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RESEARCH ARTICLE

NURSES' VALUE ORIENTATION AND INTENTION TO PURSUE GRADUATE EDUCATION AND THEIR READINESS FOR EVIDENCE-BASED PRACTICE

Paolo T. Lumanlan, PhD, RN¹

Abstract

Purpose: The investigator sought to determine nurses' value orientation and intention to pursue graduate education, as well as their readiness for evidence-based practice.

Method: A descriptive correlational research design was used. Nurses (n=188) from different government and private healthcare institutions in Pampanga were purposefully selected to participate in this research undertaking. Three instruments were adopted: the Valuation of Graduate Studies Questionnaire, the Intention to Pursue Graduate Studies in Nursing Questionnaire, and the Nurses' Attitudes towards Evidence-Based Practice Scale and Knowledge Scale. Descriptive statistics and regression analysis were used to analyze the gathered data.

Findings: Based on the results, nurses still have some confidence in pursuing graduate studies in nursing although they intrinsically value graduate education. Interestingly, nurses have a positive and an above average attitude toward evidence-based practice. However, results also show that nurses only have average knowledge in evidence-based practice which may be due to limited opportunities for evidence-based capability-training and insufficient access to technical resources. Regression analysis yielded both intrinsic value and utility value significantly predicted nurses' attitude toward evidence-based practice; while intrinsic value is also a significant predictor of nurses' likelihood of pursuing graduate studies.

Conclusions: When nurses intrinsically value evidence-based practice, they become intensely involved in it and can continue practicing it for a long time. It was found out that nurses' intention to pursue graduate education did not significantly predict their readiness for evidence-based practice. The result is indicative that there is an inconsistency in translating intention to practice, known as the "intention-behavior gap".

Keywords: Value orientation, intention to pursue graduate education, evidence-based practice

Introduction

Over the recent years, there has been an increasing focus on quality improvement that involves paradigm shift from the conventional intuition-based to evidence-based practice (EBP) (Melnyk & Fineout-Overholt as cited in Eizenberg, 2011). As this focus intensifies, nurses – as principal care givers – are in a key position to advance the quality of healthcare (Hughes, 2008) through the implementation of EBP. However, it has been argued that EBP is not fully utilized in most practice settings (Institute of Medicine as cited in Ferguson & Day, 2007), and for nurses, incorporating research findings into clinical practice has not been completely integrated as an ordinary practice (Hicks, 1997). Nurses' application of EBP is compromised by their roles and personal traits, relationships with stakeholders, organizational context (Gerrish et al., 2012); as well as anxiety, limited experiential knowledge, and developing clinical judgment (Ferguson & Day, 2007).

To address aforementioned problems, White-Williams (2011) suggests that nurses must develop a culture of EBP and research to advance the quality of care they provide to their clients. In fact, the Nursing and Midwifery Council believes that "continuing professional development (CPD) is essential to enhance nursing practice and advance nursing as a profession" (as cited in Watkins, 2011, p. 2006) and one form of CPD is through graduate

¹ Correspondence: College of Nursing and Graduate School, Angeles University Foundation, Angeles City, 2009 Philippines; email address: lumanlan.paolo@auf.edu.ph

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studies. Nurses are, therefore, highly encouraged to further their formal education beyond that of the licensure (Altmann, 2012) since it was found in a study that graduate education influences professionalization of nursing by increasing nurses' personal confidence, improving their cognitive functioning, enhancing their professionalism, and developing in them evidence-based practices (Watkins, 2011).

Graduate education continues to be an essential element in nurses' professional growth and development (Chiu, 2006; Hardcastle, 2008) for it will prepare nurses in acquiring and utilizing new knowledge in their own respective practices (Levin et al., 2008). However, some nurses greatly depend on their subjective experience and other healthcare team members instead of formal sources of knowledge (Gerrish, Ashworth, Lacey, & Bailey, 2008). This, then, implies the need for a good foundation in nursing education to properly apply EBP in the clinical setting (Gerrish et al., 2008; Waters, Crisp, Rychetnik, & Barratt, 2009).

There were some published works that tackled different factors that motivate nurses to pursue graduate studies. In Australia, Pelletier et al. (1998) found that the most important reasons for pursuing graduate education are personal or job satisfaction, increased professional status, and better job opportunities. In her dissertation, McFadden (2003) explored nurses' decisions to pursue advanced nursing degrees and found that the desire for increased autonomy, greater professional recognition and financial security, supportive work environment, family support, and the presence of a mentor were the participants' driving factors to pursue graduate education.

On the one hand, several studies were conducted to determine nurses' attitude towards EBP. In Denmark, nurses had a positive attitude towards EBP (Egerod & Hansen, 2005). In Taiwan, nurses expressed positive attitude toward research and EBP (Chang, Russell, & Jones, 2010). In Singapore, nurses also exhibited positive attitude towards EBP (Majid et al., 2011; Yip Wai, Mordiffi, Shen, Kim, & Majid, 2013). In the United States, nurses' beliefs about the benefit of EBP were high, however, knowledge of EBP was relatively low (Melnyk et al., 2004). White-Williams et al. (2013) believed that continuing education truly makes a difference in nurses' attitudes, knowledge, and application of EBP in their practice. Therefore, to expedite the transfer and adoption of new knowledge into practice, nurses must pursue a career in continuing professional development (Gerrish et al., 2008) through graduate education.

However, although nurses showed a positive attitude toward EBP and are motivated to pursue graduate studies, there is still a dearth in the literature on nurses' valuation of and intention to pursue graduate education. According to Wigfield and Eccles (2000) in their Expectancy-Value Model of Achievement Motivations, individuals' "expectancies and values are assumed to directly influence their achievement choices, performance, effort, and persistence" (p. 69). The choice,

perseverance, and how an individual carries out a certain task may depend on his own beliefs about his performance expectations and task value (Wigfield, 1994). Eccles et al. (as cited in Plunkett, Iwasiw, & Kerr, 2010) posited that task value is a key component of the model and is composed of four aspects: utility value (usefulness of the task in achieving long-term goals of an individual), intrinsic value (the pleasure that an individual gains from doing the task), attainment value (how an individual perceives the importance of a certain task), and cost (what an individual must give up to accomplish the task).

Objectives of the Study

After a thorough search in different data bases, the investigator found a dearth in the literature that dealt with value orientation and intention to pursue graduate education among nurses in the clinical setting. Therefore, the investigator sought to determine nurses' value orientation towards and intention to pursue graduate education, as well as their readiness for evidencebased practice. Specifically, the investigator described nurses' value orientation towards graduate education in nursing, their intention to pursue graduate education in nursing, and their readiness for evidence-based practice. More so, the investigator determined whether nurses' value orientation towards graduate education in nursing significantly predicts their readiness for evidence-based practice; whether nurses' intention to pursue graduate education in nursing significantly predicts their readiness for evidence-based practice; and whether nurses' value orientation towards graduate education in nursing significantly predicts their intention to pursue graduate education in nursing.

It was hypothesized that nurses' value orientation towards graduate education in nursing significantly predicts their readiness for evidence-based practice; nurses' intention to pursue graduate education in nursing significantly predicts their readiness for evidence-based practice; and nurses' value orientation towards graduate education in nursing significantly predicts their intention to pursue graduate education in nursing.

Methodology

Research Design

The investigator used a correlational design in the conduct of this study. Nurses' value orientation towards and intention to pursue graduate studies were treated as predictors of their readiness to evidence-based practice. More so, the respondents' value orientation towards graduate education was treated as a predictor of their intention to pursue graduate studies.

Sample and Setting

A total of 325 survey questionnaires were distributed to three private medical institutions in Angeles City; however, only 199 were returned. Eleven questionnaires were disregarded due to

severe incompleteness; thus, a total of 188 nurses (response rate of 57.85%), who are neither graduate-degree holders nor have taken graduate degree units, were purposively asked to join in this study. These nurses are working in the different government and private healthcare institutions in Pampanga. Nurses' areas of assignment, as well as their length of service, were not considered during the selection and recruitment process.

Instruments and Data Collection

Three instruments were adopted (with permission from the original authors) in this study. First, the Valuation of Graduate Studies Questionnaire (Battle & Wigfield, 2003), is a 51-item tool rated using a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). In addition, this tool is composed of 4 subscales (intrinsic, attainment, utility, and cost) which have Cronbach's alpha values ranging from 0.82 to 0.93. Second, the Intention to Pursue Graduate Studies in Nursing Questionnaire (Battle & Wigfield, 2003) consists of two guestions asking the respondents to rate (using a 10-point Likert scale from 1 [not at all confident] to 10 [complete confidence]) how likely they are to pursue graduate education in nursing, as well as their two most important reasons for intending to pursue (or not to pursue) graduate schooling. Lastly, the Nurses' Attitudes towards Evidence-Based Practice Scale (NATES) and Knowledge Scale (adopted with permission from its original author, Dr. Linda Thiel) is a 14-item inventory answerable by a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) that measures nurses' readiness to evidencebased practice. Internal reliability test revealed Cronbach's alpha values of 0.93 for NATES and 0.80 for the Knowledge Scale.

Prior to data collection, the Chief of Nursing Services in each healthcare institution gave the permission to distribute the survey forms. Data were collected in all participating institutions where the respondents were invited to take part in the survey during their most available time; however, it was stressed that joining the study was completely voluntary.

After explaining the entire nature of the study, the potential risks and benefits in joining this study, the respondents' right to refuse/withdraw at any time of the study and right to privacy, the investigator has obtained the respondents' voluntary consent. Lastly, the respondents were given the assurance that the data will be treated with utmost confidentiality and no identifier for both respondents and the institutions will be reported in any part of this study.

Data Analysis

Descriptive statistics such as frequency and percentage distributions, mean, and standard deviation were used to describe the nurses' value orientation and intention to pursue graduate education, as well as their readiness for evidencebased practice. Furthermore, multiple regression analysis was run using SPSS version 20.0 to examine the relationship and prediction among nurses' value orientation towards and intention to pursue graduate education, as well as their readiness for evidence-based practice.

Results

Table 1 clearly presents the description of the respondents' value orientation of graduate education based on the four subscales. The respondents gave the highest score on the intrinsic subscale ($x=3.47\pm.817$), followed by the attainment subscale ($x=3.26\pm.604$), cost subscale ($x=3.03\pm.526$), and utility subscale ($x=2.99\pm.658$).

On the other hand, majority of the respondents have some confidence (17.55%) when asked, "How likely is it that you will pursue graduate studies in nursing (master's degree or higher)?" Similarly, most of them also have some confidence (22.34%) when asked, "How likely is it that you will pursue graduate studies in nursing eventually?" The mean scores for both questions (5.78±2.35 and 5.76±2.27 respectively) indicate some confidence among the respondents in pursuing graduate nursing education (Table 2).

The two most important reasons for intending to pursue (or not to pursue) graduate school are seen in Table 3. It can be realized that more than 40% of the respondents considered money, status, or career as the most important reasons for intending to pursue (or not to pursue) further studies in nursing. Professional goals ranked the second most important reason (29.26%) among the other choices.

Subscale	Mean	Standard Deviation
Intrinsic	3.47	.817
Attainment	3.26	.604
Utility	2.99	.658
Cost	3.03	.526

 Table 1. Distribution of respondents' value orientation of graduate education

Table 2. Percentage distribution of respondents' intention to pursue graduate education in nursing

Items	1	2	3	4	5	6	7	8	9	10
How likely is it that you will pursue graduate studies in nursing? ¹	6.91	2.66	6.91	3.72	17.55	17.02	15.96	9.04	3.72	6.38
How likely is it that you will pursue graduate studies in nursing eventually? ²	6.91	2.13	5.32	4.26	22.34	15.43	13.83	11.7	3.19	5.32

1 Mean score for the first item is 5.78±2.35.

2 Mean score for the second item is 5.76±2.27.

Table 3. Distribution of res	spondents' two most im	portant reasons for inten	ding to pursue	(or not to pursue) graduate school

ltems	Most impo	rtant reason	Second most important reason		
lienis	Frequency	Percentage	Frequency	Percentage	
Money, status, or career reasons	82	43.62	33	17.55	
To be better able to support a family in the future	7	3.72	19	10.11	
For knowledge and learning	39	20.74	39	20.74	
Professional goals	36	19.15	55	29.26	
Friendship concerns					
Family concerns	6	3.19	15	7.98	
Limited amount of other options	3	1.60	7	3.72	
Others	1	0.53	3	1.60	

Nurses' readiness for evidence-based practice, which is divided into two subscales, is reported in Table 4. It is noteworthy to see that the respondents have a positive and an above average attitude toward EBP (x= $3.48\pm.720$). However, results yielded that the respondents have an average knowledge in EBP with a mean score of $3.29\pm.885$.

A multiple regression analysis was used to determine if nurses' value orientation towards graduate education (intrinsic value, attainment value, utility value, and cost) significantly predicted their readiness for evidence-based practice (attitude and knowledge) (Table 5). The results indicated that the predictor variables explain 21.1% of the variance for the dependent variable attitude (F(4,183)=12.221, p=.000), and 9.6% for the dependent variable knowledge (F(4,183)=4.865, p=.001). Also, it was found out that both intrinsic value (B=1.934, p=.008) and utility value (B=-2.894, p=.002) statistically and significantly predicted nurses' attitude toward evidence-based practice. It is evident from the results that intrinsic value is positively related

Table 4. Distribution of respondents' readiness for evidence-based practice

Subscale	Mean	Standard Deviation
Attitude toward EBP	3.48	.720
Knowledge	3.29	.885

with nurses' attitude toward evidence-based practice, while utility value is negatively related with their attitude toward evidence-based practice.

In contrary, it was found out that nurses' intention to pursue graduate education did not significantly predict their readiness for evidence-based practice (Table 6).

On the one hand, value orientation towards graduate education explained 37.5% of the variance for the dependent variable likelihood of pursuing graduate studies in nursing (F(4,164)=24.592, p=.000), and 34.6% for the dependent variable knowledge (F(4,165)=21.828, p=.000) (Table 7).

Predictor Variables		Attitude		Knowledge			
Predictor variables	Coefficient t Sig		Coefficient	t	Sig		
Intrinsic value	1.934	2.703	.008	.522	1.905	.058	
Attainment value	-1.211	-1.259	.210	.449	1.220	.224	
Utility value	-2.894	-3.160	.002	538	-1.534	.127	
Cost	-1.881	-1.621	.107	.530	1.193	.235	

Table 5. Regression coefficients of nurses' value orientation towards graduate studies

Dependent variable: readiness for evidence-based practice

Table 6. Regression coefficients of nurses' intention to pursue graduate studies

Predictor Variables	Att	itude		Knowledge		
	Coefficient	Т	Sig	Coefficient	t	Sig
Likelihood of pursuing graduate studies in nursing	004	010	.992	001	008	.994
Likelihood of pursuing graduate studies in nursing eventually	.748	1.540	.126	.297	1.747	.083

Dependent variable: readiness for evidence-based practice

Table 6. Relationship between nurses' value orientation towards graduate education and their intention to pursue graduate studies in nursing

Predictor Variables	Likelihood of pu	rsuing gradu nursing	ate studies in	Likelihood of pursuing graduate studies in nursing eventually			
	Coefficient	Т	Sig	Coefficient	Sig		
Intrinsic value	1.582	7.190	.000	1.409	6.481	.000	
Attainment value	.205	.665	.507	.153	.503	.616	
Utility value	366	-1.292	.198	429	-1.543	.125	
Cost	.204	.569	.570	.397	1.117	.266	

Dependent variable: readiness for evidence-based practice

More so, it was found out that intrinsic value statistically and significantly predicted nurses' likelihood of pursuing graduate studies in nursing (B=1.582, p=.000) and their likelihood of pursuing graduate studies in nursing *eventually* (B=1.409, p=.000). It is evident from the results that intrinsic value is positively related with nurses' intention to pursue graduate education.

Discussion

The study involves nurses' value orientation towards graduate education. Based on the results, nurses value graduate education primarily because of the enjoyment they get from performing graduate school activities or the subjective interest nurses have in graduate schooling. Similarly, Bong (2001) found out that students who were intrinsically interested in activities covered in the present course are more enthusiastic to take similar courses in the future. Also, Wigfield and Cambria (2010) reported that when students intrinsically value an activity, they often become deeply engaged in it and can persevere at it for a period of time. However, mean scores on attainment, cost, and utility subscales may be indicative, which fell within the unsure mark, may be indicative of nurses' lack of understanding of the value of graduate studies. On the one hand, nurses still have some confidence in pursuing graduate studies in nursing although they intrinsically value graduate education. Money, status, or career may affect their confidence in pursuing graduate education since nurses in the Philippines have very low remuneration, too much work assignments, and limited career growth and opportunities.

Evidence-based practice has become increasingly important in healthcare community (DoH, 2000). In the Philippines, evidencebased nursing practice has been introduced and was found effective (Dizon, Dizon, Regino, & Gabriel, 2014). In the current study, nurses have a positive and an above average attitude toward EBP. Similarly, nurses in Australia (Waters et al., 2009), Denmark (Egerod & Hansen, 2005), Queensland (Sherriff, Wallis, & Chaboyer, 2007), Scotland (O'Donnell, 2003), and United States (Melnyk et al., 2004; Brown, Wickline, Ecoff, & Glaser, 2009) have welcoming attitude toward evidence-based practice. However, results of the current study showed that nurses only have average knowledge in evidence-based practice which may be due to limited opportunities for evidencebased capability-training and insufficient access to technical resources. Likewise, scholars found that knowledge on evidence-based practice is relatively low among nurses in Australia (Waters et al., 2009) and United States (Melnyk et al., 2004).

Conclusions

Results of the multiple regression analysis showed that both intrinsic value and utility value statistically and significantly predicted nurses' attitude toward evidence-based practice; while intrinsic value is also a significant predictor of nurses' likelihood of pursuing graduate studies. This implies that when nurses intrinsically value evidence-based practice, they become intensely involved in it and can continue practicing it for a long time. On the one hand, it was found out that nurses' intention to pursue graduate education did not significantly predict their readiness for evidence-based practice. The result is indicative that there is an inconsistency in translating intention to practice, known as the "intention-behavior gap".

Recommendations

Based on the results of the current study, healthcare facilities may consider institutionalizing various activities which do not only increase nurses' evidence-based knowledge and skills, but also brace their views about the importance of evidence-based care. Nursing service administrators may establish a more practical approach in training nurses towards evidence-based practice in the clinical setting. The provision of opportunities for graduate schooling is thought to be valuable in refining nurses' attitudes, knowledge, and skills related to evidence-based practice.

Limitations and Directions for Future Research

One major limitation in this study is sampling. Nurses were conveniently recruited from different healthcare institutions in Pampanga. Representativeness may not be accurately achieved. Therefore, it is recommended that future investigators may endeavor to involve a large number of nurses in different provinces in the Philippines. Future investigators may also strive to explore the unaccounted predictors of nurses' intentions to pursue graduate education, as well as their readiness for evidence-based practice.

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ABOUT THE AUTHOR



Paolo T. Lumanlan, PhD, RN is a Professor 1 at the College of Nursing and a Graduate School Professor at the Angeles University Foundation, Angeles City. He is a registered nurse and a licensed professional teacher; a graduate of Master of Arts in Nursing, Master

of Arts in Education, and Doctor of Philosophy in Educational Management. Currently, he is finishing his Doctor of Philosophy in Nursing Education program. He has published several articles in ISI-/Scopus-indexed journals and also served as editorial board member/peer-reviewer in national and international journals. His research interests include health education, higher education studies, instrument development, and spirituality.

