, these baseline pretest knowledge scores, the insignificance between pretest and posttest mean scores, and nurses' perception answers indicate prior exposure to the safety strategies and internal bias that is a known risk in pretest posttest surveys. Other Reaching for Zero education campaigns ran throughout this study in various formats. Those efforts may have affected pretest results.

Recommendations for Further Studies and Implications for Practice

A replication of this study with controls around prior exposure within NHC prior to participation as well as garnering a larger sample would give more concrete data. However, it would seem prudent resource-wise to continue with the current lecture training format as it is bolstered by leadership and other organizational reinforcement in some capacity. This class was reduced from two hours to one hour and thirty minutes to reduce costs around requiring each new NHC employee to attend. Simulation training around six behavior strategies and the skill, rules, and knowledge-based behavior would require increased classroom time, increased training hours and commitments from presenters across the system, and increased supply costs. A similar study with pretests administered upon hire and post-tests after class would be a more effective measure of learning but it would not control for other exposures to safety strategy methods after hire.

A study comparing lecture to a pilot simulation class would offer value as simulation is preferred over lecture for learning. Simulation training is known to increase both comfort with and accurate practice of skills. While the lecture training class introduces safety strategy content

to new nurses and is valuable in that regard and in imparting confidence, NHC should consider adding additional simulation training in its new nurse residence program as well as in all clinical classroom learning so that the knowledge can be reinforced and skills developed throughout the first year of hire with consistency and real-time coaching and feedback. New nurses feel more confident with safety strategy training and this would not only reduce new nurse error, but also improve their experience. Competency evaluation of safety strategies should begin in orientation and continue throughout the first year with consistent return demonstration methods and error rates and successful evidence of daily work should be a part of ongoing nurse evaluation.

Studies that look at nurse tenure diversity and its effect on error rates, hospital acquired conditions rates, new nurse satisfaction, and nurse burnout would help to understand the effect of the changing proportions of new and experienced nurses in hospitals.

Conclusions

As options for advanced practice have expanded for nurses, hiring of new graduate nurses into inpatient hospital units as well as specialty areas has grown; so too, has the proportion of new nurses in the staff ratio at any given time so that less experienced nurses are training and knowledge-sharing with newer nurses. The increased proportion of novice and advanced beginner nurses in all nursing settings is a risk for increased error events.

Nurse leaders concerned with patient safety and sufficient training consistent with nurse skill development level should consider designing orientation and ongoing training programs that support new nurses with simulation along with experienced preceptors and mentors. However, time and volume are real world considerations. NHC has a robust, layered approach to ingraining Reaching for Zero safety strategies that this study may show influences new nurse knowledge of

safety strategies. The organization should consider if further assessment and revision of this class is warranted and if so, consider incorporating simulation training around these strategies and embedding them into the curriculum for all new nurse training and orientation. Finally, there is significant added value in retention of experienced nursing staff in any healthcare organization that aims to improve patient safety.

Table 1. *Participant Age*

Group	Median	Average	Confidence Interval of Average	Standard Deviation	Minimum	Maximum
Posttest (n=10)	28.5	27.5	24.17 to 30.83	4.65	21	34
Pretest (n=9)	23	25.3	22.07 to 28.59	4.24	22	33

Table 2. *Gender*

	Count	Percent of Data	Confidence Interval (Percent of Data)
Pretest Group			
Female	5	55.6%	26.7% to 81.1%
Male	4	44.4%	18.9% to 73.3%
Posttest Group			
Female	7	70.0%	39.7% to 89.2%
Male	3	30.0%	10.8% to 60.3%

Table 3. *Test Scores (n=19)*

Group		Mean Test Score (SD)	Percentage
Pretest (n=9)		8.22 (2.11)	63.20%
Posttest (n=10)		9.10 (3.18)	65.00%

Unpaired, One-Group t-test p-value 0.4931

Table 4. *Posttest Score not Related to Level of Nursing Education*

Group	Average	Median	Sample Size	Confidence Interval of Average	Standard Deviation
Master Degree	12.0	12.0	1	12 to 12	NA
Bachelor Degree	9.8	9.5	4	4.18 to 15.3	3.5
Associate Degree	8.0	8.0	5	4.17 to 11.8	3.1

Ranked ANOVA p-Value = 0.458 Effect Size Cohen's f = 0.566

Table 5 *Posttest Scores Not Related to Years of Clinical Nursing Experience*

Group	Average	Median	Sample Size	Confidence Interval of Average	Standard Deviation
49 months or more	12.5	12.5	2	-6.56 to 31.6	2.1
25 months - 4	12.0	12.0	1	12 to 12	NA
13 months - 2 years	6.0	6.0	1	6 to 6	NA
0-1	8.0	8.0	6	5.11 to 10.9	2.8
Ranked ANOVA p-Value = 0.153. Effect Size Chron's f = 1.18					

Table 6. *Confidence Related to Training*

Safety Strategy training improves my confidence level around error prevention.

	0-1 year	13 months - 2 years	25 months - 4	49 months or more
Somewhat agree	3	1	1	0
Strongly agree	3	0	0	0
Neither agree nor disagree	0	0	0	1
Strongly disagree	0	0	0	1

Chi-Square p-Value = 0.2133 (no significance) 95% C.I., Effect Size Cramer's v = 0.6324 (large)

Table 7. *Perception Questions Results*

In my time on my new unit, I have seen staff using known safety strategies.

	Count	*Percent of Data*	*Confidence Interval (Percent of Data)*
Strongly agree	*5*	*50.0%*	*23.7% to 76.3%*
Somewhat agree	*4*	*40.0%*	*16.8% to 68.7%*
Neither agree nor disagree	*1*	*10.0%*	*1.8% to 40.4%*

In my time on my new unit, my preceptor or colleagues have discussed these strategies as part of my training in practice.

Yes	*6*	*60.0%*	*31.3% to 83.2%*
Maybe	*4*	*40.0%*	*16.8% to 68.7%*

In my time on my new unit, leadership has discussed these strategies with me as part of my training in practice.

Yes	8	80.0%	49.0% to 94.3%
Maybe	2	20.0%	5.7% to 51.0%

Do you feel that the format for delivering this content is effective in helping you practice these strategies in patient care?

Very effective	6	60.0%	31.3% to 83.2%

Extremely effective	2	20.0%	5.7% to 51.0%
Moderately effective	1	10.0%	1.8% to 40.4%
Slightly effective	1	10.0%	1.8% to 40.4%
Overall, what is your preferred method for learning safety strategies?			
LMS module	5	0.5	23.7% to 76.3%
Simulation	4	0.4	16.8% to 68.7%
Lecture	1	0.1	1.8% to 40.4%
Safety strategy training improves my confidence in error prevention as a new nurse.			
Somewhat agree	5	50.0%	23.7% to 76.3%
Strongly agree	3	30.0%	10.8% to 60.3%
Neither agree nor disagree	1	10.0%	1.8% to 40.4%
Strongly disagree	1	10.0%	1.8% to 40.4%

Table 8. *Years of Experience Unrelated to Preferred Learning Method*

Group	LMS module	Simulation	Lecture
0-1	2	3	1
13 months - 2 years	0	1	0
25 months - 4	1	0	0
49 months or more	2	0	0

Chi-Squared Test p = 0.5121; 95% C.I. (no significance) Effect Size Cramer's v = 0.5123 (large)

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