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LEARNING PREFERENCES OF A MULTIGENERATIONAL NURSING WORKFORCE

Matthew Spradlin

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NURSING WORKFORCE

by

MATTHEW SPRADLIN

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ABSTRACT

LEARNING PREFERENCES OF A MULTIGENERATIONAL

NURSING WORKFORCE

Matthew Spradlin, B.S. Nursing

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Faculty Mentor: Deborah Behan

Learning is an ongoing and never ending aspect of every nurse's life. The nursing workforce can be difficult to teach due to the multiple generations. The purpose of our study was to determine how each generation preferred to receive their educational experiences so that training sessions could be more focused and effective in the future. We developed our own survey and distributed it via email to all nurses at a hospital in North Texas in order to determine their preferences for ongoing education. We found that there were some educational preferences all generations were equally fond of, such as receiving printouts of information and completing introductory classes. Other options, such as smart phone use and learning before or after their shift, were equally disliked. These similarities need to be focused on and used when developing educational experiences to help reach the different generations as best as possible.

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CHAPTER 1

LITERATURE REVIEW

<u>1.1 Defining the Generations</u>

The oldest of the generations, known as the Silent Generation or the Traditionalists, were born between 1925 and 1946 (Gallo, 2011). Next, is the Baby Boomer generation, which includes those who were born between 1947 and 1964 (Gallo, 2011). Following, is the Generation X'ers, or those born between 1965 and 1980 (Gallo, 2011). The last and youngest generation in the nursing field, is Generation Y, or the Millennial generation, who were born between 1980 and 2001 (Gallo, 2011). The coming sections will cover research over the four different generations and how they like to learn.

1.1.1 The Silent Generation

Those in the Silent Generation are the oldest remaining nurses still in the workforce. The people in this group are defined by their age as well as the events that they have lived through, especially World War II, The Korean War, and some even through the Great Depression. While upwards of 95% of those in this generation have retired, they still represent a group with a wealth of knowledge available to younger generations (Paterson, 2010). Because there are so few members of the Silent Generation still working today, little research has been conducted on their learning styles. They put much emphasis on hard work and do not expect things to happen quickly (Gallo, 2011). Change is not easily accepted, and often they must be slowly introduced to newer techniques. Going along with this, they are less open to using newer technologies and tend to revert to a classroom, face-

to-face environment when learning new things (Gallo, 2011). In a survey conducted in a large metropolitan hospital in 2012, it was found that 40% of nurses in the Silent Generation preferred a divergent learning style, 40% preferred an accommodator learning style, and the remaining 20% were convergent learners (Robinson, Scollan-Koliopoulos, Kamienski, & Burke, 2012). Accommodators are task-oriented, while divergers are people-oriented, and they both prefer learning by way of role playing, group activities, laboratory practice, brainstorming, interactive lecture, and hands on practice (Robinson et al., 2012). Convergers, on the other hand, typically prefer more of an academic learning style based on classroom learning and are less comfortable with learning in real life situations. This learning style is more prominent in the younger generations (Robinson et al., 2012).

1.1.2 Baby Boomers

The Baby Boomers are recognized by their extreme dedication and work ethic, and they place an emphasis on teamwork and problem solving (Gallo, 2011). This generation makes up about 45% of the nursing workforce, so knowing how to educate this group is of the utmost importance (Paterson, 2010). Like the Silent Generation, Baby Boomers also prefer a face-to-face, classroom based learning environment. However, the Baby Boomer generation needs the classroom learning to be coupled with life experience for the learning to be fully effective (Robinson et al., 2012).

In an article published in 2011 discussing Baby Boomer nurses returning to the workforce, Hoffman and Burns found that high-fidelity simulation (HFS) was an effective teaching strategy, if used correctly and personalized. The main problem with HFS was that the mannequins would either have positive or negative responses based on the interventions enacted by the student. Baby Boomers are believed to struggle with negative outcomes,

and this led to apprehension among the students. It was found that environments without a personal feel can hinder the learning process; therefore, it is important to have these students work with real patients for a short while before incorporating HFS (Hoffman & Burns, 2011). Role-playing as a teaching mechanism has been used for a long time, and involves one or more people acting out a situation in order to see how they would respond to the situation. This form of teaching is good for most generations because it lacks the risk involved with the real situation, but it can also help the student gain confidence in their abilities. However, Baby Boomers often struggle with role-playing because "they may be apprehensive about demonstrating shortcomings in public" (Paterson, 2010). They enjoy looking their best and "showing off" in public; therefore, they may be entirely unwilling to show that they are not perfect in front of their peers. This apprehension can be lessened by simply complementing them and by pointing out their strengths (Hendricks & Cope, 2012).

1.1.3 Generation X

Generation X'ers are the second largest group in the nursing workforce today, representing approximately 42% of all active nurses. They are vastly different from the generations before them because they grew up when technology was rapidly increasing, and research has shown that they are much more comfortable with different types of technology both at work and at home (Gallo, 2011). Some studies show that they prefer to learn with videos and computers and the normal classroom-learning environment is not usually very effective to those of this generation (Gallo, 2011). This same study states that online classes and discussion boards are preferred, because they allow for more active learning (Hendricks & Cope, 2012). Another study has shown the opposite to be true, saying that Generation X'ers prefer learning in a more traditional manner, by lectures and

classrooms (Robinson et al., 2012). One thing that most agree on is that Generation X'ers prefer a more individualistic experience in both work and education. People in this generation are solo workers but do enjoy working with other experts in the field from which they can learn (Robinson et al., 2012).

Generation X'ers prefer to be given resources and references so that they can verify information that they are reading (Paterson, 2010). This article also emphasizes the importance of bullet points, which can specify information for Generations X'ers to focus on when learning. They are eager to learn as long as the importance of what they are learning is explained to them beforehand (Paterson, 2012). One thing that really differentiates this generation from the rest, is their willingness to try things. When doing a simulation or role-playing they will step up and be the first to try, and they will do so without fear of looking clumsy or foolish in front of their peers (Paterson, 2010).

1.1.4 Generation Y

Those born in this generation are known as Millennials, and they are the youngest of the active working nurses today. Millennials were born into technology, so they are completely comfortable with the vast amount of technology being used around them both at work and at home (Gallo, 2011). Due to their upbringing surrounded by technology, they prefer to use this technology in every aspect of their life and are willing to adopt any new technology that makes itself available (Gallo, 2011). Millennials, more so than any other generation, favor strong relationships with their peers and thrive in learning environments where they are able to collaborate in a group in order to solve problems (Hendricks & Cope, 2012). Along with their strong preference for teamwork and technology, Millennials have tried to master the art of multitasking (Johnson & Romanello, 2005). However, this can be

a distraction in classrooms and groups because students often focus more on one topic or another and do not absorb enough detailed information on any one specific topic.

The typical classroom-learning environment is not preferred by the Millennials, because they do not feel that simply hearing, or reading about something, is enough to fully understand it. Instead, they prefer to learn through active experimentation, trial and error, and videos on the Internet that give them more information and detail (Bell, 2010). Keeping things interactive will help Millennials to not get bored when in a classroom, and as long as there is an activity to do, they are more likely to stay focused and retain the information (Paterson, 2010). Clickers, or audience response systems, are one way of allowing learning to be interactive in the classroom (Montenery, Walker, Sorensen, Thompson, Kirklin, White, & Ross, 2015). This system also offers immediate feedback; something needed by Millennials that can enhance learning. The anonymity of this system also allows students to answer without fear of failure and can help to build confidence. In a study consisting of questionnaires given to Millennial nursing students, results showed that they thought the clickers were helpful along with online tutorials on how to perform clinical tasks such as inserting IVs (Montenery et al., 2015). They also reported that podcasts of lectures were nice to have, but that they offered little help when it came to tests and learning.

One article specifically focused on the feasibility of YouTube as a teaching platform for Millennial students (Clifton & Mann, 2010). It is believed YouTube can be useful by changing up the delivery method of information in a classroom. Adding in videos can help keep students engaged and awake during long lectures. It is also a common belief that videos help students to remember information because they are seeing it instead of just hearing it or reading it. After teaching a lesson that included modules with YouTube

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videos, students were asked if they like it and felt that the videos had helped. The overwhelming majority of students reported that the videos did indeed help them to remember the material better than had they just read it on their own (Clifton & Mann, 2015). While YouTube videos alone cannot teach entire topics in depth, the supplementation of these videos into lectures, and other teaching methods, has shown to be beneficial and should continue to be researched further, for Millennials and other generations alike.

CHAPTER 2

METHODOLOGY

The director of education sent an email to all nurses in the hospital who need staff development (see Appendix A). The director of education has the distribution list for all nurses at the hospital. The survey asks demographic questions such as age and times nurses prefer for learning activities; the survey then asks questions regarding learning preferences. The questions are mostly multiple choice with the option for fill in the blank on a couple of questions. The survey is in an electronic format that is secured by a password-only access on the N drive of the nurse scientist (see Appendix B). The N-drive is a private space on a server that is password protected and only the nurse scientist can access the program on the N-drive. A specific electronic program has been developed in which the link for the email is created. The link sent via email will invite the nurses to complete the survey. Upon IRB approval, the link is sent by the director of education and is open for one month. Reminders are sent out weekly for the one month that the survey is open. Once the nurse has clicked on the link, they are consenting to be in the research. The survey is analyzed using SPSS on the nurse scientists' computer. Descriptive statistics and correlational statistics are used to evaluate the data.

CHAPTER 3

RESULTS

3.1 Demographics

A total of 56 nurses responded to the survey. The largest group represented in the survey was between the ages of 36-51, encompassing 41% of all participants. Those less than 35 years old and those 52-69 years old represented 28.6% each. There was only one response from a nurse greater than 70 years old. Figure 3.1 shows this generational distribution.
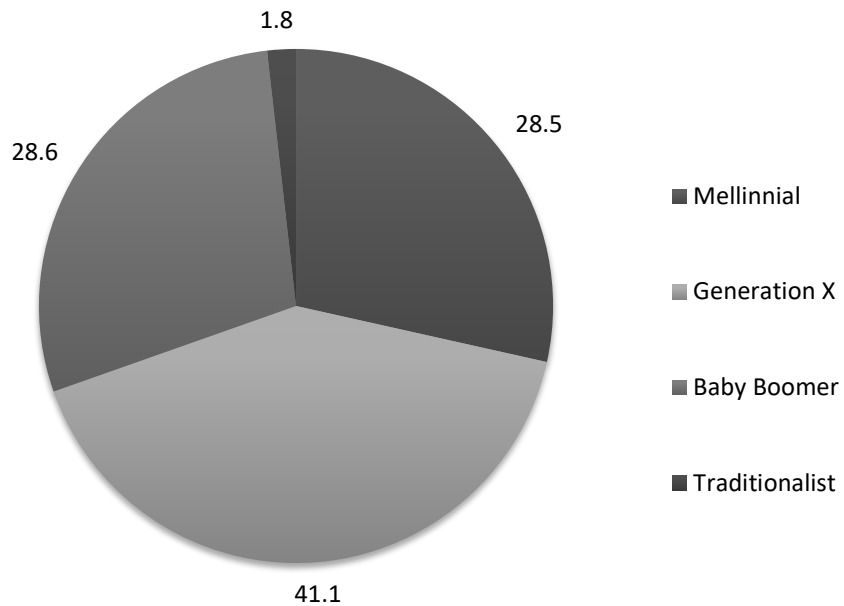
Figure 3.1: Generational Distributions

Most of the nurses that responded to the survey were experienced, with 62.5% reporting greater than 10 years experience. While most of the nurses were experienced, only 64% had up to 5 years experience on their current unit. Figure 3.2 below represents this total experience and unit experience levels. There was very nearly an even split between nurses working 7 AM to 7 PM and those working 7 PM to 7 AM, with 39% working days and 37% working nights. The rest of the responders reported working a 10-hour shift starting sometime between 5:30 and 7.
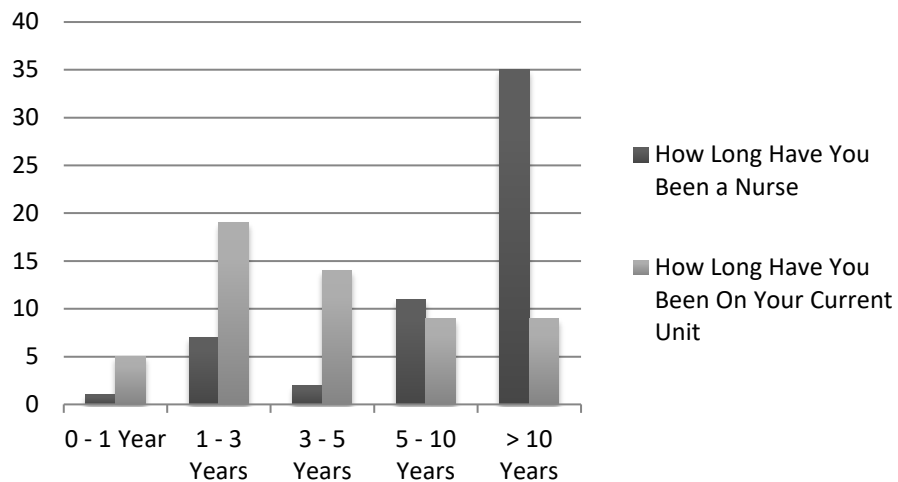
Figure 3.2: Years of Total Experience vs. Years of Experience on Current Unit

3.2 Learning Preferences

3.2.1 Time of Learning

The divide in timing preferences was great, with 45% of nurses wanting to receive their education on their off days and 36% during their shift. The remaining 19% either wanted it before or after their shift. 18% of the nurses reported that a specific day of the week was best for educational classes. The other 82% answered, "it depends," with 59% reporting that their work schedule was the determining factor. Another 20% said that it

depended on how busy their workload was while at work, and that it is often too busy to fit in any training.

3.2.2 Length of Learning

The vast majority of nurses, 80%, wanted their learning to be less than one hour. The remaining nurses said that they would prefer their learning experiences to be between one and two hours. A case-by-case analysis revealed that only Generation X'ers and Baby Boomers wanted their learning experiences to be this length, with there being an even split between the two.

3.2.3 Mode of Learning

With 67%, the majority of nurses reported that they would prefer to learn via an online course or an online webinar. Another 25% would prefer a classroom setting with face-to-face time with a teacher. A case-by-case analysis revealed 69% of Millennials, 70% of Generation X'ers, and 63% of Baby Boomers preferred to receive their learning by way of online course or webinar. It also revealed that the only nurse over 70 years of age also preferred online courses. The remaining 31% of Millennials would prefer a classroom setting, with 31% of Baby Boomers and 17% of Generation X'ers wanting the same thing.

Role-playing as a tool for learning was only preferred amongst half of the nurses, and the Generation X'ers liked it least, at only a 40% preference rate (See Appendix D). The use of games during educational experiences was preferred by 38% of the nurses overall, but it was more popular among the Millennials, with 56% of them wanting to learn this way. Learning multiple things at once was one of the few things that most nurses agreed upon. Two responses were lost, but 93% of the valid responses agreed that they would like to learn multiple things at once.

The majority of nurses (68%) would like to learn via an independent, self-directed approach. However, only 40% of nurses would like to learn by conducting their own individual research on the topic. The Millennials were the most fond of individual research, as 50% of them would like learning this way.

A case-by-case analysis was completed on the final 12 questions of the survey. An introductory class was preferred among the majority of nurses, with 84% of all responses saying so. The vast majority (93%) wanted a printout of the information and also to learn via hands on practice with an educator. Interactive groups were preferred over lectures progressively more with each age group, with Millennials at 44%, Generation X'ers at 57%, and Baby Boomers at 69%.

3.2.4 Technology in Learning

The majority of nurses (68%) prefer the use of computers when learning new material. Generation X'ers showed the greatest preference for computers, at 79%. Next, were the Millennials at 69% and then followed by Baby Boomers with half. The only nurse greater than 70 said they would like the use of computers. Generation X'ers also showed the greatest preference for the use of their smart phone as a tool during their educational experiences, at 57%. The use of high-fidelity simulation was preferred the most amongst the Millennials, with 75% wanting to learn this way. Baby Boomers preferred this 57% of the time. The lone traditionalist responded that they would prefer high-fidelity simulation, the use of their smart phone, and the use of computers when learning new material.

CHAPTER 4

DISCUSSION

The purpose of this study was to determine differences in learning preference among the four different generations of nursing staff. The findings revealed that there were indeed differences among the generations. Some of these differences were explained by the review of literature, while others defied our expectations.

4.1 The Silent Generation

The lone member of the Silent Generation in the survey differed greatly from how the review of literature explained this generation. The two things confirmed by the study about the Silent Generation were that they enjoyed hands-on practice and role-play if available (Robinson et al., 2012). According to Gallo (2011), those in the Silent Generation prefer learning in a classroom, face-to-face with an instructor, and with less technology involved. The survey contradicted this though, with the participant saying they would prefer learning while using a computer, their smart phone, and with high-fidelity simulation. They would also prefer an individual online course to a classroom setting. One possible explanation for wanting an online class is that they are more confident in their abilities due to their increased experience, and feel that they do not need the face-to-face teaching from an expert.

4.2 Baby Boomers

Baby Boomers make up roughly 45% of the nursing workforce. This was also represented by the survey results, showing the importance for understanding how this

generation learns. Robinson et al., (2012) said that Baby Boomers preferred a classroom based learning experience. However, our results showed that 62.5% of Baby Boomers wanted to learn via an online course or a webinar, and only 31% wanted a classroom setting. The difference in results between the two studies may be due to the difference of survey tools. The tool used by Robinson was the premade learning style inventory survey by Kolb and Kolb, whereas our survey was new and created ourselves. Interactive groups were also preferred over in-class lectures at a high rate. With both online classes and interactive groups being preferred methods of learning, it may be beneficial to include online discussion boards in the education of the Baby Boomer generation. Hendricks and Cope (2012) postulated that these discussion boards allow for more interaction and also provide a more active learning experience through participation. Online classes with discussion board components could also give them the more independent, individualized experience that they prefer.

Although they reported wanting online classes, Baby Boomers were the only generation in which the majority of responders did not want to use computers when learning new material. They also did not want to use their cell phones. One explanation for this may be that Baby Boomers are comfortable with technology in their own home where they can go slowly and have time to figure out how to do different things, but not as much in their workplace because there they may be judged by others for not being as proficient with technology as some of their colleagues (Hoffman & Burns, 2011).

Hoffman and Burns (2011) found that High-Fidelity Simulation (HFS) was effective particularly with Baby Boomers returning to the workforce. Our results showed that only 57% would like the use of this kind of simulation. While this is over half, it is not

as overwhelming as expected. This may be because 87% of the Baby Boomers who responded had been a nurse for greater than 10 years. Hoffman and Burns (2012) focused on the returning nurses who had not been able to practice their knowledge and skills for a period of time that may not feel confident in their abilities. The nurses in our study are more likely to feel confident in their abilities because they have recent experience and more opportunity to practice their skills on humans; therefore, they may feel that using mannequins may not be as effective for them. Another explanation for the low preference for HFS is that these nurses have been out of school for so long that they have not been able to work with the latest in mannequin technology. HFS and role play are often combined into complete patient scenarios, and the lackluster rates of preference for both HFS and role play may mean that it may be more efficient and cost effective to pursue other routes of education for those in the Baby Boomer generation.

4.3 Generation X

Generation X is currently the second largest generation represented in the nursing workforce today. Gallo (2011) reported that this generation is very comfortable with technology both at home and at work. Our study validated this with 79% of responders saying they would like to use computers when learning new material. Generation X'ers also would prefer using their cell phones, preferring to use them more than any of the other generations. Our study also supported the claim by Hendricks and Cope (2012) that online classes were more effective than the traditional classroom setting for those in this generation. Our study showed that a more individualized learning experience is preferred. This can, and should, be provided through online courses and discussion boards. Although

they favor individualized learning, interactive groups can be helpful for some in this group and should be included on occasion.

Overall, in order to effectively tend to the education of Generation X'ers it is imperative to include ways for them to use technology and to provide an individualized learning experience as best as possible. One recommendation would be to create online modules with quizzes at the end that can help to keep their learning active. Results show that introductory classes are wanted, and they can be used to introduce new topics and emphasize important points for learning. Another recommendation is that role-play should not be the main teaching method, as this was not a very popular option, contrary to what Paterson (2010) believed.

<u>4.4 Generation Y</u>

The Millennials are the youngest generation of nurses and the fastest growing. According to Gallo (2011) they were born into technology, and are therefore extremely comfortable with it. Our results supported this, with the vast majority preferring the use of computers, online classes to in-class lectures, and even HFS. The use of the smart phone when learning was the only area where Millennials did not think technology would be helpful. One explanation may be that they feel the smart phone may become distracting, and would hinder the learning experience. Hendricks and Cope (2012) believed that collaboration was the key when it came to learning; however, our results showed that less than half of Millennials would prefer interactive groups to lectures. Results also revealed that half of all Millennials would prefer learning by doing their own research, and the vast majority believe an independent, self-directed approach would be the best way to learn. According to our results, group learning may not be the best approach for many in

Generation Y. Our recommendation is that research projects be assigned so that individual research can be completed and then posted online, where this group prefers to receive most of their information. Online webinars may also be beneficial for this generation, as it gives nurses the chance to access the material when they want to, and provides reinforcement to what they already know.

When analyzing the results on a case-by-case basis, there were several outliers in this group. Several Millennials wanted in-class lecture, and did not want a self-directed learning experience. This may be because they are new to nursing or the career field in general and they feel they need help or validation since they are not yet comfortable with what they are learning.

4.5 Limitations

The major limitation of this study was the survey tool. There were no current tools available to us at the time we began the study, so we created our own. The survey was only sent to the nurses at one hospital, which may not contain an accurate representation of the nursing population as a whole. Another limitation was that there was only a 9.3% total response rate. This small amount of responses may not accurately reflect the nursing population at this hospital either. Our study only had one response from a member of the Silent Generation, making it impossible to draw conclusions about the generation as a whole.

4.6 Future Nurse Considerations

When determining how to best educate a group of multi-generational nurses, there are many things that need to be considered. Each generation had clear preferences when it came to how they receive their education, but there were many similarities as well. Hands

on training, receiving paper printouts, completing introductory classes, and learning multiple things at once were all things that the majority of nurses wanted. These four things should be included if possible in order to better accommodate all nurses.

When to hold these educational sessions is another thing to consider. There may not be a definitive right or wrong time to hold them, as opinions were mostly split between learning during their shift and learning on an off day. The only thing that is for certain is that classes should not be held before or after their shift, as only a small number of nurses chose this as their preferred time.

Games should be avoided when teaching, as they may be seen as a waste of time to many. Role-playing should be avoided since it can be costly due to the amount of time it can take up, and also because many nurses believe it to not be very effective. Although smart phone use has skyrocketed in recent history, it is important not to assume that they are useful tools for education. This may change as even more people adopt smart phones into their everyday lives, but currently many nurses still do not see them as valuable learning tools.

<u>4.7 Future Research</u>

In order to draw more definitive conclusions, future research should have more nurse responses. The survey should be left open for a longer period of time in order to obtain a higher number of responses. Sending the survey to nurses at multiple hospitals would increase the number of responses, and would also increase the likelihood that the general nursing population is more accurately illustrated. If a pre-existing, proven survey tool can be found it should be used for future research. While my study focused on the preference of the nurses, it did nothing to determine the effectiveness of the different

teaching methods. More research should be conducted to determine the validity of these methods.

CHAPTER 5

CONCLUSION

Learning is an ongoing and never ending aspect of every nurse's life. Most hospitals offer in-house training sessions. These in-service training sessions are often taught by other nurses and are used to teach new techniques for nursing practice, or review old ones. Today, these sessions are generalized with no special consideration for the different generations of nurses that might be present. This technique may not be the most effective because some people are not able to learn well a certain way while others may thrive. There is an abundance of research covering each of the different generations and their learning preferences, but none that covers these generations in the nursing workforce. Our research was aimed at filling this gap. We found that there were a few educational preferences that all generations were equally fond of. These similarities need to be focused on and used when preparing educational experiences to help reach each of the different generations.

APPENDIX A

EMAIL SENT TO NURSES

Dear Nurses,

Hello my name is Matthew Spradlin, I am an Honors nursing student at UTA and this research study is my senior project for my Honors degree. I am working with Dr. Deborah Behan, a Nurse Scientist on this research project. No names will be recorded in this online anonymous survey. My research is exploring your opinions and preferences regarding the way you would like to receive educational classes for staff development. Overall results will be shared with the education. This is an anonymous survey. No one has access to the electronic program but the Nurse Scientist who will not be able to identify the individuals completing the survey. If you have questions feel free to call Dr. Deborah Behan at 940-367-4758. You can also call the IRB at 682-236-6746 if you have any questions. This survey that will take approximately 10 minutes of your time and can be taken during your regular work hours or during paid work time as previously approved by your hospitals' nursing leadership. By clicking on the link you are agreeing to participate in the survey and completing the survey has no impact on your current position or work with Texas Health Resources. LINK.

APPENDIX B

NURSE SURVEY

You are being asked to complete this survey so that the Education Department will provide staff development in the way you would prefer. The survey was created so that you might provide your personal preferences regarding how you receive staff development by the education department at THHEB. This survey is anonymous and your job will not be affected by your answers. It will take 10 minutes to complete. By completing the survey, you are agreeing to participate. You may withdraw at any time by not continuing to answer questions. Please answer all questions asked below. Thank you for participating.

1 - How long have you been a nurse?
- 0 up to 1 year
- >1year up to 3 years
- >3 years up to 5 years
- >5 years up to10 years
- >10 years

2 - How long have you been on your current unit?
- 0 up to 1 year
- >1 up to 3 years
- >3 up to 5 years
- >5 up to 10 years
- >10 years

3 – What shift do you currently work?
- 7a-7p
- 7p-7a
- Weekend only
- Other

4 – If "other" was selected above, what are your hours?

5 - What range corresponds with your age?
- <35 years
- 36-51 years
- 52-69 years
- >70 years

6 – What is the best time for you to complete educational experiences?
- During work time
- Before shift
- After shift
- Off day
- Other

7- If "other" was selected above, when is the best time to complete your educational experience?

8 – What day of the week would you prefer to complete your educational experiences?
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday
- Doesn't matter
- It depends on_____

9- How much time would you prefer to spend in each educational session?
- <30 min
- 31-60 min
- 61-120 min
- >120 min

10 – What would be your preferred way to complete your educational experiences?
- Individual online course
- Classroom setting with face to face time
- Online webinar
- Presentations by yourself or a peer on a topic

The following questions are referring to your preferred way of learning. Mark one box below each question, either yes or no.

1 - Do you prefer an introductory class to learn a new technique?
- Yes
- No

2 - Would you like a printout of the information when learning new material?
- Yes
- No

3 - Do you prefer hands on practice with an educator while learning a new technique?
- Yes
- No

4 – Do you prefer interactive groups as opposed to a lecture when learning new materials?
- Yes
- No

5 – Would you prefer the use of computers when learning new material?
- Yes
- No

6 – Would you like using high fidelity simulation (high-tech mannequins) when learning new skills?
- Yes
- No

7 – Would you find role-playing to be helpful during educational experiences?
- Yes
- No

8 – Would you prefer a more independent, self-directed approach when learning new materials?
- Yes
- No

9 – Would you prefer learning new material by completing individual research on the topic?
- Yes
- No

10 – Would you prefer learning multiple things during your educational experiences?
- Yes
- No

11 – Would you prefer the use of games during your educational experiences?
- Yes
- No

12 – Would you prefer the use of your smart phone as a tool during your educational experiences?
- Yes
- No

APPENDIX C

APPROVAL LETTER FROM THR IRB

Texas Health Resources®

DATE:	November 8, 2016
TO:	Deborah Behan, PhD
FROM:	Texas Health Resources IRB
PROJECT TITLE:	927067-1 Generational Educational Preferences
REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	November 7, 2016
EXPIRATION DATE:	November 6, 2017
REVIEW TYPE:	Expedited Review
REVIEW CATEGORY:	Expedited Review Category: 45 CFR 46.110 and 21 CFR 56.110 Category 7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

The IRB approves a Waiver of Consent for this study since the research meets the criteria outlined under 45 CFR 46.116 (d) 117c.

The IRB approves a Waiver of HIPAA Authorization since the research meets the criteria outlined under 45 CFR 164.512(i)(2)(ii).

Thank you for your submission of New Project materials for this project. The Texas Health Resources IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

If your study involves waiving the HIPAA privacy authorization, please print out the approved study application and IRB approved HIPAA waiver and present it along with your approval letter when requesting access to protected health information (PHI).

The research may not continue beyond the end of the new approval period, as indicated by the expiration date above. In order for the research to continue beyond that date, the IRB must first conduct continuing review and designate a new approval period.

Generated on IRBNet

The IRB will send you a continuing review notice at least 30-60 days before the expiration date listed above. If not completely filled out, received, reviewed and approved by the IRB before the end of the expiration date above, enrollment of new subjects in the research must cease until IRB approval can be obtained. Continued involvement in the research of previously enrolled subjects may not continue unless explicitly approved by the IRB to prevent harm to subjects.

Based on human research regulations and THR human subject research policies, the IRB emphasizes the following requirements in granting approval for this research project:

1. Any changes, modifications, or amendments to any facet of the research must be reviewed and approved by the IRB before they can be initiated.

2. All reportable adverse events and unanticipated problems involving risks to subjects or others must be reported to the IRB according to THR IRB policy requirements. This includes reporting to this Committee any death or serious reactions(s) resulting from this study. Please consult the THR IRB Policy and Procedure Manual for specific definitions and reporting time-frames and requirements.

3. It is required to submit annual and terminal progress reports to the IRB and to receive continuing review of your activity annually by the IRB.

Failure to submit the above reports may result in severe sanctions being placed on Texas Health Resources. All research-related records and documentation may be inspected by the IRB for the purposes of ensuring compliance with THR policies and procedures and federal regulations governing the protection of human subjects. The IRB has the right and authority to suspend or terminate its approval if THR and Federal requirements are not strictly adhered to by all study personnel.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

The JCAHO standards related to patients taking part in research require that they be informed about the benefits, risks, alternative treatments, research procedures and refusal to participate. This information is contained in each approved research consent form. All in-patients and out-patients that are actively taking part in clinical research must have a copy of their signed consent form on their open medical records.

If you have any questions or concerns, please contact the IRB Office at IRB@TexasHealth.org. The IRB thanks you for your continued commitment to the protection of human subjects in THR research.

APPENDIX D

SURVEY RESPONSE RESULTS

	Percentage of Yes Responses to the Final 12 Yes or No Questions of the Survey			
	Generation Y	Generation X	Baby Boomer	Traditionalist
Do you prefer an introductory class to learn a new technique?	87.5	87	75	100
Would you like a printout of the information when learning new material?	93.8	95.7	87.5	100
Do you prefer hands on practice with an educator while learning a new technique?	100	100	87.5	0
Do you prefer interactive groups as opposed to a lecture when learning new materials?	43.8	56.5	68.8	100
Would you prefer the use of computers when learning new material?	68.8	78.3	50	100
Would you like using high fidelity simulation (high-tech mannequins) when learning new skills?	75	56.5	56.3	100
Would you find role-playing to be helpful during educational experiences?	50	39.1	50	100

Would you prefer a more independent, self-directed approach when learning new materials?	75	65.3	62.5	100
Would you prefer learning new material by completing individual research on the topic?	50	30.5	37.5	100
Would you prefer learning multiple things during your educational experiences?	93.8	87	100	100
Would you prefer the use of games during your educational experiences?	56.3	26.1	31.3	100
Would you prefer the use of your smart phone as a tool during your educational experiences?	43.8	56.5	43.8	100

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BIOGRAPHICAL INFORMATION

Matthew Spradlin is an undergraduate student at the University of Texas at Arlington College of Nursing and Health Innovation. Matthew will graduate *Summa Cum Laude* with his Honors Bachelor of Science in Nursing. Along with the Honors College, he is also a member of Sigma Theta Tau. Matthew was the recipient of the President's Charter Scholarship, as well as the Dream Makers Scholarship that has allowed him to graduate debt free. Matthew will begin his nursing career at John Peter Smith Hospital, Fort Worth, in the Cardiovascular Progressive Care Unit. He plans to use his nursing knowledge and skills to provide health care around the world via medical mission trips, and intends to one-day return to school to pursue his Ph.D. and become a Certified Registered Nurse Anesthetist.