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A COMPARISON OF PROFESSIONAL NURSING VALUES SCORES OF ACCELERATED AND FOUR-YEAR BACCALAUREATE NURSING STUDENTS

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A COMPARISON OF PROFESSIONAL NURSING VALUES SCORES OF
ACCELERATED AND FOUR-YEAR BACCALAUREATE NURSING STUDENTS

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By

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ABSTRACT

The purpose of this study was to determine if differences exist in professional

nursing values scores of students in accelerated and four-year baccalaureate nursing

programs. Participants in this study were nursing students (N=173) from one Canadian

university enrolled in the penultimate semester of an eighteen month accelerated

baccalaureate program and a traditional four-year program. Ware's emerging theory

Building on a Foundation of Knowledge by 'Taking it All In' was the theoretical

framework for this study. In the present study, the effect of program length on students'

professional nursing values scores was examined. *Program length* addresses *the passage

of time*, one aspect of Ware's theory. Participants completed the 26-item Revised

Nursing Professional Values Scale (Weis & Schank, 2000), which addresses five aspects

of professional nursing values formation. Relationships among total scores and

demographic variables were also examined. Overall, there were no significant differences

in total scores between groups. Although accelerated students had higher total scores on

all five subscales, only the difference between groups on one subscale, *activism*, was

statically significant. Results of this study lend support for the ongoing creation and

development of accelerated baccalaureate nursing programs as an effective form of

nursing education. Further research about Ware's theory and professional nursing values

formation is warranted.

Keywords: accelerated nursing students, professional values, nursing education

CO-AUTHORSHIP

Alison F. Evans completed the following work under the supervision of Dr.

Carroll Iwasiw and Dr. Dorothy Forbes. Both Dr. Iwasiw and Dr. Forbes will be co-

authors on the publication resulting from this manuscript.

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Part One

Background

Worldwide, the nursing shortage, in both high-income and low-income countries, is reaching staggering proportions. In Canada, it is predicted that there will be a shortage of 113,000 nurses by 2016 (CNA, 2009). One approach to alleviating the nursing shortage has been the creation of accelerated baccalaureate nursing programs which allow students with an existing degree to complete a baccalaureate nursing degree in 11 to 18 months of full-time, year-round study (Oermann, 2004; Suplee & Glasgow, 2008; Wink 2005).

The American Association of Colleges of Nurses (2008) reported that in 2007, there were 205 accelerated baccalaureate nursing programs in the United States, up from 84 programs nationwide, in 2002. There are thirty such programs in Canada (Hale, 2008). Authors cite several reasons for the creation and proliferation of accelerated baccalaureate nursing programs, including: the need to increase the number of nurses, and the benefits of attracting non-nursing college graduates to the nursing profession (Wink, 2005)

Professional socialization is "a developmental process involving changes in values and attitudes as students progress though their educational program" (Maltby & Andrusyszyn, 1997, p.9), and is considered a terminal outcome of baccalaureate nursing curricula. The relationships between values orientation and sex, age, and ethnicity has been examined (duToit, 1995; Martin, Yarbrough & Alfred, 2003; Thorpe & Loo, 2003). However, there is a lack of research examining professional socialization, specifically,

the professional nursing values orientation of students in accelerated baccalaureate programs.

Problem

Accelerated baccalaureate programs are a growing trend but research examining all aspects of this form of nursing education is in its infancy. Professional socialization, specifically values formation, is a terminal objective of baccalaureate nursing curricula. Although student in accelerated programs are highly successful academically, and highly satisfied with their education overall (Bentley, 2006; Oullet, MacIntosh, Gibson & Jefferson, 2008), it is not known if students in a shorter program of study are at a disadvantage in the formation of professional nursing values.

Significance

Among the many factors negatively impacting healthcare in Canada, there is little doubt that the nursing shortage has a huge effect on patient care. Long-term solutions to the nursing shortage are aimed at recruitment and retention by focusing on education, work environment including job satisfaction, and legislation designed to sustain the profession during changing and challenging times.

A positive correlation between job satisfaction and professional values orientation has been reported (McNeese-Smith & Crook, 2003; Perry, 2005; Verplanken, 2004). Demeronti, Bakker, Nachreiner, and Schaufeli (2000) found that nurses who were dissatisfied in their work place detached themselves from their patients, thereby compromising their ability to provide care based on core nursing values. Similarly, nurses who reported high levels of congruence between personal values, and organizational values, were more likely to experience higher levels of job satisfaction

(Verplanken). Therefore, it is essential that educators, employers, and other stakeholders have some assurance that students graduating from accelerated programs do, indeed, share the value set expected of graduates of four-year baccalaureate nursing programs.

Professional Nursing Values

The socialization of students into the nursing profession has been examined from various perspectives. It has been described in the literature as a process characterized by the acquisition of knowledge, skills and a sense of identity with a profession, as well as a shift in values and attitudes (Kramer, 1974; Leddy & Pepper, 1993; Maltby & Andrusyszyn, 1997), and is considered a terminal outcome of baccalaureate nursing curricula.

While skill and knowledge acquisition in nursing education have been studied extensively, research examining the values component of professional socialization only began to proliferate in the early 1980s, a time in nursing's history that also marked the *curriculum revolution*. This educational reform effort initiated by the National League of Nursing (NLN) was characterized by a rejection of the traditional, pragmatic, behaviourist approach to nursing education, in favour of educational philosophies founded on theories of humanism and caring, concepts studied extensively by Jean Watson (1979, 1988). The concept of humanism, inherent in Watson's theory, is concerned with the incorporation of the deeper values of human existence, such as quality of life, and, the "sensitivity to one's self and to others" (1979, p. 9). Contemporary styles of teaching and learning, aligned with a humanistic approach to professional nursing practice, are focused on preparing nurses to be critical thinkers, life-long learners, and able to, "participate as leaders in health care reform, with values that recognized the

multicultural, multiracial, and growing diversity of both individual and family lifestyles in our society" (Tanner, 2007, p.51).

In the late 1970s, a more humanistic approach to nursing theory and curriculum development began to emerge. Concurrently, codes of ethics were being created by professional nursing organizations such as the Canadian Nurses' Association (CNA), the American Nurses' Association (ANA), and the College of Nurses of Ontario (CNO), to name a few. These codes were viewed as a means to formally "bring to practitioners' attention their ethical obligations, possible areas of ethical conflict, and ethical principles to use in coping with such conflict" (Davis, 1991, p. 1358). While codes of ethics may vary slightly among organizations, all are composed of a similar set of values identified as core values of professional nursing practice, including accountability, autonomy, professionalism, and morality (Esterhuizen, 1996).

Theoretical Framework

Ware's (2008) emerging theory *Building on a Foundation of Knowledge by 'Taking it All In'* was the theoretical framework for this study. Central to Ware's theory is the belief that "nursing is a profession and a social phenomenon" (p. 1). Ware describes the process of developing the self-concept of *nurse* as a gradual one in which students internalize the values, beliefs, and skills of the nursing profession. Students enter the nursing program with a foundation of knowledge based on life experiences, personal philosophy, role models, and religious beliefs. Throughout their program of study, students add to their foundational knowledge with knowledge gleaned from various sources within the nursing program. Sources of knowledge acquired within the nursing program include: the school as a whole or, the culture of the program, faculty, clinical

experiences, and assignments and projects, to name a few. "As knowledge is added to the foundation, it is internalized by the student, contributing to the development of the self-concept of *nurse* over time" (Ware).

Although Ware (2008) identified several key aspects of nursing professional socialization in this theory, including: students' past life experience, the impact of the educational experience as a whole, and the passage of time, the relationships among these elements of socialization are not clear, nor is the relative impact of each element on the overall process of developing the self-concept of *nurse*. In the present study, the effect of program length on students' professional nursing values scores was examined. *Program length* addresses *the passage of time*, one aspect of Ware's theory.

References

Aiken, L. H., & Cheung, R. (2008). Nursing workforce challenges in the United States:

Implications for policy. *Organisation for Economic Co-operation and*

Development. Retrieved April 12, 2009, from

http://www.who.int/hrh/migration/Case_study_US_nurses_2008.pdf

American Association of Colleges of Nurses (2008). Fact sheet: accelerated

baccalaureate and master's degrees in nursing. Retrieved June 16, 2008, from

http://www.aacn.nche.edu/Media/pdf/AccelProgs.pdf

Bentley, R. (2006). Comparison of traditional and accelerated baccalaureate nursing

graduates. *Nurse Educator, 31*(2), 79-83.

Canadian Nurses Association (2009). The nursing shortage – the nursing workforce.

Retrieved April 19, 2009, from http://www.cna-

aiic.ca/CNA/issues/hhr/default_e.aspx

Davis, A. J. (1991). The sources of a practice code of ethics for nurses. *Journal of*

Advanced Nursing, 16, 1358-1362.

Demeronti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2000). A model of

burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing, 32*,

454-464.

duToit, D. (1995). A sociological analysis of the extent and influence of professional

socialization on the development of nursing identity among nursing student at two

universities in Brisbane, Australia. *Journal of Advanced Nursing, 21*, 164-171.

Hale, S. (2008). Nursing in the news. *Registered Nurse Journal, 20*(3), 8-10.

Kramer, M. (1974). *Reality Shock*. St. Louis, Missouri: C.V. Mosby Company.

Leddy, S., & Pepper, J. M. (1993). *Conceptual bases of professional nursing* (3rd ed.).

Philadelphia: Lippincott.

Maltby, H. J., & Andrusyszyn, M.-A. (1997). Perspective transformation: Challenging

the resocialization concept of degree-seeking registered nurses. *Nurse Educator,*

22(2), 9-11.

Martin, P., Yarbrough,S., & Alfred, D. (2003). Professional values held by baccalaureate

and associate degree nursing students. *Journal of Nursing Scholarship, 35*, 291-

296.

McNeese-Smith, D. K., & Crook, M. (2003). Nursing values and changing nurse

workforce. Values, age, and job stages. *JONA, 33*, 260-270.

Nightingale, F. (1859). *Notes on nursing: What it is and what it is not*. London: Harrison

& Sons.

Oermann, M. H. (2004). Reflections on undergraduate nursing education: A look to the

future. *International Journal of Nursing Education Scholarship, 1*(1), 1-13.

Oullet, L. L., MacIntosh, J., Gibson, C. H., & Jefferson, S. (2008). Evaluation of selected

outcomes of an accelerated nursing degree program. *Nurse Education Today, 28,*

194-201

Perry, B. (2005). Core nursing values brought to life through stories. *Nursing Standard,*

20(7), 41-48.

Suplee, D. P., & Glasgow, M. E. (2008). Curriculum innovation in an accelerated BSN

program: The ACE model. *International Journal of Nursing Education*

Scholarship, 5(1), 1-13.

Tanner, C. A. (2007). The curriculum revolution revisited. *Journal of Nursing Education,* *46*(2), 51-52.

Thorpe, K., & Loo, R. (2003). The values profile of nursing undergraduate students: Implications for education and professional development. *Journal of Nursing Education, 42*(2), 83-90.

Verplanken, B. (2004). Value congruence and job satisfaction among nurses: A human relations perspective. *International Journal of Nursing Studies, 41,* 599-605.

Ware, S. M. (2008). Developing a self-concept of nurse in baccalaureate nursing students. *International Journal of Nursing Education Scholarship, 5*(1), 1-17.

Watson, J. (1979). *Nursing: The philosophy and science of caring.* Boston: Little Brown and Company.

Watson, J. (1988). *Nursing. Human science and human care: A theory of nursing.* New York: National League for Nursing.

Wink, D. M. (2005). Accelerated nursing programs for non-nursing college graduates. *Annual Review of Nursing Education, 3,* 271-297.

Part Two

Manuscript

In Canada, the minimum educational requirement for entry into the nursing

profession, in the majority of provinces, is a baccalaureate degree in nursing. This degree

can typically be completed in four-years of full-time study, over eight semesters, and is

open to students who have graduated from secondary school. The shift toward

baccalaureate entry-to-practice began in Canada in the mid 1980s, when the Canadian

Association of Schools of Nursing (CASN), and the Canadian Nurses Association

(CNA), released a joint position statement endorsing baccalaureate education as the

minimum requirement for new nurses (CNA, 2004). Strategies developed to ease the

transition to baccalaureate entry-to-practice included the creation of variations of the

traditional four-year basic program, including: university and college collaborative

programs, distance education programs, and accelerated programs.

Accelerated baccalaureate nursing programs allow students with an existing

degree to complete a baccalaureate nursing degree in 11 to 18 months of full-time, year-

round study (Oermann, 2004; Suplee & Glasgow, 2008; Wink 2005). The American

Association of Colleges of Nurses (2008) reported that in 2007, there were 205

accelerated baccalaureate nursing programs in the United States, up from 84 programs

nationwide, in 2002. In 2008, there were 30 such programs in Canada (Hale, 2008). In

addition to aiding in the transition to baccalaureate entry-to-practice, authors cited several

reasons for the creation and proliferation of accelerated programs, such as "the need to

increase the number of nurses, the need to increase the number of baccalaureate prepared

nurses, and the benefits of attracting NNCG [non-nursing college graduates] to the

nursing profession" (Wink, p.274). Oermann further asserted that, though the growth in accelerated programs was initially "a means of increasing enrollment in nursing programs" (p. 2), it has more recently been a method of coping with the ever-increasing nursing shortage. In addition, accelerated programs have been developed in "response to a call for more men, minorities, and diversity in nursing programs" (p.2).

While baccalaureate nursing education is being delivered in a variety of settings and formats, certain curriculum outcomes are central to all programs, including the socialization of nursing students into the role of *professional nurse*. One aspect of professional socialization is values formation. A value can be defined as a belief or "standard that guides and determines action, attitudes toward objects and situations, ideology, presentations of self to others, evaluations, judgments, comparisons of self with others, and attempts to influence others" (Rokeach, 1973, p. 25).

Accelerated programs are a growing trend in baccalaureate nursing education. However, there is little research examining professional socialization, specifically, the professional nursing values orientation of students in accelerated baccalaureate programs. Relationships between professional socialization and students' healthcare employment experience prior to beginning a baccalaureate program are also unclear. Therefore, a research study was conducted to compare the professional nursing values scores of students in an accelerated program with students in a four-year program.

Literature Review

Professional values development. The socialization of students into the nursing profession has been described as a process characterized by the acquisition of knowledge, skills, and a sense of identity with a profession, as well as a shift in values and attitudes

(Kramer, 1974; Leddy & Pepper, 1993; Maltby & Andrusyszyn, 1997). There is abundant

evidence that students experience a shift in values orientation from baccalaureate nursing

program entry to exit (Day, Field, Campbell, & Reutter, 2005; Duckett et al., 1997;

duToit, 1995; Shinyashiki, Trevizan, & Day, 2006; Ware, 2008; Woodard Leners,

Roehrs, & Picone, 2006). As well, values continue to develop after entry into the nursing

profession (Schank & Weis, 2001; Weis & Schank, 1997). Schank and Weis asserted that

"values formation and development of professional values appears to mirror the novice to

expert model" (p. 226), developed by Benner (1984), and that "it is the *practice* of each

individual nurse that must give form to the values of the profession" (Schank & Weis, p.

231).

Ware (2008) suggested that, in addition to formal education and practice, personal

characteristics and life experiences contribute to nursing students' formation of

professional values. Researchers have attempted to detect relationships between student

characteristics, such as age, sex, and ethnicity, and professional values formation

(Duckett et al.,1997; Lui et al., 2008; Martin, Yarborough, & Alfred, 2003; Nesler,

Hanner, Melburg, & McGowan, 2001; Prince-Gibson & Schwartz, 1998; Shinyashiki et

al., 2006; Thorpe & Loo, 2003). Of the three variables, age has most consistently had a

positive correlation with professional values formation (duToit, 1995; Nesler et al., 2001;

Prince-Gibson & Schwartz, 1998). Overall, the divergence in findings from these studies

makes it difficult to draw conclusions about the relationships between values and any of

these variables.

A correlation between previous healthcare experience and professional nursing

values orientation has been reported (Howkins & Ewens 1999; Nesler et al., 2001).

Howkins and Ewens concluded that past experience influenced the role socialization of study participants (N=26). This finding was supported by Nesler et al. who compared socialization scores of four-year baccalaureate nursing students and students, many of whom already held RN licensure, in a distance program (N=1194). The authors concluded that lack of healthcare experience was associated with lower socialization scores. Conversely, Clark (2004) found no correlation between years of employment as an RN and the level of professional socialization. While researchers have been unable to reach consensus regarding the relationship between previous experience in a healthcare field and professional nursing values orientation, it is important to note that several authors either did not ask study participants about previous healthcare experience (duToit, 1995; Duckett et al., 1997; Lui et al., 2008), or did not control for the previous healthcare experience of study participants (Martin et al., 2003; Woodard Lenners et al., 2006).

Comparison of accelerated and traditional BSN students. There are conflicting findings about the relationship between program type and values orientation. McNeese-Smith and Crook (2003) reported that values scores were significantly higher among baccalaureate nurses (BSN) than associate degree nurses (ADN) (N=412) employed in the same hospital, suggesting that differences in educational preparation may account for differences in values orientation. However, Martin et al. (2003) found no significant difference between BSN and ADN students (N=1450) on scores of values orientation.

Compared to students in basic four-year programs, students in accelerated nursing programs tend to be older, more likely to be male, and more ethnically diverse (Bentley, 2006; Meyer, Hoover, & Maposa, 2006; Miklancie & Davis, 2005; Raines & Sipes, 2007;

Toth, Dobratz, & Boni, 1998; Wu & Connelly, 1992). Overall, accelerated students have similar, or higher, pass rates in national licensure examinations than students in traditional four-year programs (Bentley; Meyers et al.; Oullet, MacIntosh, Gibson, & Jefferson, 2008; Seldomridge & DiBartolo, 2007). Accelerated students report higher levels of stress (Meyers et al.; Ouellet et al.; Weitzel & McCahon, 2008; Youssef & Goodrich, 1996), but also report higher levels of satisfaction both during their educational program and one year after graduation compared to students in traditional programs (Meyer et al.; Raines & Sipes).

Summary.

In summary, research on the formation of professional values among nurses in general, and among nursing students in particular, is limited. There is an increase in professional nursing values orientation that occurs during the course of a nursing educational program. Age has been found to be positively correlated with values orientation, while the effect of sex, ethnicity and previous healthcare experience remains obscure. Also unclear is the extent to which these variables affect professional nursing values orientation of nursing students, particularly those in accelerated programs, who tend to be older, possessing more life experiences upon program entry, but engaged in a shorter program of study. The effect of previous healthcare experience, in particular, remains unknown. Overall, studies examining professional nursing values formation of students in accelerated programs are limited.

While the number of empirical studies examining the concept of values formation in nursing students is limited, researchers have found a relationship between length of time in an educational program and values formation (Duckett, et al., 1997; Woodard

Leners et al., 2006; Ware, 2008). This evidence, though limited, raises the question of whether or not students in a shorter program of study are at a disadvantage in relation to professional socialization.

<div align="center">Theoretical Framework</div>

The theoretical foundation of this study was based on the emerging grounded theory entitled, "Building on a Foundation of Knowledge by 'Taking it All In' " (Ware, 2008). The theory addressed the process of professional socialization of nursing students as they develop the self-concept of *nurse*. Sources of knowledge which contribute to the development of the self-concept of *nurse* include those brought to the nursing program, such as life experiences and personal philosophy, and those acquired within the program, such as school as a whole, instructors, clinical rotations, assignments, projects, and tests. Ware described the transition as "a gradual process...building upon each experience piece-by-piece" (p. 10).

Ware (2008) identified several key aspects of nursing professional socialization in this theory, in addition to the passage of time, such as: the significance of students' individual characteristics and past experience, and the educational experiences as a whole. The relationships among these elements of socialization are not clear, nor is the relative impact of each element on the overall process of developing the self-concept of *nurse*. In the present study, the effect of program length on students' professional nursing values scores was examined. *Program length* addresses *the passage of time*, one aspect of Ware's theory.

Purpose

The purpose of this study was to determine if differences exist in professional

nursing values scores of students in an accelerated and a four-year baccalaureate nursing

program prior to the start of the final semester of each program.

Research Questions

1.   Are there differences in the professional nursing values scores of

accelerated and a four-year baccalaureate nursing program students?

2.   What is the relationship between professional nursing values scores and

program type, students' age, sex, self-identification with a visible or ethnic

minority, or previous healthcare experience?

3.   Are there differences in professional nursing values scores based on

students' age, sex, self-identification with a visible or ethnic minority, or

possession of previous healthcare experience?

Hypothesis

Accelerated nursing students will have similar professional nursing values scores

compared to baccalaureate nursing students' scores.

Method

Design

A non-experimental, descriptive, correlational design was utilized to evaluate

relationships between professional nursing values scores and program type, and student

demographics. Permission was obtained to utilize the Nursing Professional Values Scale-

Revised (NPVS-R) (Weis & Schank, 2000) for this study. Statistical analyses were

conducted using *The Statistical Package for the Social Sciences* (SPSS) *Version 16.0*

computer software (SPSS incorporated, 2007). Differences in demographic characteristics of the two groups of students were analyzed. Correlation analysis was performed to determine if relationships existed among research variables and values scores. Independent sample t-tests were performed to analyze mean differences in NPVS-R scores of student in both programs, as well as differences in scores of students based on demographic variables.

Sample and Setting

The target population was nursing students enrolled in a four-year baccalaureate program and an accelerated program at a large southwestern Ontario university. With alpha set at .05 and a power of .80, the sample size needed in this study was 98 (effect size .40) in each group (Polit & Beck, 2004). Convenience sampling was utilized and 251 students were invited to participate, 195 from the four-year program, and 56 from the accelerated program. At the time of data collection, students in the four-year program were thirty-nine months into their program (seventh of eight semesters), and students in the accelerated program were fifteen months into their program (fourth of five semesters). The timing of data collection corresponded to the semester immediately prior to the final integrative practicum. Clinical practice has been found to contribute to the professional socialization and professional nursing values orientation of nursing students and newly graduated nurses (Courdret, Fuchs, Roberts, Suhrheinrich, & White, 1994; Day et al., 2005; Dunn, Ehrich, Mylonas, & Hansford, 2000; Schank & Weis, 2001; Secrest, Norwood, & Keatley, 2003). An assumption was made that the integrative practicum may have had a significant effect on the values formation of all students, and

that differences in values related to program type may not have been detected if data were collected after this time period.

Instrument

The NPVS-R (Weis & Schank, 2000) (See Appendix A) addresses five aspects of professional nursing values: caring, activism, trust, professionalism, and justice. Each item on the 26-item scale describes a values statement to which participants indicate the importance of that statement on a 5 point Likert-scale, 'A' indicating that they felt the item was *not important*, to 'E' indicating that they felt the item was *most important*. Responses (A to E) were converted to numeric scores (1 to 5). The scores were summed with a possible range of 26 to 130, "with a high score indicating a strong values orientation" (Weis & Schank, p. 202).

The NPVS-R (Weis & Schank, 2000) is a revised version of a 44-item survey to represent specific statements from the 1985 ANA *Code of Ethics for Nurses with Interpretive Statements*. Testing has resulted in the 26-item revised version. Five subscales identified within the survey have yielded Cronbach's alpha coefficients ranging from .73 to .87 (Weis & Schank, personal communication), indicating high reliability. Weis and Schank (under review) further asserted a high level of validity for the NPVS-R based on a large sample (N=632) of baccalaureate and masters' students and practicing nurses.

Demographic items that were part of the NPVS-R (Weis & Schank, 2000) were modified to fit with a Canadian student population, as well as to capture data about students' previous healthcare experience (Appendix B). Data collected included: the program in which students were enrolled, age, sex, whether or not they identified with a

visible or ethnic minority, and whether or not they had any healthcare experience prior to enrollment in the nursing program.

Data collection procedure:

Approval to conduct the study was obtained from the university ethics board (Appendix C), and the director of the School of Nursing (Appendix D). Permission to recruit subjects and administer the questionnaire during class time was granted by course professors. Each student was provided with a survey package which included: instruction sheet for survey package (Appendix E), letter of information (Appendix F), NPVS-R instrument, and a prize ballot (Appendix G). Students were asked to read the letter of information and complete the questionnaire. Questionnaire completion took approximately 20 minutes. Return of completed questionnaires was accepted as consent to participate in the study. A drop box was available for returned questionnaires and ballots. Two reminder emails (Appendix H)(Appendix I) were sent to potential participants, weekly, after the initial data collection.

<div align="center">Results</div>

Sample Description

A total of 251 students were invited to participate in this study, and 173 (68.8%) surveys were returned, 46 from the accelerated program, and 122 from the four-year program (missing data $n=5$). Most participants were female (93.6%, $n=162$). Their ages ranged from 20 to 46. The average age of accelerated and four-year students was 26.15 years ($SD=4.87$), and 23.00 years ($SD=3.516$), respectively. This difference was statistically significant ($t=4.636$, $df=166$, $p<.05$). The two groups of students did not differ significantly by sex ($\chi2$ [1, $N=169$] $=0.823$, $p=.364$), identification with a visible or

ethnic minority ($\chi2$ [1, N=168] =0.288, p=.592), or possession of previous healthcare

experience ($\chi2$ [1, N=156] =1.547, p=.214).

The students' demographic characteristics are summarized in Table 1.

Table 1

Demographic Characteristics of Study Sample

Demographic Variable	Total (N=173)	Accelerated (n=46)	Four-Year (n=122)
Age (years)*			
20-23	107(64%)	13(27%)	94(77%)
24-27	42(25%)	27(56%)	15(13%)
28-31	10(12%)	2(4%)	8(7%)
32-39	6(4%)	2(4%)	4(4%)
40+	3(2%)	2(4%)	1(0.8%)
Sex**	162(96%)	44(92%)	118(97%)
Female	7(4%)	3(6%)	4(3%)
Male			
Visible/ethnic minority**	35(21%)	11(23%)	24(20%)
Yes	134(80%)	36(75%)	98(80%)
No			
Previous healthcare experience***	92(55%)	30(63%)	62(51%)
Yes	64(38%)	15(31%)	49(40%)
No			

*missing data n=5
**missing data n=4
***missing data n=17

Research question 1: Are there differences in the professional nursing values scores of

accelerated and a four-year baccalaureate nursing program students?

Scores on the NPVS-R ranged from 26 to 130. The mean score for all participants

was 106.46 (SD=12.14), indicating moderate to high levels of professional values

orientation. Independent sample t-tests were conducted to determine if differences in total

scores and scores for each of the five subscales existed between groups based on program

type. The results are summarized in Table 2. There were no significant differences in

total scores between groups. Accelerated students had higher total scores on all five

subscales. The difference between groups on one subscale, *activism*, was statically

significant. However, results must be interpreted with caution given the unequal sample

sizes in each group.

Table 2

Differences Between Accelerated and Four-Year Students in NPVS-R Total and Subscale Scores

	Accelerated (*n*=122) Mean(*SD*)	Four-Year (*n*=48) Mean(*SD*)	Mean difference (*SE*)	*t*	*df*	*p*
NPVS-R total scores	109.33(16.15)	105.46(10.21)	3.86(2.11)	1.83	163	.069
Subscale 1 *Caring*	39.26(6.01)	38.59(4.28)	.67(.83)	.81	166	.421
Subscale 2 *Activism*	19.02(3.44)	17.48(3.02)	1.55(.54)	2.87	167	.005
Subscale 3 *Trust*	22.06(3.06)	21.40(2.02)	.66(.40)	1.64	168	.102
Subscale 4 *Professionalism*	15.65(2.73)	15.14(2.24)	.50(.41)	1.24	166	.218
Subscale 5 *Justice*	13.21(2.01)	12.78(1.63)	.43(.30)	1.44	168	.151

Research question 2: What is the relationship between professional nursing values scores and program type, students' age, sex, self-identification with a visible or ethnic minority, or previous healthcare experience?

A correlation analysis was conducted to determine if a relationship exists among study variables. The correlations among study variables are displayed in Table 3. No statistically significant correlations were detected between total NPVS-R scores and any of the study variables. Statistically significant relationships were identified between age and three study variables; program type, sex, and self-identification with a visible or ethnic minority. Older students were more likely to be enrolled in the accelerated program (r=-.339, p<.01), more likely to be male (r=.201, p<.01), and more likely to self-identify with a visible or ethnic minority (r=-.290, p<.01). In addition, there was a significant relationship between sex and previous healthcare experience, with female students being more likely to have reported experience in the healthcare setting prior to beginning their baccalaureate program (r=.201, p<.05). However, given the small number of men in this study, conclusions regarding correlations between sex and other study variables must be made with caution.

Table 3

Correlation Matrix for Key Study Variables: Professional Nursing Values Scores

Variable/ coding	Program Type	Sex	Self-Identification with visible/ethnic minority	Students' Age	Previous Healthcare experience	Total NPVS-R score
Program type 1=Accelerated 2=Four-year	1.00	-.070	.041	-.339**	.100	-.142
Sex 1=Female 2=Male		1.00	-.043	.201**	-.167*	.101
Minority 1=Yes 2=No			1.00	-.290**	-.123	-.032
Age				1.00	-.044	.068
Previous experience 1=Yes 2=No					1.00	-.067
Total score						1.00

**Correlation is significant at the 0.01 level (2-tailed)
*Correlation is significant at the 0.05 level (2-tailed)

Research question 3: Are there differences in professional nursing values scores based on students' age, sex, self-identification with a visible or ethnic minority, or possession of previous healthcare experience?

Independent sample t-tests were conducted to determine if differences in total scores existed between student groups based on demographic characteristics. The results are summarized in Table 3. There were no significant differences in scores based on

students' sex, self-identification with a visible or ethnic minority, or students' possession

of previous healthcare experience.

Table 4

Demographic Group Differences in NPVS-R Scores

Groups by Demographic Characteristic	Total Score (Mean/SD)	Mean difference	t	df	p
Sex					
Female(*n*=162)	106.27/12.40				
Male(*n*=7)	112.83/4.88	-6.56	-1.289	162	.199
Ethnicity					
"yes" (*n*=35)	107.30/18.47	.99	.413	162	.680
"no" (*n*=134)	106.31/10.22				
Previous healthcare experience					
"yes"(*n*=92)	107.09/8.69	1.61	.819	150	.414
"no" (*n*=64)	105.48/15.46)				

Additional Analysis

Internal consistency of the NPVS-R (Weis & Schank, 2000) was evaluated.

Cronbach's alpha scores were as follows: professionalism (.77), caring (.88), activism

(.79), trust (.73), and justice (.73), indicating good internal consistency of the research

instrument with this sample.

Discussion

NPVS-R Scores Related to Program Length. This study examined the effect of

program length on values orientation by determining if differences existed in the values

orientation of students in a traditional four-year program compared with students in an

accelerated program. The two groups of students did not differ significantly based on

sex, ethnicity, or possession of previous healthcare experience, a finding which contrasts with previous findings (Bentley, 2006; Meyer et al., 2006; Miklancie & Davis, 2005; Raines & Sipes, 2007; Toth et al., 1998; Wu & Connelly, 1992). Accelerated students in the present study were, however, older than the four-year students by approximately three years, a difference which was statistically significant.

Overall, there was no significant difference in mean scores on the NPVS-R between the two groups of students. This finding is consistent with those of similar studies which evaluated professional socialization of nursing students in different programs (Clark, 2004; DuToit, 1995; Martin et al., 2003). All students in this study reported moderate to high levels of professional values orientation (M=106.46, SD=12.14).

Researchers have asserted that the shift in values, from program entry to exit, is a gradual one which occurs over the course of an educational program (Day et al., 2005; Duckett et al., 1997; DuToit, 1995; Shinyashiki et al., 2006; Woodard Leners et al., 2006; Ware, 2008). Results from the present study indicate that students nearing completion of their formal nursing education have been socialized to the same extent, suggesting that it is the nature and quality of the education experience rather than the length of that experience, which may contribute more to professional values formation.

There is growing evidence that accelerated baccalaureate nursing programs are an effective means of preparing highly competent nurses, who enjoy high academic achievement, and are well received by employers (Bentley, 2006; Meyers et al., 2006; Oullet et al., 2008; Seldomridge & DiBartolo, 2007). Findings from the present study add to the growing body of knowledge in support of accelerated baccalaureate nursing

program by demonstrating that students from both programs exit formal education with a similar degree of professional values orientation, in spite of the difference in program length.

A key component of Ware's (2008) emerging theory, *Building on a Foundation of Knowledge by 'Taking it all in'* is the influence of the whole education experience on professional socialization and values formation. Students in Ware's study recounted the significance of faculty, clinical experiences, assignments and projects, client appreciation, and other elements as a whole. Although Ware describes socialization as a process, the concept of education in the theory is described in terms of its content, rather than its length, a concept supported by the finding of this study.

Scores Related to Demographic Characteristics. Although total scores did not differ significantly between groups of students, accelerated students had higher scores on the *activism* subscale of the NPVS-R (Weis & Schank, 2000). Items in this subscale addressed respondents' beliefs about nurses' imperative to participate in the development of policies impacting healthcare and nursing, and to support the advancement of the nursing profession through involvement in professional organizations and the utilization of nursing research. Accelerated students may have greater insight into the political issues associated with nursing, or healthcare delivery in general, simply by virtue of their age. Perhaps older students have utilized healthcare services to a greater extent, either personally or in relation to family members, thus have an awareness of issues of accessibility, hospital wait times, etc. Or, perhaps older students have a greater awareness of sociopolitical issues in their community in general, thus recognize the role of nurses to act as advocates to promote health and healing through activism.

Demographic variables have been studied extensively in relation to values formation. Overall, much of the research on the relationship between demographic characteristics and professional nursing values orientation of baccalaureate nursing students has yielded conflicting results (Duckett et al.,1997; Lui et al., 2008; Martin et al., 2003; Nesler et al., 2001; Prince-Gibson & Schwartz, 1998; Shinyashiki et al., 2006; Thorpe & Loo, 2003). In the present study, NPVS-R (Weis & Schank, 2000) mean scores were not significantly different between groups of students based on demographic characteristics. Ware's theory does not describe variables such as: age, sex, ethnicity, or previous work experience, *per se*. Sources of knowledge brought to the nursing program described in Ware's theory include: life experiences, personal philosophy, role models, and religious beliefs. Perhaps these more complex personal attributes have a greater influence on values formation than simple demographic characteristics.

Reliability and Validity of the NPVS-R. Reliability testing for the NPVS-R (Weis & Schank, 2000) in this study yielded Cronbach's alpha scores for the five subscales of between .73 and .88. These findings are consistent with those of previous studies in which this instrument was used and indicate high internal consistency. Several distinct measurement instruments have been employed in the research on values in nursing, including the NPVS-R (Weis & Schank), with great variability in findings, especially findings relating demographic variables with professional nursing values. Given the somewhat ethereal nature of *values*, and that there is essentially no evidence of convergent validity among tools, it is perhaps difficult to conclude that instruments are, in fact, measuring the same phenomena. Indeed, some would question whether existing instruments used to measure values are even useful.

"While the professional group determines professional values"..."the professional values of the group might change to reflect the increased diversity of the profession" (Martin et al, 2003, p. 295). These changes may not be reflected in the measurement instrument being utilized thus far, resulting in the difference seen in scores. Despite gender and ethnic diversity, nursing students as a whole may be a more homogeneous group and differences in values may be small and not detected by the instrument.

Implications. The development of professional nursing values is a terminal objective of baccalaureate nursing education. Thus, it is incumbent upon nurse educators to evaluate factors which contribute to this aspect of socialization on nursing students. If similar levels of values formation can be obtained by students in programs of different lengths, perhaps it is the content of the program, rather than its length that has the greatest influence on values formation. Educators should focus on the quality of curriculum content, rather than the quantity. Ware (2008) described sources of knowledge obtained within the nursing program. Further study is needed to examine each one of these elements to determine which, if any, contributes most to values formation.

Further study is also needed to evaluate the value of examining the effect of demographic characteristics on values formation. Given the variability of findings in previous studies, it is possible that no real relationship exists. Or, the inability to detect differences in values between students based on demographics may be more of a reflection of the homogeneity of nursing students, or young people in general, than the lack of a relationship between the two variables at all.

Limitations. This study has limited generalizability due to the use of one setting, the small sample size, and the cross-sectional research design. Also, the small number of

men in this sample makes it very difficult to draw any conclusions about values formation of male nursing students in either program.

Conclusion

Overall, students in a four-year and accelerated baccalaureate nursing program demonstrated similar professional nursing values scores in the penultimate semester of their programs. Although the sample size was small, and participants were from one university only, it can be concluded that there was no difference in the values orientation of students in an accelerated program of study and those in a traditional four-year program. This finding lends support for the ongoing creation and development of accelerated baccalaureate nursing programs as an effective form of nursing education. Findings further suggest that more than just the passage of time is involved in the values formation that occurs in formal nursing education, an assertion which supports Ware's (2008) theory. Further study is needed to examine which specific aspects of nursing curricula contribute to values formation, as well as whether more complex personal characteristics, rather than certain demographic variables, are related to values formation in nursing students.

References

American Association of Colleges of Nursing. (2008, July). *Advancing higher education in nursing: Annual state of the schools.* Retrieved September 15, 2008, from http://www.aacn.nche.edu/Media/pdf/AnnualReport08.pdf

Benner, P. (1984). *From Novice to Expert: Excellence and Power in Clinical Practice.* Addison-Wesley Publishing Company, Menlo Park, CA.

Bentley, R. (2006). Comparison of traditional and accelerated baccalaureate nursing graduates. *Nurse Educator, 31*(2), 79-83.

Canadian Nurses Association. (2004, June). *Joint position statement: Educational preparation for entry to practice.* Retrieved January 15, 2009, from http://www.cna-aiic.ca/cna/

Clark, C. (2004). The professional socialization of graduating students in generic and two-plus-two baccalaureate completion nursing programs. *Journal of Nursing Education, 43*, 346-351.

Coudret, N. A., Fuchs, P. L., Roberts, C. S., Suhrheinrich, J. A., & White, A. H. (1994). Role socialization of graduating student nurses: Impact of a nursing practicum on professional role conception. *Journal of Professional Nursing, 10*, 342-349.

Day, R. A., Field, P. A., Campbell, I. E., & Reutter, L. (2005). Students' evolving beliefs about nursing: From entry to graduation in a four-year baccalaureate programme. *Nurse Education Today, 25*, 636-643

Duckett, L., Rowan, M., Ryden, M., Krichbaum, K., Miller, M., Wainwright, H., et al. (1997). Progress in the moral reasoning of baccalaureate nursing students between program entry and exit. *Nursing Research, 46*, 222-229.

Dunn, S. V., Ehrich, L., Mylonas, A., & Hansford, B. C. (2000). Students' perceptions of

field experience in professional development: A comparative study. *Journal of*

Nursing Education, 39, 393-400

duToit, D. (1995). A sociological analysis of the extent and influence of professional

socialization on the development of a nursing identity among nursing students at

two universities in Brisbane, Australia. *Journal of Advanced Nursing, 21*, 164-

171.

Hale, S. (2008). Nursing in the news. *Registered Nurse Journal, 20*(3), 8-10.

Howkins, E. J., & Ewens, A. (1999). How students experience professional socialisation.

International Journal of Nursing Studies, 36, 41-49.

Kenny, G. (2002). The importance of nursing values in interprofessional collaboration.

British Journal of Nursing, 11(1), 65-68.

Kramer, M. (1974). *Reality shock. Why nurses leave nursing.* Saint Louis, MO: Mosbly.

Leddy, S., & Pepper, J. M. (1993). *Conceptual bases of professional nursing. (3rd.ed.).*

Philadelhia, PA: Lippincott.

Lui, M. H. L., Lam, L. W., Lee, I. F. K., Chien, W. T., Chau, J. P. C., & Ip, W. Y. (2008).

Professional nursing values among baccalaureate nursing students in Hong Kong.

Nurse Education Today, 28, 108-114.

Maltby, H.J., & Andrusyszyn, M-A. (1997). Perspective transformation: challenging the

resocialization concept of degree-seeking registered nurses. *Nurse Educator,*

22(2), 9-11.

Martin, P., Yarbrough, S., & Alfred, D. (2003). Professional values held by baccalaureate and associate degree nursing students. *Journal of Nursing Scholarship, 35,* 291-296.

McNeese-Smith, D. K., & Crook, M. (2003). Nursing values and a changing nurse workforce. *JONA, 33,* 260-270.

Meyers, G. A., Hoover, K. G., & Maposa, S. (2006). A profile of accelerated BSN graduates, 2004. *Journal of Nursing Education, 45,* 324-327.

Miklancie, M., & Davis, T. (2005). The second-degree accelerated program as an innovative educational strategy: new century, new chapter, new challenge. *Nursing Education Perspectives, 26,* 291-293

Nesler, M. S., Hanner, M. B., Melburg, V., & McGowan, S. (2001). Professional socialization of baccalaureate nursing students: Can students in distance nursing programs become socialized? *Journal of Nursing Education, 40,* 293-302.

Oermann, M. H. (2004). Reflections on undergraduate nursing education: a look to the future. International *Journal of Nursing Education Scholarship, 1*(1), 1-13.

Oullet, L.L., MacIntosh, J., Gibson, C.H., & Jefferson, S. (2008). Evaluation of selected outcomes of an accelerated nursing degree program. *Nurse Education Today, 28,* 194-201.

Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods (7th ed.).* Philadelphia, PA: Lippincott.

Prince-Gibson, E., & Schwartz, S. H. (1998). Value priorities and gender. *Social Psychology Quarterly, 61*(1), 49-67.

Raines, D. A., & Sipes, A. (2007). One year later: reflections and work activities of

accelerated second-degree bachelor of science in nursing graduates. *Journal of*

Professional Nursing, 23, 329-334.

Rokeach, M. (1973). *The nature of human values.* New York: Collier Macmillan

Publishers.

Schank, M. J., & Weis, D. (2001). Service and education share responsibility for nurses'

values development. *Journal for Nurses in Staff Development, 17,* 226-231.

Secrest, J. A., Norwood, B. R., & Keatley, V. M. (2003). "I was actually a nurse": The

meaning of professionalism for baccalaureate nursing students. *Journal of*

Nursing Education, 42(2), 77-82

Seldomridge, L. A., & DiBartolo, M. C. (2007). The changing face of accelerated second

bachelor's degree students. *Nurse Educator, 32,* 240-245.

Shinyashiki, G. T., Trevizan, M. A., & Day, R. A. (2006). Professional socialization:

Students becoming nurses. *Rev Latino-am Enfermagem, 14,* 601-607.

SPSS Incorporated. (2007). *The Statistical Package for the Social Sciences Version 16.0*

for Windows Student Edition. Chicago, Ill. SPSS Inc.

Suplee, P. D., & Glasgow, M. E. (2008). Curriculum innovation in an accelerated BSN

program: The ACE model. *International Journal of Nursing Education*

Scholarship, 5(1), 1-13.

Thorpe, K., & Loo, R. (2003). The values profile of nursing undergraduates: implications

for education and professional development. *Journal of Nursing Education, 42*(2),

83-90.

Toth, J. C., Dobratz, M. A., & Boni, M. S. (1998). Attitude toward nursing of students

    earning a second degree and traditional baccalaureate students: are they different?

    Nursing Outlook, 46, 273-278.

Ware, S. M. (2008). Developing a self-concept of nurse in baccalaureate nursing

    students. *International Journal of Nursing Education Scholarship, 5*(1), 1-17.

Weis, D., & Schank, J. (1997). Toward building an international consensus in

    professional values. *Nurse Education Today, 17,* 366-369.

Weis, D., & Schank, J. (2000). An instrument to measure professional nursing values.

    Journal of Nursing Scholarship, 32, 201-204.

Weis, D., & Schank, J. (2008). *Development and psychometric evaluation of the Revised*

    Nurses Professional Values Scale (NPVS-R). Manuscript submitted for

    publication.

Weitzel, M. L., & McCahon, C. P. (2008). Stressors and supports for baccalaureate

    nursing students completing an accelerated program. *Journal of Professional*

    Nursing, 24(2), 85-89.

Wink, D. M. (2005). Accelerated nursing programs for non-nursing college graduates.

    Annual Review of Nursing Education, 3, 271-297.

Woodard Leners, D., Roehrs, C., & Piccone, A. V. (2006). Tracking the development of

    professional values in undergraduate nursing students. *Journal of Nursing*

    Education, 46, 504-511.

Wu, C., & Connelly, C. E. (1992). Profile of non-nurse college graduates enrolled in

    accelerated baccalaureate nursing programs. *Journal of Professional Nursing,*

    8(1), 35-40.

Youssef, F. A., & Goodrich, N. (1996). Accelerated versus traditional nursing students: a

comparison of stress, critical thinking ability and performance. *International

Journal of Nursing Studies, 33*(1), 76-82.

Part Three

Discussion

Values are "integral to professional socialization, evident in nursing care, and fundamental to decisions that affect practice" (Weis & Schank, 2000, p. 204). This sentiment was further maintained by Kenny (2002) who stated that the nursing "profession needs to demonstrate that values are not only a theoretical concept but also that they can, and do, have a profound impact on the practical working life of nurses delivering care in collaboration with other professions" (p. 65). It is widely accepted that the process of values formation begins in formal nursing education programs and continues in the workplace; however, little is known about the values orientation of students graduating from accelerated baccalaureate nursing programs. The purpose of this study was to determine if differences exist in professional nursing values scores of students in an accelerated, compared to a four-year, baccalaureate nursing program prior to the start of the final semester of each program.

Professional nursing values scores of accelerated and four-year baccalaureate nursing students were examined using the Revised Nursing Professional Values Scale (NPVS-R) (Weis & Schank, 2000). The hypothesis that accelerated nursing students will have similar nursing professional values scores compared to four-year baccalaureate nursing students' scores was supported. The four-year students had been enrolled in their program for twenty-four months more than the accelerated students at the time of data collection, yet no significant difference in scores on the NPVS-R was detected in this sample, suggesting that factors other than elapsed time may have contributed more to professional nursing values formation.

Nursing students experience an increase in professional nursing values over the course of their program of study (Day, Field, Campbell, & Reutter, 2005; Duckett et al., 1997; duToit, 1995; Shinyashiki, Mendes, Trevizan, & Day, 2006; Ware, 2008; Woodard Leners, Roehrs & Picone, 2006). However, variables besides the passage of time have been linked to professional values formation. Personal characteristics such as: age, ethnicity, sex and past life experience, and the educational program as a whole have all been identified as being related, to a greater or lesser extent, to values formation (Duckett et al.,1997; Lui et al., 2008; Martin, Yarborough, & Alfred, 2003; Nesler, Hanner, Melburg, & McGowan, 2001; Prince-Gibson & Schwartz, 1998; Shinyashiki et al., 2006; Thorpe & Loo, 2003, Ware, 2008). Overall, findings are inconsistent making it difficult to draw conclusions regarding the influence of these variables on professional nursing values formation. Similarly, in the present study, no significant differences in NPVS-R scores were detected based on these variables.

What accounts for the inconsistent findings of studies on the relationships between demographic variables and values formation, and that no relationships were detected in this study? Likely, values formation is more complex a process than can be explained by simple individual demographic variables. In particular, perhaps the unique demographic profile of students in accelerated programs is such that extant theory is not applicable. For example, they tend to be older and have more experience (factors identified as being positively related to values formation), but are also more likely to self-identify with a visible or ethnic minority and more likely to be male (factors negatively associated with professional values formation). Perhaps the influences of these factors cancel each other out, thus making it impossible, or impractical to try and evaluate them

separately. In fact, this proposition is supported by Ware's (2008) theory, *Building Upon a Foundation of Knowledge by 'Taking in All In'*, in which personal characteristics are considered as a whole.

Although no significant difference in overall scores was detected, students in the accelerated program scored significantly higher on the *Activism* subscale of the NPVS-R (Weis & Schank, 2000). Differences in subscale scores, particularly the *Activism* subscale, have been detected between groups of students in different programs or at various stages of education. Woodard Leners, Roehrs, and Piccone (2006) used the NPVS-R to track changes over time in four cohorts in a four-year baccalaureate program and found that the *Activism* subscale was among those ranked least important by participants (N=159) in pre- and post-test scores, although it did increase over the course of study. In a between-group comparison, Martin, Yarborough and Alfred (2003) concluded that Associate Degree Nursing (ADN) students had higher *Activism* scores than BSN students (N=1450). Conversely, Schank and Weis (2001) found no significant difference in *Activism* scores between nursing students (n=29) and practicing nurses (n=22). In general, there is a lack of consistency in findings from studies examining differences in subscale scores. Perhaps age and life experience have more to do with the recognition of the nurse's role in activism, since students in the previous studies who did have higher *Activism* scores tended to be older. Older students, such as those in the accelerated nursing program in this study, may be more aware of socio-political issues relevant to healthcare and may, therefore, value *Activism* more highly than their younger colleagues. More research is needed to examine this more fully.

Reliability testing for the 26-item NPVS-R (Weis & Schank, 2000) in this study

yielded Cronbach's alpha scores for the five subscales of between .73 and .88, indicating

high internal consistency. Findings are consistent with those of previous studies in which

this instrument was used.

Implications

Implications for Nursing Education. Based on the results of this study, the

literature, and the Ware's (2008) emerging theory, there are several implications for

nursing education, research and practice. Professional nursing values formation of

accelerated students is comparable to that of four-year students. Thus, educators should

continue to develop accelerated programs as they address the nursing shortage by

increasing enrollment opportunities for prospective nursing students. Educators may also

consider expanding enrollment in existing programs given that several program

outcomes, including values formation, are similar for both groups of students. Perhaps

the traditional baccalaureate degree program can be shortened to three or three-and-a-half

years by offering compressed portions of the four-year curriculum to students. Finally,

the difference in *Activism* scores should be addressed. Lower scores among four-year

students may indicate that this aspect of nursing practice does not hold a prominent

position in current nursing curricula. Educators may need to examine ways to ensure that

all baccalaureate nursing students are graduating with adequate values formation and

foundational knowledge of this important aspect of the nursing role.

Implications for Nursing Research. Extant research has failed to elucidate any

relationships between values and individual student characteristics, such as age, sex or

ethnicity, with any consistency. Given the ethereal nature of *values*, can individual

variables, such as sex, age, and ethnicity meaningfully be related to values development? If not, innovative approaches to studying the relationships between values formation and student characteristics are needed. Ware's (2008) theory does not address these discrete characteristics. Ware describes personal characteristics as being composed of life experiences, personal philosophy, role models, and religious beliefs. Perhaps, as described by Ware, these complex, interrelated personal characteristics are associated with professional nursing values formation, and it is these characteristics which need to be further examined in relation to values formation. Also, further research is needed to investigate and develop theory-based instruments to measure values formation. The NPVS-R was based on the American Nurses Association Code for Nurses, rather than theory. Theory-based research about values would render "research findings meaningful and generalizable" (Polit & Beck, 2004, p. 119). Instrument development based on Ware's theory would add to the understanding of this phenomenon. Finally, studies which utilize a longitudinal study design to assess changes over time, as well as studies employing a larger sample from multiple schools of nursing are necessary to verify and expand on the current study findings.

Implications for Nursing Practice. Administrators can be assured that graduates of accelerated programs have similar levels of values formation as graduates from traditional four-year programs. This is significant since professional nursing values have been found to be related to job satisfaction or dissatisfaction (McNeese-Smith & Crook, 2003; Perry, 2005; Verplanken, 2004). McNeese-Smith and Crook concluded that lower levels of *altruism* and *achievement* were more likely in nurses who were disengaged in their workplace. Demeronti, Bakker, Nachreiner, and Schaufeli (2000) concluded that

nurses who were dissatisfied with their work place detached themselves from their

patients, thereby compromising their ability to provide care based on core nursing values.

Similarly, nurses who reported high levels of congruence between personal values and

organizational values were more likely to experience higher levels of job satisfaction

(Verplanken).

The link between job satisfaction and values orientation is of significance to

educators and administrators alike, given the positive relationship between job

satisfaction and recruitment and retention. Aiken, Clarke, Sloane, Sochalski, and Siber

(2002) concluded that "burnout and dissatisfaction predict nurses' intentions to leave

their current job within a year" (p. 1992). Certainly, job satisfaction and retention of

nurses in the workforce is dependent upon more than values formation upon graduation,

and possession of a strong values set upon graduation is no guarantee of job satisfaction.

However, the relationship between nursing values and job satisfaction behooves

educators to ensure that all graduates, including those from accelerated programs are

graduating with values consistent with professional standards prior to entry into the

workforce. Findings from the present study indicate that accelerated students are

graduating with at least the same level of professional nursing values as their peers in a

four-year program.

Conclusion

Researchers and educators have studied many aspects of accelerated

baccalaureate nursing programs to determine if graduates from accelerated programs are

of the same quality as graduates of the traditional four-year programs. Three domains of

learning, cognitive, psycho-motor, and affective, provide a framework around which

educators design learning activities and evaluate learning outcomes. There is much evidence supporting successful learning outcomes for accelerated students in the cognitive and psychomotor domains, with students in accelerated programs often out-performing their peers in four-year programs (Bentley, 2006; Meyer, Hoover, & Maposa, 2006; Oullet, MacIntosh, Gibson & Jefferson, 2008; Seldomridge & DiBartolo, 2007). The present study adds to the existing body of knowledge by providing evidence of equal learning outcomes of students in both programs in the affective domain of learning, which "encompasses attitudes, beliefs and values" (Jeffries & Norton, 2005, p. 201). Professional nursing values formation is a complex process, with far-reaching implications for nursing education, research, and practice. Further studies are needed to address questions raised based on the results of this study, such as: *How much time in formal education is necessary for students to develop professional nursing values? Can demographic variables reliably predict values formation of nursing students?* Answers to these questions may be helpful in guiding the development and expansion of accelerated baccalaureate nursing programs and the development of nursing curricula in general.

References

Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J., & Silber, J. H. (2002). Hospital

nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *JAMA,*

288, 1987-1993.

Bentley, R. (2006). Comparison of traditional and accelerated baccalaureate nursing

graduates. *Nurse Educator, 31*(2), 79-83.

Buchan, J., & Calman, L. (2004). The global shortage of registered nurses: An overview

of issues and actions. For the International Council of Nurses. Geneva

Switzerland. Retrieved June 7, 2008, from

http://www.icn.ch/global/shortage.pdf,.

Canadian Institute for Health Information (2005). Workforce trends of registered nurses

in Canada, 2004. Retrieved October 1, 2006, from http://www.cna-nurses.ca.

Clouder, L. (2003). Becoming professional: exploring the complexities of professional

socialization in health and social care. *Learning in Health and Social Care, 2,*

213-222.

Day, R. A., Field, P. A., Campbell, I. E., & Reutter, L. (2005). Students' evolving beliefs

about nursing: From entry to graduation in a four-year baccalaureate programme.

Nurse Education Today, 25, 636-643.

Demeronti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2000). A model of

burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing, 32,*

454-464.

Duckett, L., Rowan, M., Ryden, M., Krichbaum, K., Miller, M., Wainwright, H., et al. (1997). Progress in the moral reasoning of baccalaureate nursing students between program entry and exit. *Nursing Research, 46*, 222-229.

duToit, D. (1995). A sociological analysis of the extent and influence of professional socialization on the development of nursing identity among nursing student at two universities in Brisbane, Australia. *Journal of Advanced Nursing, 21*, 164-171.

Jeffries, P. R., & Norton, B. (2005). Selecting learning experiences to achieve curriculum outcomes. In D. M. Billings & J. A. Halstead (Eds.), *Teaching in nursing: A guide for faculty* (2nd ed., pp 187-212).

McNeese-Smith, D. K., & Crook, M. (2003). Nursing values and changing nurse workforce. Values, age, and job stages. *JONA, 33*, 260-270.

Meyers, G. A., Hoover, K. G., & Maposa, S. (2006). A profile of accelerated BSN graduates, 2004. *Journal of Nursing Education, 45*, 324-327.

Nesler, M. S., Hanner, M. B., Melburg, V., & McGowan, S. (2001). Professional socialization of baccalaureate nursing students: Can students in distance nursing programs become socialized? *Journal of Nursing Education, 40*, 293-302.

Oullet, L. L., MacIntosh, J., Gibson, C. H., & Jefferson, S. (2008). Evaluation of selected outcomes of an accelerated nursing degree program. *Nurse Education Today, 28*, 194-201.

Perry, B. (2005). Core nursing values brought to life through stories. *Nursing Standard, 20*(7), 41-48.

Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods (7th ed.).* Philadelphia, PA: Lippincott.

Prince-Gibson, E., & Schwartz, S. H. (1998). Value priorities and gender. *Social Psychology Quarterly, 61*(1), 49-67.

Robnett, M. K. (2006). Critical care nursing: Workforce issues and potential solutions. *Crit Care Med, 34*(3, suppl), S25-S31.

Seldomridge, L. A., & DiBartolo, M. C. (2007). The changing face of accelerated second bachelor's degree students. *Nurse Educator, 32*, 240-245.

Shinyashiki, G. T., Trevizan, M. A., & Day, R. A. (2006). Professional socialization: Students becoming nurses. *Rev Latino-am Enfermagem, 14*, 601-607.

Tanner, C. A. (2007). The curriculum revolution revisited. *Journal of Nursing Education, 46*(2), 51-52.

Verplanken, B. (2004). Value congruence and job satisfaction among nurses: A human relations perspective. *International Journal of Nursing Studies, 41*, 599-605.

Ware, S. M. (2008). Developing a self-concept of nurse in baccalaureate nursing students. *International Journal of Nursing Education Scholarship, 5*(1), 1-17.

Woodard Leners, D., Roehrs, C., & Piccone, A. V. (2006). Tracking the development of professional values in undergraduate nursing students. *Journal of Nursing Education, 46*, 504-511.

Appendix A: Nursing Professional Values Scale-R
Nurses Professional Values Scale-R ©

Indicate the importance of the following value statements relative to nursing practice. Please circle the degree of importance.

(A = not important to E = most important) for each statement.

	Not Important	Somewhat Important	Important	Very Important	Most Important
	A	B	C	D	E

1. Engage in on-going self-evaluation	A	B	C	D	E
2. Request consultation/collaboration when unable to meet patient needs.	A	B	C	D	E
3. Protect health and safety of the public.	A	B	C	D	E
4. Participate in public policy decisions affecting distribution of resources.	A	B	C	D	E
5. Participate in peer review.	A	B	C	D	E
6. Establish standards as a guide for practice.	A	B	C	D	E
7. Promote and maintain standards where planned learning activities for students take place.	A	B	C	D	E
8. Initiate actions to improve environments of practice.	A	B	C	D	E
9. Seek additional education to update knowledge and skills.	A	B	C	D	E
10. Advance the profession through active involvement in health related activities.	A	B	C	D	E
11. Recognize role of professional nursing associations in shaping health care policy.	A	B	C	D	E
12. Promote equitable access to nursing and health care.	A	B	C	D	E
13. Assume responsibility for meeting health needs of the culturally diverse population.	A	B	C	D	E
14. Accept responsibility and accountability for own practice.	A	B	C	D	E
15. Maintain competency in area of practice.	A	B	C	D	E
16. Protect moral and legal rights of patients.	A	B	C	D	E
17. Refuse to participate in care if in ethical opposition to own professional values.	A	B	C	D	E

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	Not Important	Somewhat Important	Important	Very Important	Most Important
	A	B	C	D	E
18. Act as a patient advocate.	A	B	C	D	E
19. Participate in nursing research and/or implement research findings appropriate to practice.	A	B	C	D	E
20. Provide care without prejudice to patients of varying lifestyles.	A	B	C	D	E
21. Safeguard patient's right to privacy.	A	B	C	D	E
22. Confront practitioners with questionable or inappropriate practice.	A	B	C	D	E
23. Protect rights of participants in research.	A	B	C	D	E
24. Practice guided by principles of fidelity and respect for person	A	B	C	D	E
25. Maintain confidentiality of patient.	A	B	C	D	E
26. Participate in activities of professional nursing associations	A	B	C	D	E

Appendix B: Demographic Questionnaire

A Comparison of Professional Nursing Values Scores
of Accelerated and Four-Year Baccalaureate Nursing Students

Demographic Information

27.   In which baccalaureate nursing program are you enrolled?

A. Compressed Time-frame program   B. UWO-Fanshawe Collaborative program

28.   What is your sex?

A. Female   B. Male

29.   Do you consider yourself to be a member of a visible or ethnic minority?   Yes   No

30.   **Prior to beginning your baccalaureate nursing program**, did you work or volunteer in a

healthcare environment in any of the following positions?

Registered Practical Nurse (RPN)	yes	no
Personal Support Worker (PSW)	yes	no
Unit clerk	yes	no
Porter	yes	no
Medical office worker	yes	no
Hospital volunteer	yes	no

Other. Please describe _____

31.   What is your age in years? _____

Appendix G: Prize Ballot

PRIZE BALLOT

NAME: _____

HOME PHONE:_____

CELL PHONE:_____

EMAIL:_____ _____

GOOD LUCK!!