Similarities and Differences between Participants and Nonparticipants of Nursing Continuing Education

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Abstract

Continuing education (CE) in nursing is a critical element in assuring quality health care for the public. Rapid changes in technology and increasing emphasis on utilizing current research findings in practice increases the importance of participation in CE. Many nurses, however, do not attend CE sessions. As provincial professional associations are looking at ways to ensure competency in practice, the issue of who participates in CE and who does not is becoming more relevant to employers and educators.

A review of the literature found that while many studies looked at factors that increase participation in CE, few examined deterrents or barriers to CE participation in nursing. Few studies were found comparing CE participants with nonparticipants.

This comparative descriptive study examined the similarities and differences between participants and nonparticipants of CE. Questionnaires, including the 40-item Deterrents to Participation Scale as well as some demographic and recent CE participation information, were distributed to a sample of acute care nurses in three different-sized hospitals in Saskatchewan. To maximize response rates, Dillman’s Total Design Method for surveys was used where possible.

Means of the interval data was compared between the participants and nonparticipants. Crosstabulations were used to explore relationships among non-interval data.

This study provided valuable insights into participation and nonparticipation in CE, and will thereby help employers and educators develop a deeper understanding of possible strategies that could increase participation in CE.
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Chapter 1

Introduction

1.1 Introduction to the Problem

Changing technology and increasing emphasis on evidence-based practice requires registered nurses to continuously learn and adapt their practice to maintain competence. No longer can nurses rely only on their basic preparation. Rapid technological improvements and concurrent changes in nursing and medical practice have placed increasing demands on nurses (Yuen, 1991).

Quality assurance and competency issues are of concern to the public and governments as they strive to get the best health care for the funding available. Competence is a primary goal of professional associations (Saskatchewan Registered Nurses’ Association [SRNA], 1999), and continuing education (CE) is one way to foster competence in nursing practice. Although participation in CE is not synonymous with learning or change in practice, it is often the first step. Waddell (1991) concluded from a synthesis of the research that CE does indeed exert a positive effect on nursing practice.

The SRNA and other professional nursing associations are currently exploring ways to ensure competence by requiring members to assess their own continuing education needs and then to seek opportunities to meet those needs (S. Chow, personal communication, March 22, 2002). Grotelueschen (1985) points out that an issue having implications for research is the decision-making autonomy of
participants regarding their own continuing professional education. Professionals often have less choice than other adult learners because they are expected to participate as a result of professional obligations. The issues and reasons surrounding participation and nonparticipation in CE, therefore, are current, pressing, and have direct implications for CE providers and nurses.

1.2 Statement of the Problem

Facilitating participation in continuing professional education is a concern for educators and managers alike. Although health care agencies and CE institutions offer courses and sessions, many nurses do not attend. Numerous studies have been conducted regarding what causes nurses to participate in CE (Barriball & While, 1996; Dealy & Bass, 1995; DeSillets, 1995; Harper, 2000; O’Connor, 1979; Urbano, Jahns, & Urbano, 1988), but fewer studies have specifically focussed on nonparticipant nurses and their reasons for not participating (Cullen, 1998; Duquette, Painchaud, & Blais, 1988).

1.3 Purpose of the Study

The purpose of this study was to identify the similarities and differences of participants and nonparticipants in formal CE. An assumption was that although all nurses experience deterrents or barriers to participating in continuing education, the perception of individual nurses regarding these deterrents may influence their participation or nonparticipation.

1.4 Significance of the Study

Researchers have recommended further study be done regarding issues surrounding nonparticipation (Hegge, Powers, Hendrickx, & Vinson, 2002) and there is a need for “additional examination of nonparticipants to determine
differences and similarities within this group” (Waddell, 1993, p. 55). Furze and
Pearcey (1999) identify a need for more research into the whole range of motivation
and self-direction regarding nursing CE, and state there has been “little research
dealing with the characteristics of non-attendees” (p. 356). Besides looking at
motivation, there is also a need to examine other factors such as family, professional,
and provider-related variables (Urbano, Jahns, & Urbano, 1988). Kristjanson &
Scanlan (1989), in an extensive literature review, recommend that deterrent factors
and how they impact on participation be identified because these factors appear to
contribute most meaningfully to explaining variance in participation behaviour.

There were many other reasons to conduct this timely study. Continuing
nurse educators can use information about the barriers nurses face in CE
participation to help tailor marketing strategies. Employers will be able to provide
attention and encouragement to nurses who are least likely to participate (Waddell,
1993). Differences between the groups will provide information that could also be
used to develop various strategies to enhance participation. In addition, much of the
literature about CE participation was published from eight to twenty-four years ago
(Barriball & While, 1996; Carlson, 1990; Duquette, Painchaud, & Blais, 1988;
O’Connor, 1979; Parochka, 1985; Puetz, 1980; Scanlan & Darkenwald, 1984;
Staring, 1995; Urbano, & Jahns, 1988; Waddell, 1991). New knowledge must be
sought in this area.

The Canadian Nurses Association (CNA) describes quality professional
practice environments as those that support safe, competent, and ethical nursing care
(CNA, 2001). These environments are best assured when nurses’ learning needs are
addressed and the organization is committed to providing ongoing opportunities,
such as CE, to support nurses in acquiring and maintaining competence (CNA, 2001). The quality of nurses’ workplaces appears to have a direct correlation with job satisfaction, recruitment and retention and, ultimately, client outcomes (CNA, 2001).

The study conducted with rural nurses by Stratton, Dunkin, Juhl, and Geller (1995) found that limited access to both formal and informal educational experiences may motivate rural nurses to seek employment in urban areas. Educational opportunity, therefore, has implications for the retention of rural nurses. Similarly, Hegney and McCarthy (2000) also found that the lack of educational opportunities for rural nurses in Australia had a negative influence on job satisfaction.

1.5 Conceptual Framework

Based on research and theory in the field, Urbano and Jahns (1988) developed a comprehensive model for conceptualizing participation in CE in nursing. The complexity of the model begins to depict the complex human behaviour that helps to determine participation (Waddell, 1993). In this model, motivation orientation is considered to be the independent variable, and includes an individual’s needs, beliefs, values, and perceptions. Participation is the dependent variable. Demographics, life situation, and educational opportunity, together described as “influencing forces which positively or negatively affect the ultimate manifestation of participatory behaviour” are labeled as intervening variables (Urbano & Jahns, p. 184).

Maslow describes levels of basic human needs. Using Maslow’s Hierarchy of Needs as a framework, Urbano and Jahns (1988) equate basic survival needs in
nursing with attaining skill and knowledge necessary for job acquisition or
maintenance. Addressing safety needs is reflected in participation in CE as a means
of keeping up with rapidly changing technology, and improving job security. Needs
for recognition, achievement, and self-actualization are related to professional CE in
the individual’s intrinsic needs for knowledge, skills, and attitudes (Urbano &
Jahns).

Urbano and Jahns (1988) suggest that the individual’s position on the
Hierarchy of Needs will influence that person’s beliefs, values, and attitudes,
including their perception of the relevance and usefulness of a CE activity. This
approach is consistent with that of authors who stress the need to relate adult
learning experiences to real life and the perceived relevance by the adult learner

In Urbano and Jahns’ (1988) conceptual framework, needs, beliefs, values,
attitudes, and perceptions are motivation for participation or nonparticipation. Such
motivations include reasons relating to professional advancement and cognitive
interest, but also must include personal reasons to account for the complexity of
human behaviour. The authors acknowledge three categories of “influencing forces
which positively or negatively affect the ultimate manifestation of human
behaviour” (p. 184): demographic characteristics, life situation variables
(personal/family, professional), and educational opportunity structure characteristics
(provider variables). Demographic variables such as age, gender, marital status,
previous education level, and income have been shown to influence education
participation and motivation orientation.
Life situation variables include family roles and relationships, as well as personal relationships with significant others outside the family unit (Urbano & Jahns, 1988). Another more recent study (Dowswell, Bradshaw, & Hewison, 2000) affirms that home responsibilities and role strain have a definite negative impact on CE participation of nurses. A further dimension of life situation variables is concerned with the professional or work environment, including the individual’s attitude toward the job and social and professional relationships with others in the job situation. According to Urbano and Jahns, in the case of work life, dissatisfaction leads to an aspiration to a higher level, serving as a motivator for participation in CE and subsequent behaviour change.

The variable of educational opportunity structure includes such factors as scheduling of programs, type and amount of programming, publicity aimed at the intended audiences, location, fee structure, and congruency between the nurse’s interest and course content (Urbano & Jahns, 1988).

Participation, the dependent variable in the framework, is a complex phenomenon, but can be operationalized by determining the actual number of hours of participation in CE. It must be recognized that participation is “a dynamic process characterized by the complex interactions of a variety of influencing variables” (Urbano & Jahns, 1988, p. 185).

1.6 Definitions of Terms

For the purpose of this study, terms were defined as follows:

*Acute care*: the care provided at district or regional hospitals in Saskatchewan.

*Continuing education (CE)*: any optional or voluntary formal learning opportunity that occurs after a nurse’s initial registration, including workshops or conferences.
provided directly by the employer or an outside source. Certifications or inservices required by the employer are not included.

*CE participants (CEP):* nurses who have participated or attended any optional or voluntary CE event in the year prior to the study.

*CE nonparticipants (CENP):* nurses who have not participated or attended any optional or voluntary CE event in the year prior to the study.

*District hospitals:* hospitals in communities with populations of 3,500 to approximately 15,000 providing general medical services for adults and children, and low complexity surgeries and obstetrical deliveries (Saskatchewan Health, 2001).

*Regional hospitals:* hospitals in communities of 15,000 to 40,000 people providing the services of district hospitals as well as basic specialty services including intensive care (Saskatchewan Health, 2001).

*Rural:* populations living outside regions with major urban settlements of 50,000 or more (Statistics Canada, 2001a).

### 1.7 Research Question

The question in this study was to describe the similarities and differences between participants and nonparticipants of nursing continuing education in rural acute care settings. Both demographic characteristics of the groups and the main factors that acted as deterrents or barriers to their participation in CE events were compared.
Chapter 2

Literature Review

2.1 Introduction

A literature search was conducted using the words: continuing education in nursing, participant, participation, and then nonparticipant and nonparticipation. Several issues relating to CE in nursing surfaced, and those relevant to motivation and participation were examined. The focus of the literature review was studies looking at participation and nonparticipation in nursing CE, but a search for studies using the Deterrents to Participation Scale (DPS) also revealed some non-nursing studies. A search of rural and rural nursing issues was then conducted to identify CE issues unique to rural nursing.

2.2 Continuing Education

While mandatory CE is not currently required in Saskatchewan to maintain nursing registration, the importance of CE in nursing cannot be disputed. The Canadian Nurses Association (1998) states that nurses must continuously enhance their knowledge, skills, attitudes, and judgement in order to provide competent care. The Saskatchewan Registered Nurses Association (SRNA) includes “competent nursing” in its mission statement, and SRNA standards of practice require registered nurses to update their knowledge and skills on a regular basis (SRNA, 1999), thus requiring ongoing education and learning. Advances in technology and changes in health care delivery have made profound changes in the way providers view health
and health care (Collins, 2002). Due to rapid scientific and technological advances, nurses’ basic educational preparation for practice is considered to be obsolete within 10 years (Gillies & Pettengill, 1993). This time may decrease as technology and new knowledge develop. Evidence-based practice is coming to be expected in all areas of nursing. Nurses must have current knowledge to provide the best nursing care.

An established link between CE and positive patient outcomes remains elusive (Eustace, 2001). Research in this area has found that CE increases knowledge (Berarducci, Lengacher, & Keller, 2002; Slusher et al., 2000), but the results of the Slusher et al. study revealed no subsequent change in practice. However, Waddell (1991) concluded from a synthesis of the research that CE does indeed exert a positive effect on nursing practice. Although the tangible benefits of CE in nursing continue to be widely debated, nurses should be given the opportunity to benefit from CE and to develop to their full potential (Smith & Topping, 2001).

In Saskatchewan, most CE events are voluntary or optional, and nurses are responsible for assessing their own knowledge and seeking opportunities for professional growth (SRNA, 1999). Nurses are expected to be self-directed learners with the motivation necessary to participate in CE activities. Quality workplace initiatives have been identified (Saskatchewan Health, 2003) which may improve retention of nurses throughout Saskatchewan, and these include financial support for CE and the provision of time off for staff development.

Numerous studies have explored the issue of participation in CE in nursing, and several variables have been examined. In Waddell’s meta-analysis (Waddell, 1993), the motivational orientations of external expectation and cognitive interest were found to be major influences on participation in CE. Other studies describe
maintaining professional competence and keeping abreast of developments in the health care field as primary reasons for participation (Dealy & Bass, 1995; DeSilets, 1995; Harper, 2000). Barriball and While (1996) found that nurses who work full-time and day duty hours are more likely to participate in CE. Staring (1995) examined and compared the CE motivations of shift workers and obtained a response rate among urban nurses of 41% (n=159) when questionnaires were delivered to potential participants. The study found no significant difference between nurses working only day shifts and those working only night shifts. The author concluded that more research is needed to identify other influencing factors regarding CE and to examine rural nurses and rotating shift workers and their subsequent motivation to attend CE events. Relevancy of the topic to a nurse’s practice also influences the decision to participate in CE (Harper, 2000). Another reason for CE found in the literature is job satisfaction. According to the Canadian Nurses Association (CNA, 2001), the quality of nurses’ professional practice environments (which includes support for continuing education) has a direct correlation with job satisfaction. In a study of long term care nurses, Robertson, Higgins, Rozmus, and Robinson (1999) found that nurses who participated in more CE activities scored higher on a job satisfaction scale than those who did not. The question arises, however, whether CE participation was the cause for improved job satisfaction, or whether nurses who were happier with their jobs to begin with sought out CE experiences.

Fewer studies focus on nonparticipation and researchers recommend further study regarding the issues surrounding nonparticipation (Furze & Pearcey, 1999; Hegge et al., 2002; Waddell, 1993). Waddell identifies a need for “additional
examination of nonparticipants to determine differences and similarities within this group” (p. 55). Furze and Pearcey note a need for more research into the whole range of motivation and self-direction in nursing CE, stating there has been “little research dealing with the characteristics of non-attendees” (p. 356). Puetz (1980) studied CE attenders and nonattenders among nurses in Indiana, and found some differences between the groups. Attenders tended to be younger, single, associate or baccalaureate degree prepared, full time, and working in acute care areas. Puetz also found that the location of CE events was a barrier to participation, and recommended that events be scheduled at places and times convenient for nurses to attend. Dowswell, Bradshaw, and Hewison (2000) found that childcare responsibilities might act as a deterrent, as participation in CE was more likely for those nurses without children.

Kristjanson and Scanlan (1989), in an extensive literature review, recommend the identification of deterrent factors as they impact on participation. These factors appear to contribute most meaningfully to explaining variance in participation behaviour.

2.3 Rural Nursing and Continuing Education

The current study examines CE activities of nurses in rural Saskatchewan. While there are many definitions of rural (Statistics Canada, 2001a), the “non-metropolitan region” definition of rural (Statistics Canada, 2001a) was used for this study. According to this definition, populations living outside regions with major urban settlements of 50,000 or more are considered rural.

The literature identifies some of the challenges of nurses practicing in rural situations as well as the unique needs and challenges of providing CE for rural
nurses. CE for rural nurses must be accessible, flexible, efficient, and relevant (Pearson & Care, 2002). Due to the absence of other health care professionals, the scope of rural nursing practice is frequently wider than that of their more specialized urban counterparts (Hegney & McCarthy, 2000). This requires rural nurses to have and maintain a very broad base of knowledge (Beatty, 2001), sometimes called being ‘expert generalists’ (Bushy & Bushy, 2001).

Beatty (2001) describes professional isolation and inequitable geographical distribution of nurses and other health care providers as adding to the challenge of continuing competence in rural areas. Respondents in Beatty’s study who lived farther away from a college or university were less likely to participate in CE than those who were nearer such institutions.

CE offerings in rural areas are not as readily available as in larger centres because low numbers of attendees make offering many courses financially not feasible (Eustace, 2001). In Australia, the geographic isolation of rural health care workers and the limited professional relationships in the work environment are described as significant challenges in delivering CE offerings (Hill & Alexander, 1996). Bellaver, Daly, and Buckwalter (1999) described professional isolation and inadequate resources as significant impediments for nurses in rural Iowa in accessing up-to-date information. Atack and Rankin (2002) examined the experiences of registered nurses in three provinces and one territory in Canada enrolled in a web-based course and found it to be an effective method of delivery for most of the nurses in the study.

The cost associated with CE is a challenge for many nurses and health regions (Morgan, Semchuk, Stewart, & D’Arcy, 2002; Rice, 2001; Tanner, 2002).
For rural and remote nurses, the increased expenses related to travel, lodging and food, additional time off required, and family responsibilities create additional barriers (Silverman, Goodine, Ladouceur, & Quinn, 2001).

The challenges for CE as they relate to job satisfaction are consistent for rural nurses regardless of the national setting. Hegney and McCarthy (2000) found that the lack of educational opportunities for rural nurses in Australia had a negative influence on job satisfaction. When job satisfaction and retention incentives were studied among rural nurses in several practice settings in the United States, tuition reimbursement (being paid to further one’s nursing education) consistently corresponded with significantly higher levels of job satisfaction (Stratton et al., 1995). The latter study also determined that limited access to both formal and informal educational experiences for rural nurses may motivate them to seek employment in urban areas. Access, therefore, has implications for the retention of rural nurses.

2.4 The Deterrents to Participation Scale

Scanlan and Darkenwald (1984) created the Deterrents to Participation Scale (DPS) to identify health professionals’ perceived deterrents to participation in CE. This scale has been used both with nurses (Carlson, 1990; Cullen, 1998; Duquette et al., 1988; Sparling, 2003) and with other health professionals (Jackowski & Akroyd, 2001; Manning & Vickery, 2000; Scanlan & Darkenwald, 1984).

After its development, Scanlan and Darkenwald (1984) revised the original DPS and tested the scale with physical therapists, respiratory therapists, and medical technologists. A mailed questionnaire was used. Non-respondents were followed up with additional mailings and telephone contact. The response rate was almost 70%.
Items in the scale fell into six factors labeled disengagement, lack of quality, family constraints, cost, lack of benefit, and work constraints. Scanlan and Darkenwald concluded that these perceived deterrent factors exhibited considerable predictive power in relation to participation / nonparticipation.

Duquette et al. (1988) used the DPS in a survey of diploma prepared nurses in Quebec who had not registered for any credited CE courses since their basic education. A random sample of 9% of 22,494 French-speaking diploma nurses stratified according to age and regional district was surveyed. The researchers deliberately adapted the factors described by Scanlan and Darkenwald (1984) to better represent the majority of respondents as female nurse nonparticipants. Questionnaires, in the form of an attractive booklet, were mailed to potential respondents, and repeat mailings were sent three weeks later. The response rate of 80% was remarkable. However, only 44% were usable questionnaires because only those labeled “pure nonparticipants” were retained as subjects. “Pure nonparticipants” were those who had not taken part in any off-work CE activities in the past twelve months. It is not clearly stated if there were problems with the initial sample selection procedure causing such a low number of subjects to be retained. In the study, eight factors were deemed to be the most conceptually meaningful representation of the data. These factors differed from those of Scanlan and Darkenwald. For the Duquette et al. study, the factors were lack of perceived need for CE, time constraints due to work, negative impressions regarding courses, lack of confidence, low personal priority, professional disengagement, cost, and lack of benefits. Lack of perceived need and time constraints due to work were the primary influences to nonparticipation.
The DPS was used as part of a study to examine the reasons that motivate emergency room nurses to take the certification examination in emergency nursing (Carlson, 1990). Certification, a voluntary process by which the competencies of an individual are measured and acknowledged, requires considerable self-study on the part of the individual. Cost was the most influential factor preventing nurses from seeking certification, followed by nonutility (similar to lack of benefit) and incompatibility (related to time constraints). Although comparison of Carlson’s study and the current study is limited due to the different nature of specialty certification and other voluntary CE events, it is noteworthy that cost emerged as the main factor that deters nurses from certifying. The implication for the need for nursing employers to find ways to financially support the pursuit of CE is evident.

Cullen (1998) used the DPS in mailed questionnaires to study nurses (n=583) in Delaware who did not renew their license. These nurses were chosen because it was felt that the recently legislated mandatory CE in that state might have influenced their renewal decision. A response rate of 43% was obtained after the initial mailing and one reminder postcard. The highest ranked reason for nonparticipation in CE was “because other things happen to have a higher priority in my life” (p. 230), an item in the DPS family constraints factor. Overall, however, the disengagement factor, followed by cost, emerged as the primary factors for predicting nonparticipation in CE.

In a recent Saskatchewan study, the DPS was used to examine barriers to participation in CE among critical care nurses working in the two largest health districts in the province (Sparling, 2003). A response rate of 41.5% (n=268) was obtained, and the sample was largely female (92.5%), worked full time (60.1%), and
was diploma prepared (75.4%). The most frequent age reported was in the 30-39 year range (45.9%). Using the DPS, overall, respondents scored highest on the work constraints factor, while the factor of disengagement scored low. Cost was the reason most often chosen on a given list of possible deterrents to CE participation, and work constraints, cost, and time were all themes described in the open response question. In Sparling’s study, nonparticipants were described as nurses who either had not used their days off for CE, or who had not requested time to participate in CE. When participant and nonparticipant groups were compared, Sparling found no significant difference in DPS factors.

There has also been research into participation of non-nursing health professionals in CE. It is helpful to compare the deterrents to CE participation of nurses and other groups. Jackowski and Akroyd (2001) used the DPS to explore what factors deter radiographers in North Carolina from participating in CE. A 45.8% (n=229) response rate was obtained from a mailed questionnaire. The factor of cost emerged as the most influential in preventing the respondents from participating in CE. This was interesting because the study also reported that 70% of employers offer money towards CE. Jackowski and Akroyd concluded that perhaps there is a breakdown in communication between employers and employees. Work constraints was the second most influential factor.

Manning and Vickery (2000) used the DPS to look at deterrents to participation in CE among registered dieticians. All members of the Delaware Dietetic Association (n=167) were surveyed either at the state annual meeting or by mail. A response rate of 67% was achieved. The most influential factor for predicting nonparticipation was disengagement, which these researchers described
as feelings of boredom and apathy toward CE. Lack of program quality was ranked second in this study.

The cited studies are useful because they employ the DPS, which was developed for examining nonparticipation among health care professionals. Because the target populations were largely nonparticipants, strategies were employed to ensure adequate response rates. CE nonparticipants may not be as interested in responding to a research study especially given the nature of the subject being investigated (Duquette et al., 1988). The studies also include helpful information regarding sampling procedures used.

2.5 Nonparticipation and CE

Barriball and While (1999) in their study of nurses from a range of specialties, found a statistically significant difference between the CE activities of nonrespondents and respondents. Nonrespondents were asked to answer a few questions about themselves even though they did not participate in the main study. A higher percentage of nonrespondents than respondents had not attended a recent CE event. Therefore the use of methods to increase response rates is critical.

In another study, Barriball and While (1996) used semistructured interviews to overcome poor response rates often associated with survey questionnaires. The large number of subjects (449) interviewed increases the strength of this study. Participants were interviewed regarding their level of participation in CE and what they perceived as barriers to CE. Poor funding, low staffing levels, and domestic responsibilities were the main deterrents to participation.

Only one study was found comparing the differences between participants and nonparticipants in nursing CE (Puetz, 1980). This American study achieved a
return rate of 60.5% (n=1442) when questionnaires were mailed to nurses in Indiana. In the study, CE was defined as planned learning experiences, other than education toward a degree in nursing, designed to enhance practice. A sample (10%) of all registered nurses in Indiana was asked about demographic data, participation or nonparticipation in CE activities, and reasons for attending or not attending. Sixty-eight percent of respondents indicated attending some form of CE event in the past 5 years. Those attending were significantly younger, but no further detail regarding age was reported. Other characteristics of attenders were being single, having full-time employment, being in an administrative position, or being a clinical specialist. Staff nurses showed a slight tendency not to attend. Diploma graduates tended to be nonattenders and associate degree graduates attenders. However, those with baccalaureate degrees were as likely to be nonattenders as attenders.

Puettz (1980) found that reasons given for not attending CE events were related to family obligations, inconvenient locations, and inability to take time off work to attend, leading to a recommendation to schedule events in more convenient locations. This study was used to justify the need for mandatory CE, as typical nonattenders were found to be nurses with minimal education. This study began to examine differences between participants and nonparticipants in CE, but since it was done so long ago, issues may have changed. In addition, it was an American study, and it is not known whether there are similar similarities and differences among Canadian nurse attenders and nonattenders. Rural nurses were not specifically studied.

A more recent study sought to describe the attitudes of rural nurses toward CE (Beatty, 2001). Beatty obtained a response rate of 32% (n=199) in a mailed
survey of rural nurses from counties in Pennsylvania that were designated as 75% or more rural. Rural is not clearly defined, nor is CE. The return rate was 41% (n=254), but the useable response rate was 32%. Participation was described as attending a CE event in the past 2 years, and 86% of those responding identified themselves as such. In this study age, marital status, and the presence of young children had no significant influence on participation. Factors that did show a significant relationship were educational preparation and employment status. Nurses with diplomas were less likely to participate. Those working full-time were significantly more likely to participate. Beatty postulates that full-time nurses may be more engaged with professional life, may have a higher disposable income, and receive a higher level of reimbursement from employers for expenses surrounding CE participation.

Distance was a barrier to participation for rural nurses in Beatty’s study (2001). Respondents who lived farther away from a college or university were significantly less likely to participate in CE. Rural nurses also listed non-supportive supervisors and spouses, inflexible work schedules, lack of financial support, and lack of time as primary deterrents to participation in CE.

A study conducted among urban nurses in Illinois (Parochka, 1985) examined the beliefs of nonparticipant nurses regarding CE. The criteria used to define nonparticipation was having attended no formal CE courses offering CE education credits in a specified three-year period. Forty-one nonparticipant nurses were interviewed about their beliefs and intentions to participate in CE activities, as well as reasons for attending and for not attending. Interestingly, even though they had not participated in CE programs, the respondents believed in the value of CE and saw it as a positive and useful activity. Parochka explains that this apparent
paradox (negative behaviour with positive beliefs) may be the result of respondents participating in CE events other than those leading to CE credits. Also, the respondents may have experienced barriers to participation or had personal priorities that prevented participation. Parochka goes on to say that the absence of the behaviour does not necessarily affect the beliefs held.

Parochka (1985) also asked nonparticipant nurses to list deterrents to CE participation. Money, time, work conflict, and family commitments were the most frequently identified factors. In this study, 32 of the 41 nonparticipant respondents had less than a baccalaureate degree, which may confirm the findings of Puetz (1980) that diploma graduates tended to be nonattenders.

Glass and Todd-Atkinson (1999) studied nurses employed in long term care nursing facilities in North Carolina to determine their self-perceived learning needs. A response rate of 51% was obtained. The questionnaire asked about learning needs, demographic data, and deterrents to attending CE events. Tuition costs were indicated as the leading reason for nurses not participating in CE. Other deterrents were family responsibilities, lack of information about programs, and responsibilities at work. Caring for older relatives is becoming an increasing concern for nurses and employers. Monahan and Hopkins (2002), in a study of nurse employee satisfaction and eldercare, found that more than half of their sample reported elder caregiving responsibilities.

2.6 Summary

It can be concluded that CE is an essential part of quality nursing practice, and that employers should support nurses seeking learning opportunities. This will result in higher quality of nursing care, improved job satisfaction, and better
retention of nurses. The factors that deter nurses from participating in CE must be examined and issues related to rural nursing and CE explored.
Chapter 3
Methodology

3.1 Design

In this study, a comparative descriptive cross-sectional survey design was used to compare the demographic characteristics and deterrents to participation in continuing education (CE) between two groups – those who had participated in some form of optional or voluntary CE within the past year, and those who had not. This was an appropriate design because comparative descriptive designs examine and describe differences in variables in two or more groups that occur naturally in the setting (Burns & Grove, 2001) and cross sectional designs examine characteristics in subjects simultaneously.

Descriptive studies provide information about characteristics within a particular field of study. This design may be helpful in developing theory, identifying problems with current practice, or justifying current practice (Burns & Grove, 2001, p. 248). CE among acute care registered nurses has been identified as a method not only of keeping practice safe and current, but also for ensuring competent, quality care is being provided to patients. The descriptive design chosen for this study facilitated examining deterrents to participation in CE events, identification of problems with current voluntary attendance, and possible solutions.
A survey was used to collect data for this study. Surveys are self-report investigations with the purpose of describing populations on some variable or variables of interest. An advantage of surveys is that large amounts of data can be obtained rather quickly and with minimal cost, providing fairly accurate information with relatively small sample sizes. The possibility that respondents may provide only socially acceptable responses instead of the whole truth is sometimes considered a disadvantage (Nieswiadomy, 2002). Nonetheless, the survey method has proven useful in other nursing studies (Beatty, 2001; Puetz, 1980; Staring, 1995). In this study, because the researcher was not affiliated with the employers, it was felt that nurses would provide truthful answers about their CE participation, deterrents, and demographic data.

3.2 Setting

Nurses in four acute health care facilities (Facilities A, B, C, and D) participated in this study. All facilities were located in Saskatchewan, a western Canadian province with a total population of just under one million (Statistics Canada, 2001b). The four facilities are located in areas defined as rural, according to the Statistics Canada (2001a) “non-metropolitan region” definition of rural as a “population living outside regions with major urban settlements of 50,000 or more” (p. 7).

The two urban (according to the definition from Statistics Canada, 2001a) centres in Saskatchewan were not included in the study due to their distinct nature. They both have provincial hospitals used as ‘teaching hospitals’ and have full time clinical educators. In addition, both urban centres have major educational facilities,
including universities, further altering the CE opportunities for nurses working in the provincial hospitals. The practice and CE needs and habits of nurses employed there are therefore likely to differ from those elsewhere. The four hospitals chosen for this study reflect the situation of acute care nurses in rural Saskatchewan.

The hospitals chosen for this study are in the central part of the province. Facilities A and B are district hospitals, described by Saskatchewan Health (2001) as those providing general medical services for adults and children, low complexity surgeries, and obstetrical deliveries. Facilities C and D are regional hospitals providing basic specialty services including intensive care in addition to the services of district hospitals (Saskatchewan Health). According to Saskatchewan Health, the number of acute care beds at each facility as of March, 2001 was Facility A: 38 beds, Facility B: 34 beds, Facility C: 75 beds, and Facility D: 107 beds.

3.3 Sample

The target population was all acute care registered nurses (RNs) currently employed in district and regional hospitals in Saskatchewan. The accessible population, or study population, was the portion of the target population to which the researcher had reasonable access – the acute care RNs employed at the four chosen hospitals at the time of the study. Since the study instruments were distributed at the facilities, the sample population consisted of RNs who were present in one of the facilities during the time that the survey was conducted. Only RNs were eligible to participate. While the contribution to patient care of others such as Licensed Practical Nurses, Registered Psychiatric Nurses, and Special Care Aides is acknowledged as valuable, they were beyond the scope of this study.
3.4 Ethics

The Behavioural Research Ethics Board of the University of Saskatchewan approved the research proposal on July 26, 2002 (See Appendix A). The requirement for ethical approval by the affected health regions was discussed with each manager on initial contact. Only Facility D required additional approval. A copy of the research proposal and accompanying letter (see Appendix B) was supplied to the Ethics Committee for Facility D as requested, and formal written approval was obtained on December 4, 2002 (See Appendix C).

In the cover letter (Appendix D) which accompanied the questionnaire (Appendix E), respondents were informed regarding measures to maintain confidentiality. The letter also noted that results would be sent to those requesting them and further, that in reporting the results, hospitals would not be identified. Participants were not required to sign formal consent forms as the completion of the questionnaire implied consent. Completion and return of the questionnaire also implied consent to use the results of the survey as described in the cover letter.

Confidentiality was maintained throughout the data collection process and the reporting of results. Names and mailing addresses supplied by respondents requesting a copy of the summary of results were separated from the data by the researcher as soon as the surveys were removed from collection boxes. During data collection and analysis, the returned questionnaires were kept in the researcher’s home in a locked cabinet, to which only the researcher had the key.
3.5 Methods of Measurement

The Deterrents to Participation Scale (DPS) was the measurement tool for identification of the barriers to participation in voluntary CE. Scanlan and Darkenwald (1984) developed the DPS for use with health care professionals in an attempt to explore the many reasons adults give for not participating in CE. After the developers revised the DPS to shorten and improve the scale, the resulting 40-item DPS had an internal consistency (Cronbach’s alpha) of 0.91. The revised DPS consists of 40 questions asking respondents how influential specific reasons are for their not participating in CE. Responses are on a Likert-type scale, ranging from 1 = “not influential” to 5 = “very greatly influential”. Each of these items corresponded to one or more of six factors, as seen in Appendix F.

The DPS was chosen because it is designed to examine deterrents to CE participation among health care professionals. The researcher contacted Dr. C. L. Scanlan via email and he generously granted permission to use the DPS at no cost (see Appendix G).

The researcher designed a questionnaire (see Appendix E) to elicit information related to nursing experience, demographics, and participation in CE. In addition, respondents were invited to comment about either their own participation in CE or CE in general.

3.6 Development of Cover Letter and Survey

In a survey such as this one, the researcher commonly does not have personal contact with the subjects. Therefore, attention-getting and persuasive strategies to
encourage an adequate response rate must be used (Burns & Grove, 2001; Dillman, 2000). Several such strategies were used in this study.

According to Dillman (2000), the cover letter should be a straightforward request, not excessively lengthy, but providing all the necessary information. Therefore, a carefully composed cover letter (Appendix D) with a pleasant and inviting tone was used to convince potential respondents of the importance of the study and of their response in particular. The need for the identification number on each survey was explained, and subjects were assured of anonymity. Potential subjects were informed that the expected completion time for the survey would be just 10-15 minutes. Cover letters were printed on University of Saskatchewan letterhead and, in keeping with Dillman’s suggestion that each letter should be seen as an individual appeal to the respondent, letters were individually signed in ink by the researcher.

Three registered nurses pretested the cover letter and survey for clarity, logic, and length of time needed for completion. Subsequently, some changes to wording were made. The revised cover letters and surveys were given to a different group of three registered nurses to reassess for clarity, logic, and time needed for completion. A few further minor changes to wording in both the cover letter and survey were made.

One of the survey formats described by Dillman (2000) is use of letter-sized (8.5 by 11-inch) paper printed on one side only and stapled in the upper left-hand corner. This format was chosen because of the limited associated cost. Dillman (2000) cites studies indicating a slight favouring (2 to 4%) of coloured covers over
black and white covers. To bring attention to this survey, bright neon green paper was used for the front cover (see Appendix E). The same paper was used on corresponding posters (see Appendix H) and survey collection boxes (see Appendix I) for consistency and easy identification.

Surveys were copied and stapled in the upper left-hand corner. Code numbers were placed on the front cover to identify the facility at which the respondent worked. Cover letters and surveys were placed in envelopes with no identifying marks. Each envelope was then placed in a larger envelope, labeled where possible, with an individual nurse’s name. Participants were instructed to return only the inner, non-labeled envelope to the researcher.

Dillman (2000) asserts that personal contact with potential respondents will increase response rates. Initially, the researcher intended to label each outer envelope with an individual nurse’s name, so that each nurse would receive a survey with her / his name on it to personalize the survey and maximize the level of commitment each nurse would feel toward the study (Dillman). However, because the researcher was unable to obtain names of nurses at all of the facilities due to confidentiality issues, personalization was not possible at all sites.

3.7 Data Collection Process

Initially, nursing managers at the four selected acute care facilities were contacted by phone to assess interest and potential cooperation for conducting the study. Arrangements were made to meet each manager face-to-face. The researcher traveled to each facility and met with the manager(s) to discuss the study, ask them to remind and encourage staff nurses to complete the questionnaires, and determine
if there were any further ethical approvals required. Only Facility D requested that
the researcher apply to that health region’s ethics board for approval. The other three
facilities did not require further ethical approval.

Managers were asked if they could provide the names of nurses working in
their facility so that the researcher could personalize the survey envelopes. The
manager of Facility B provided names on the initial visit. Managers at Facilities A
and C declined, citing confidentiality concerns, whereas managers at Facility D
indicated that they would provide names at a later time. The researcher contacted
managers at Facility D later and obtained the names. Survey envelopes for nurses at
Facilities B and D were thus labeled individually by the researcher with nurses’
names prior to distribution.

At Facility A, the manager indicated that she would place nurses’ names on
envelopes to ensure each nurse received a survey. At Facility C, the manager gave
the researcher the numbers of nurses working on each unit (but no names). The
researcher left appropriate numbers of surveys with the manager for each unit. In an
effort to garner support for and interest in the study, the researcher delivered the
survey envelopes to the units herself to make further contact with the managers and
with any staff members present.

Extra surveys were provided at each facility in case names were missed or
surveys misplaced. At Facility D, where some nurses worked on more than one unit,
only one survey was provided for each nurse. Posters directed them to look for the
survey envelope with their name on it on each unit on which they worked. This was
not necessary at Facilities A and B, where there is one main nursing unit, or at Facility C, where names were not placed on survey envelopes.

Posters were placed at each facility inviting potential respondents to complete and return a survey, providing instructions on how to participate, and reminding them of collection dates. Facilities A and B received two posters each, and Facilities C and D received one poster for each nursing unit. One collection box was supplied for each of Facilities A and B. Each unit at Facilities C and D received a box. The lids of the collection boxes displayed the neon green coloured label, were sealed, and had an opening to allow for easy insertion of envelopes but not their removal.

Approximately one to two weeks into data collection, the researcher called the managers to see if they had any concerns about the data collection process and to ask them again to encourage nurses on their units to complete and return the surveys. Two weeks into data collection, the researcher recognized that asking the president of the provincial nursing union to endorse the study had been overlooked. The Saskatchewan Union of Nurses (SUN) president was contacted by phone and then fax (see Appendix J) requesting endorsement of the study. This was done because an endorsement from a labour group representative adds legitimacy to the study and makes involvement in the study more attractive to potential subjects (Burns & Grove, 2001). The SUN president agreed to send a letter to the managers in each facility (see Appendix K) involved in the study, encouraging registered nurses to complete and return the survey. Because of this potential boost to the response rate, the data collection period was extended from three weeks to four. The researcher
notified managers of this change and asked them to alter the posters accordingly. They agreed.

The researcher collected completed surveys four weeks after they were distributed.

3.8 Summary

Nurses in four rural acute care Saskatchewan hospitals were surveyed using a comparative, descriptive design. In some facilities, adaptations were necessary in order to address confidentiality concerns. A variety of strategies was used to increase response rates for this cross sectional survey.
This chapter describes the analysis procedures used for this study and the results found. Results are then organized into the framework described by Urbano and Jahns (1988) including demographic characteristics, life situation, and educational opportunity structure variables.

4.1 Description of Analysis Procedures

Respondents were divided into continuing education participants (CEP) and continuing education nonparticipants (CENP) on the basis of their answers to the question asking whether or not they had participated in some form of voluntary or optional CE in the past year.

Descriptive statistics were used to describe the total group of respondents, and the two subgroups – CEPs and CENPs. The statistical package for social sciences (SPSS 11.5 Windows) was used for data analysis, and comparisons were made between groups. Demographics (age, gender, educational preparation, years in nursing) of each group were described. The six factors influencing nonparticipation in CE identified by Scanlan and Darkenwald (1984) were used in the analysis. Crosstabulations were used to examine nominal and ordinal data to identify similarities and differences between CEPs and CENPs. Means of interval data from
the two groups were compared using t-tests. A significance level of 0.05 was used to accept or eject the null hypothesis.

Variables were initially categorized as nominal or interval. Nominal data consisted of gender, marital status, basic nursing education level, post-RN education, area most worked, usual shifts worked, employment status, and CE participation or nonparticipation. Interval data included age, years nursed, and the number of dependent children. The six factors of disengagement, lack of quality, family constraints, cost, lack of benefit, and work constraints were also considered interval or continuous data.

Responses to open-ended questions were compiled and examined for emerging themes. Themes were then compared to the quantitative data to identify congruencies or discrepancies.

4.2 Response Rates

The overall response rate was 42.1% (n=136), with a high of 61.3% (n=19) at Facility B, and a low of 30% (n=27) at Facility C. The smaller facilities (district hospitals) had higher response rates than the regional hospitals (see Table 4.1).

Table 4.1 Response Rates

<table>
<thead>
<tr>
<th>Facility and Size</th>
<th>Number of Surveys Left at Facility</th>
<th>Number of Surveys Completed and Returned</th>
<th>Response Rate* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (38-bed)</td>
<td>33</td>
<td>17</td>
<td>51.5</td>
</tr>
<tr>
<td>B (34-bed)</td>
<td>31</td>
<td>19</td>
<td>61.3</td>
</tr>
<tr>
<td>C (75-bed)</td>
<td>90</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>D (107-bed)</td>
<td>169</td>
<td>73</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td><strong>323</strong></td>
<td><strong>136</strong></td>
<td><strong>42.1</strong></td>
</tr>
</tbody>
</table>

*May be an underestimate of actual response rate as the exact number of nurses in sample population not known.
4.3 CE Participants and CE Nonparticipants

The pivotal question in the survey asked nurses if, in the past year, they had attended any optional or voluntary CE events excluding certifications required by their employer. Responses were used to divide the respondents into CE participant (CEP) and CE nonparticipant (CENP) groups. Eighty (58.8%) were in the CEP group and 55 (40.4%) in the CENP group. One respondent (0.7%) did not answer the question. The data from this respondent was included in the overall sample analysis but not in the comparison of the two groups. No significant differences were found between nurses from district hospitals and nurses from regional hospitals when the number of CEPs and CENPs were compared.

4.4 Demographics

4.4.1 Age, Gender, Education, and Employment

The mean age of respondents (n=130) was 43.5 years, with a range from 22 to 64 years. The sample was mainly female (n=132, 97.1%) and married (n=109, 80.1%) (see Appendix L). The number of men in the sample was too small to allow direct comparisons between male and female respondents.

Slightly more than 90% of respondents reported a diploma as their initial nursing education (see Table 4.2).

Table 4.2 Initial Nursing Education

<table>
<thead>
<tr>
<th>Initial Nursing Education (n=136)</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>123</td>
<td>90.4</td>
</tr>
<tr>
<td>Degree</td>
<td>10</td>
<td>7.4</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>2.2</td>
</tr>
</tbody>
</table>
Almost three-quarters had no formal nursing education after their initial nursing program (n=98, 72.1%). Although only three (2.2%) reported obtaining their post-registration nursing degree, 30 (22.1%) reported ‘other’ nursing education, including Canadian Nurses Association (CNA) certifications, courses towards a bachelor’s degree in nursing, and an operating room technician course. While the majority (n=88, 64.7%) reported no non-nursing education since their initial nursing program, 19 (14%) indicated they had completed a non-nursing degree or other program, such as accounting, secretarial, and emergency medical technician.

The number of years since initial registration ranged from less than 1 year to 42 years, with most (n=42) in the 16-25 year range (see Table 4.3).

### Table 4.3 Years since Initial Registration as a Nurse

<table>
<thead>
<tr>
<th>Years Since Initial Nursing Registration (n=135)</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 – 5</td>
<td>7</td>
<td>5.1</td>
</tr>
<tr>
<td>6 – 15</td>
<td>36</td>
<td>26.5</td>
</tr>
<tr>
<td>16 – 25</td>
<td>42</td>
<td>30.9</td>
</tr>
<tr>
<td>26 – 35</td>
<td>39</td>
<td>28.7</td>
</tr>
<tr>
<td>36 or more</td>
<td>11</td>
<td>8.1</td>
</tr>
</tbody>
</table>

The mean number of years worked in nursing was 20.3, with a range from 0.6 to 42. Just under two-thirds worked full-time, with approximately one quarter part-time, and the remainder casual (see Table 4.4).

### Table 4.4 Employment Status

<table>
<thead>
<tr>
<th>Employment Status (n=136)</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time</td>
<td>88</td>
<td>64.7</td>
</tr>
<tr>
<td>Part time</td>
<td>37</td>
<td>27.2</td>
</tr>
<tr>
<td>Casual</td>
<td>11</td>
<td>8.1</td>
</tr>
</tbody>
</table>
Slightly more than half (53.7%) worked rotating 12-hour day and night shifts, with the remainder working a variety of 8-hour, 12-hour, and other shifts (see Table 4.5).

**Table 4.5 Usual Shifts Worked in Past Year**

<table>
<thead>
<tr>
<th>Usual Shifts (n=136)</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-hour Days and 12-hour Nights</td>
<td>73</td>
<td>53.7</td>
</tr>
<tr>
<td>8-hour Days</td>
<td>18</td>
<td>13.2</td>
</tr>
<tr>
<td>12-hour Nights</td>
<td>7</td>
<td>5.1</td>
</tr>
<tr>
<td>8-hour Days and On-Call</td>
<td>7</td>
<td>5.1</td>
</tr>
<tr>
<td>12-hour Days</td>
<td>5</td>
<td>3.7</td>
</tr>
<tr>
<td>8- and 12-hour Days</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Combination</td>
<td>23</td>
<td>16.9</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.7</td>
</tr>
</tbody>
</table>

More (19.9%) worked the majority of their hours in the Emergency Room than any other area (refer to Table 4.6). This was followed by Medicine (16.9%), Obstetrics (12.5%), Operating Room / Recovery Room (11%) and Intensive Care Unit (11%), Pediatrics (9.6%), and Surgery (7.4%). Sixty-one percent (n=84) reported working in more than one main area. For these nurses, the second and third most worked hours were the Intensive Care Unit, Emergency Room, Obstetrics, and Medicine.

**Table 4.6 Area Most Worked**

<table>
<thead>
<tr>
<th>Area (n=136)</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>26</td>
<td>19.1</td>
</tr>
<tr>
<td>Medicine</td>
<td>23</td>
<td>16.9</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>17</td>
<td>12.5</td>
</tr>
<tr>
<td>Operating Room / Recovery Room</td>
<td>16</td>
<td>11.8</td>
</tr>
<tr>
<td>Intensive Care Unit</td>
<td>15</td>
<td>11.0</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>13</td>
<td>9.6</td>
</tr>
<tr>
<td>Surgery</td>
<td>10</td>
<td>7.4</td>
</tr>
<tr>
<td>Dialysis</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>General</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>Day Surgery</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>3.7</td>
</tr>
</tbody>
</table>
Means of the interval data for age, number of years in nursing, and number of years in current primary area were compared between the CEP and CENP groups. Independent samples t-tests revealed no statistically significant differences between groups (see Table 4.7).

<table>
<thead>
<tr>
<th></th>
<th>CE Participation / Nonparticipation in Past Year</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>CEP</td>
<td>77</td>
<td>43.64</td>
<td>9.38</td>
<td>.755</td>
</tr>
<tr>
<td></td>
<td>CENP</td>
<td>52</td>
<td>43.08</td>
<td>10.36</td>
<td></td>
</tr>
<tr>
<td>Years Nursed</td>
<td>CEP</td>
<td>80</td>
<td>20.49</td>
<td>10.08</td>
<td>.814</td>
</tr>
<tr>
<td></td>
<td>CENP</td>
<td>55</td>
<td>20.06</td>
<td>10.79</td>
<td></td>
</tr>
<tr>
<td>Years in Current Primary Area</td>
<td>CEP</td>
<td>77</td>
<td>9.92</td>
<td>7.80</td>
<td>.960</td>
</tr>
<tr>
<td></td>
<td>CENP</td>
<td>54</td>
<td>9.84</td>
<td>10.18</td>
<td></td>
</tr>
</tbody>
</table>

A greater percentage of CEPs than CENPs worked full time. Crosstabulations conducted on the ordinal and nominal data yielded a significant relationship in the Pearson Chi-square test (p=0.048) between employment status and CE participation (see Table 4.8).

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Casual</th>
<th>Pearson Chi-Square Asym. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEP (n=80)</td>
<td>58 (73%)</td>
<td>18 (23%)</td>
<td>4 (5%)</td>
<td>.048*</td>
</tr>
<tr>
<td>CENP (n=55)</td>
<td>29 (53%)</td>
<td>19 (35%)</td>
<td>7 (13%)</td>
<td></td>
</tr>
</tbody>
</table>

*Significance level < .05

No significant relationships were found between CE participation and marital status, income, basic nursing education, and usual shifts worked. Crosstabulations
conducted between nurses working only day shifts and nurses working only night shifts and CE participation revealed no relationship. Although not significant (p=0.065), nurses working mainly in the areas of Emergency, Intensive Care, and Obstetrics had a tendency to be CEP rather than CENP (see Table 4.9). Because CENPs scored higher than CEPs on the disengagement factor and were less likely to be working full time, employment status and disengagement were compared using crosstabulations, and no relationship was found. No significant differences were found between nurses from district hospitals and nurses from regional hospitals when demographic characteristics were compared.

Table 4.9 Crosstabulations of CE Participation / CE Nonparticipation vs Area of Most Work

<table>
<thead>
<tr>
<th>Area of Most Work</th>
<th>CEP (n=80)</th>
<th>CENP (n=55)</th>
<th>Total (n=135)</th>
<th>Pearson Chi-Square Asym. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>17 (21%)</td>
<td>9 (16%)</td>
<td>26 (19%)</td>
<td>.065</td>
</tr>
<tr>
<td>Intensive Care Unit</td>
<td>13 (16%)</td>
<td>2 (4%)</td>
<td>15 (11%)</td>
<td></td>
</tr>
<tr>
<td>Obstetrics</td>
<td>12 (15%)</td>
<td>5 (9%)</td>
<td>17 (13%)</td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td>11 (14%)</td>
<td>11 (20%)</td>
<td>22 (16%)</td>
<td></td>
</tr>
<tr>
<td>Operating / Recovery Room</td>
<td>7 (9%)</td>
<td>9 (16%)</td>
<td>16 (12%)</td>
<td></td>
</tr>
<tr>
<td>Pediatrics</td>
<td>6 (8%)</td>
<td>7 (13%)</td>
<td>13 (10%)</td>
<td></td>
</tr>
<tr>
<td>Surgery</td>
<td>4 (5%)</td>
<td>6 (11%)</td>
<td>10 (7%)</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>3 (4%)</td>
<td>1 (2%)</td>
<td>4 (3%)</td>
<td></td>
</tr>
<tr>
<td>Dialysis</td>
<td>1 (1%)</td>
<td>3 (5%)</td>
<td>4 (3%)</td>
<td></td>
</tr>
<tr>
<td>Day Surgery</td>
<td>1 (1%)</td>
<td>2 (4%)</td>
<td>3 (2%)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5 (6%)</td>
<td>0 (0%)</td>
<td>5 (4%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>80 (100%)</td>
<td>55 (100%)</td>
<td>135 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

4.4.2 Income

Of the 122 (89.7%) who answered the question about their annual household income, most (77.1%, n=105) reported family incomes over $50,000. There was no significant difference in income between CEPs and CENPs.
4.5 Life Situation Variables

4.5.1 Family Responsibilities

Respondents were asked if they had dependents. While 58 (42.6%) had no dependent children, 23 (16.9%) had one, 35 (25.7%) had two, 17 (12.5%) had three, 2 (1.5%) had four, and 1 (0.7%) had five or more. Crosstabulations revealed no significant difference between CEPs and CENPs and the presence or number of children. Eighteen (13.2%) of all respondents reported caregiving responsibilities for adults. Although the difference was not significant (p=0.063), CENPs tended to be more likely to have adult caregiving responsibilities than did CEPs (see Table 4.10).

Table 4.10 Crosstabulation of CE Participation / CE Nonparticipation vs Adult Caregiving Responsibilities

<table>
<thead>
<tr>
<th>CE Participation</th>
<th>Adult Caregiving Responsibilities</th>
<th>No Adult Caregiving Responsibilities</th>
<th>Total</th>
<th>Pearson Chi-Square Asym. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEP</td>
<td>7 (9%)</td>
<td>72 (91%)</td>
<td>79*</td>
<td>.063</td>
</tr>
<tr>
<td>CENP</td>
<td>11 (20%)</td>
<td>44 (80%)</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18 (13%)</td>
<td>116 (87%)</td>
<td>134</td>
<td></td>
</tr>
</tbody>
</table>

*Not all CEP respondents answered this question.

4.6 Educational Opportunity Structures

4.6.1 Employer Support

Multiple responses were allowed to the question asking how employers usually handled attendance at CE events (see Table 4.11). The largest number (46.3%, n=63) reported having to trade shifts with co-workers in order to attend. Although many (39%, n=53) were expected to attend during their time off without pay or to take holiday time to attend (23.5%, n=32), slightly over one-third (34.6%, n=47) reported receiving time off with pay to attend. More than half (55.1%, n=75) indicated that
their employer usually paid registration fees for CE events, but fewer than one-third (30.9%, n=42) reported the employer usually paying for travel and accommodation if required. Crosstabsulations conducted with this data revealed no significant differences between CEPs and CENPs for any of the above parameters.

**Table 4.11 How CE Expenses are usually handled by Employer**

<table>
<thead>
<tr>
<th>How handled by employer</th>
<th>n</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer pays registration fee</td>
<td>75</td>
<td>55.1</td>
</tr>
<tr>
<td>Must trade shifts</td>
<td>63</td>
<td>46.3</td>
</tr>
<tr>
<td>Time off without pay</td>
<td>53</td>
<td>39.0</td>
</tr>
<tr>
<td>Must attend on day off</td>
<td>49</td>
<td>36.0</td>
</tr>
<tr>
<td>Time off with pay</td>
<td>47</td>
<td>34.6</td>
</tr>
<tr>
<td>Employer pays travel/accommodation</td>
<td>42</td>
<td>30.9</td>
</tr>
<tr>
<td>Must take holiday</td>
<td>32</td>
<td>23.5</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>5.9</td>
</tr>
</tbody>
</table>

*Respondents were permitted > 1 response so does not equal 100%

**4.7 Results of the Deterrents to Participation Scale**

The Deterrents to Participation Scale (DPS) consists of 40 items asking respondents to rate influential deterrents to participation in CE. Items were summed to represent six factors according to Scanlan and Darkenwald’s (1984) method (see Appendix F). The factors were analyzed for the entire sample and then compared across the two groups, CE participants (CEP) and CE nonparticipants (CENP).

In this study, participants considered their decision-making during the previous year. Overall, the most commonly identified reason for not participating in CE was, “Because the program locations are often inconvenient.” Additional items that had a mean score of greater than 3 are also shown in Table 4.12.
Table 4.12 Rank Order of Highest Deterrent Item Responses of Entire Sample (n=136)

<table>
<thead>
<tr>
<th>Deterrent</th>
<th>Mean (Standard Deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because the program locations are often inconvenient</td>
<td>3.47 (1.294)</td>
</tr>
<tr>
<td>Because attendance generally infringes upon my family time</td>
<td>3.29 (1.260)</td>
</tr>
<tr>
<td>Because my employer does not assist with the cost of attending</td>
<td>3.24 (1.533)</td>
</tr>
<tr>
<td>Because it is difficult to get others to cover for me in my absence</td>
<td>3.05 (1.384)</td>
</tr>
<tr>
<td>Because the indirect costs (food, travel, etc) tend to be excessive</td>
<td>3.05 (1.442)</td>
</tr>
<tr>
<td>Because other things happen to have a higher priority in my life</td>
<td>3.04 (1.305)</td>
</tr>
<tr>
<td>Because I can’t afford the registration or course fees</td>
<td>3.04 (1.512)</td>
</tr>
<tr>
<td>Because attending these programs means a loss of income for me</td>
<td>3.00 (1.554)</td>
</tr>
</tbody>
</table>

When the mean scores of the 40 individual items were compared for the two groups using t-tests, ten items showed a significantly higher score for CENPs than CEPs as deterrents to CE participation (see Table 4.13).
Even though the individual reasons for not participating in CE provided some information as to the similarities and differences between CEPs and CENPs, it was more relevant to examine the items by summing them according to Scanlan and Darkenwald’s (1984) method. Items were therefore grouped into factors as shown in Appendix F. For the whole sample, the disengagement factor scored highest of the six factors, followed by lack of benefit, cost, family constraints, work constraints, and lack of quality. When examining the two subgroups, the means for all factors except lack of quality was higher for CENPs than CEPs. Independent samples t-tests were conducted comparing the means of the six factors. There were significant differences
between the two groups for the factors of disengagement (p = 0.001), lack of benefit (p = 0.004), and family constraints (p = 0.006) (see Table 4.14). Maximum scores are also provided, as the number of items summed for each factor differed (see Appendix F).

Table 4.14 T-test Comparison of Factor Scores of CEP and CENP Groups

<table>
<thead>
<tr>
<th>Factor</th>
<th>Maximum Score</th>
<th>CEP Mean Score</th>
<th>CENP Mean Score</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disengagement</td>
<td>55</td>
<td>19.05</td>
<td>22.96</td>
<td>.001*</td>
</tr>
<tr>
<td>Lack of Benefit</td>
<td>40</td>
<td>18.30</td>
<td>22.05</td>
<td>.004*</td>
</tr>
<tr>
<td>Family Constraints</td>
<td>30</td>
<td>14.18</td>
<td>16.89</td>
<td>.006*</td>
</tr>
<tr>
<td>Cost</td>
<td>30</td>
<td>16.65</td>
<td>18.44</td>
<td>.097</td>
</tr>
<tr>
<td>Work Constraints</td>
<td>35</td>
<td>14.48</td>
<td>14.76</td>
<td>.712</td>
</tr>
<tr>
<td>Lack of Quality</td>
<td>45</td>
<td>13.49</td>
<td>13.44</td>
<td>.955</td>
</tr>
</tbody>
</table>

*Significance level < .05

No significant differences were found between nurses from district hospitals and nurses from regional hospitals when mean scores of DPS factors were compared.

4.8 Narrative Responses – Themes

Space was provided for comments after the question in the survey asking how the employer usually handled attendance expenses for CE events (see Appendix E). At the end of the questionnaire, an opportunity was provided for respondents to comment about their own participation in CE or CE in general. More than half of the respondents (58%, n=79) provided additional information in at least one of these spaces. Comments were analyzed for common themes. The themes that emerged were lack of employer support, distance, staffing shortage, family responsibilities, disengagement, lack of perceived benefit, lack of quality, importance of CE, and CE delivery.
4.8.1 Employer Support

Lack of employer support related to both funding and other support. Frequently comments related to the lack of employer funding for CE.

- “Employer unwilling to help pay expenses.” (CENP)
- “No employer reimbursement for registration. No employer reimbursement for travel or accommodation. Funds only available through charitable organizations.” (CEP)
- “I have never attended any continuing education programs. Employer unwilling to help pay expenses. One year two nurses went to a seminar in Winnipeg. Problems collecting from employer.” (CENP)

Both CEPs and CENPs felt the employer should both pay for costs associated with CE and provide paid time off to attend. Several respondents stated they were required to trade shifts (thereby attending on days off) or take holidays to attend CE events. Others indicated that the expense of CE was a significant deterrent to their attendance.

- “One of the main reasons I do not attend more than I do is the absence of paid time off from employer. We do not get any education days. Most of the conferences I have attended have been on my own time.” (CEP)
- “The employer states they don’t have any money in their budgets to send employees for any inservices or educational courses. I would love to go back to school if there were resources to help pay for the tuition / books without jeopardizing my income to support my family.” (CENP)
• “Course expense only significant deterrent for me. Time is a close second, but do-able. Paid leave for education and tuition costs covered would be a real bonus.” (CEP)

Other comments referred to inconsistent funding. Sometimes only full-time or senior staff was allowed to go to CE activities, and even then it was not always known whether any or all costs would be paid by the employer or other funding entities.

• “They (employers) refuse to pay or send you to classes that are not specific to your work – eg stress workshops – that is generic but I feel would apply to anyone” (CEP)
• “Not enough money for nurses’ education in their own department – my float pool position allows me none…” (CENP)
• “Foundation (fund raising entity) agrees or disagrees to requests for funding. Education committee of hospital also approachable re: funding, but conditions seem vague.” (CEP)

Some respondents (CENPs) described lack of employer encouragement to attend CE.

• “Employer does not ‘offer’ to send you to any educational inservices / conferences. They may be posted but there is minimal encouragement to attend.” (CENP)
• “Employers should be more aware of nursing education and what is out there – they should encourage nurses to participate.” (CENP)
• “More emphasis placed on CE would allow nurses to feel more appreciated which would lead to better nursing care, and perhaps more nurses staying in Saskatchewan.” (CENP)
One nurse commented on the benefit provided by a local foundation:

- “I feel we are extremely fortunate in (Facility A) as we have access to a foundation that spends significant amounts of money to support nursing education.” (CEP)

4.8.2. Distance

The distance required to travel to participate in CE was described as a deterrent to attendance. Both CEPs and CENPs wanted more CE events offered closer to their facilities because most courses demanded significant travel to larger centres.

- “Workshops usually offered in Saskatoon or Regina – requiring long travel times.” (CEP)
- “We are finding groups of people are travelling to other centres for workshops when they could be arranged for and planned here. Not enough is being done to arrange good workshops close to home.” (CEP)
- “It would be very beneficial to have some continuing nursing education programs in our community on a regular basis.” (CENP)

Some respondents expressed the desire for local educators who could provide more consistent and accessible CE in rural facilities.

- “All facilities should have paid education directors – full-time – who could provide regular continuous (sic) educational opportunities.” (CEP)
- “In my 5 years at this hospital the inservices are few and far between. There is no clinical educator here to even try to keep the staff up-to-date and competent with any current procedures and skills – exception – CPR and ACLS.” (CENP)
4.8.3 Staffing Shortage

Shortage of staff was frequently identified as being a deterrent to CE participation, with many respondents noting they are unable to either get time off or attend during work hours because no staff is available to cover their shifts. The staffing shortage also prevented some nurses from being able to trade shifts in order to attend CE events.

- “It is difficult to attend during work hours as ward is too busy.” (CEP)
- “Due to nursing shortage it is very difficult to schedule attendance at CE because there is no one to ‘work for you’...” (CEP)
- “Too short staffed for paid LOA’s” (CENP)

4.8.4 Family Responsibilities

For both CEPs and CENPs, family responsibilities were frequently cited as being an important factor in CE decision making. Specific situations included single parenting, having young grandchildren, and going through stressful family incidents:

- “I feel that because I am at the hospital for most of the week, my family should not suffer me being away the rest. I feel family MUST always come first!” (CENP)
- “I was in the habit of taking every available course when I did not have kids. Now my young family limits participation and travel.” (CEP)
- “In the last five years I have had several family incidents which have caused me a lot of stress and therefore I have not participated in any continuing education events in the time frame.” (CENP)
- “Where is the balance between work and work related activities and workshops and having a personal life? With 3
new grandchildren arriving in the past year my priority has been being there for my daughters and their families.”

(CEP)

4.8.5 Lack of Perceived Benefit

Scanlan and Darkenwald (1984) described lack of benefit as questioning the relative worth and need of CE participation. Comments were provided about the perceived lack of benefit of CE events, especially when programs did not support a specific area of nursing.

- “I would like to see more CE opportunities in areas that would be pertinent to surgical nursing.” (CENP)
- “‘Advanced’ workshops for nurses are not usually at an advanced enough level. Many nurses have specialized practices, ie emergency, surgical, gerontology. My experience is that knowledge levels are generally higher than in the past.” (CEP)
- “Too many of the OR (operating room) workshops do not have enough clinical content. I am not interested in another workshop on stress.” (CEP)

One nurse also referred to the perceived lack of monetary benefit or recognition for CE.

- “There is no recognition for higher levels of education – e.g. do not receive higher salary benefits for achieving degree for example. Teachers have a major salary level increase for achieving a masters degree.” (CEP)

4.8.6 Lack of Quality of Programs

Scanlan and Darkenwald (1984) describe lack of quality of programs as perceptions of program inadequacies. Both CEPs and CENPs commented on the lack of quality of some CE offerings.
• “I found distance education extremely poorly administered. Very difficult to follow the flow of registration, books and exams. Many mix-ups and snags encountered only from poor administration.” (CEP)
• “Poor quality of any education or inservice except that required by the employer.” (CENP)

4.8.7 Disengagement

While disengagement, described by Scanlan and Darkenwald (1984) as feelings of alienation, apathy, and boredom toward their discipline and to learning was not directly identified by participants, it was inferred from expressions of feeling unappreciated and losing interest in CE.

• “A few years ago I attended as many education programs – inservices/ workshops as possible. Due to lack of interest by employer and always having to do so on my days off and having to work so much overtime I have lost interest in trying to arrange to get to workshops.” (CEP)

4.8.8 Importance of CE

Some nurses recognized the importance of CE and described it as a professional responsibility:

• “Attending ongoing educational opportunities is crucial to staying current; there is always something new to learn and skills to be refreshed.” (CEP)
• “CE is supremely important in our line of work due to the increase in specialization and the technical component – without CE we would be left behind and floundering.” (CEP)
• “I believe each nurse has a professional responsibility for CE – it is not totally the employer’s responsibility.” (CEP)
4.8.9 Suggested Delivery Methods

Both CEPs and CENPs suggested CE delivery methods for rural nurses such as on-line and telehealth courses, mail-outs, and union and professional association journals.

4.9 Summary

The results of the study have been presented here. Demographic data, Deterrents to Participation Scale factors, and narrative responses provide information as to the similarities and differences between CEPs and CENPs for this sample of rural acute care nurses.
5.1 Introduction

For this sample of nurses, demographic characteristics revealed more similarities than differences between CEPs and CENPs. While most characteristics were similar, there were significant differences in employment status between the two groups and trends toward differences in adult caregiving responsibilities and area of work. Significant differences were also found in deterrents to CE participation. In this chapter, the study results will be discussed, leading to conclusions and implications for nurses, nurse educators, and employers.

Urbano and Jahns (1984) proposed three categories of forces that influence human behaviour regarding CE participation, including demographic characteristics, life situation variables, and educational opportunity structure characteristics. This framework will be used to discuss study results.

5.2 Discussion of Findings

5.2.1 Response Rate

The response rate of this study (42.1%, n=136) was comparable to that of similar studies about CE participation (Beatty, 2001; Sparling, 2003; Staring, 1995) but may actually be higher than that reported. Although the researcher knew the total number of eligible nurses employed in each facility, some nurses may not have been
available during the time of data collection. If the nursing manager notified the researcher that a nurse was not available, the nurse was removed from the list of potential subjects and numbers were adjusted accordingly. However, it is likely that a number of nurses who were on leave, extended vacation, or had no shifts booked during the time of the study were included in the overall population. If all of the absent nurses had been removed from the list of potential respondents, the response rate would have been higher than the reported 42%.

The original intent in this study was to follow Dillman’s (2000) Tailored Design Method to maximize response rates. When using all the recommended procedures for mailed surveys, Dillman projects a response rate of 77%. However, since mailing addresses of potential participants were not available to the researcher, it was decided to adapt the Tailored Design Method by labeling all surveys with nurses’ names. This was done in facilities B and D, where response rates were 61.3% and 43%, respectively. At Facility A, the nursing manager labeled surveys with nurses’ names and the response rate was 51.5%. At Facility C, where unlabeled surveys were placed on each unit for nurses to pick up, the response rate was just 30%, consistent with Dillman’s contention that personalization influences response rates.

Dillman (2000) recommends that multiple attempts be made to contact intended subjects. In this study, the researcher contacted the managers at each facility during the study and prior to collection of the completed surveys in order to increase awareness of the study and to have managers encourage participation in the
study. If there had been some way to directly contact potential respondents again, the response rate may have been higher.

Specific strategies to increase response rates, such as attention-getting techniques and persuasively written material, are recommended (Burns & Grove, 2001). In this study, a bright colour, neon green, was consistently used for materials related to the survey (the cover of the survey, the collection box, and the posters) to help nurses associate the information with the study (see Appendices E, H, & I). The cover letter was carefully composed to persuade the nurses of the importance of the study and of their participation (see Appendix D).

To improve response rates, Burns and Grove (2001) recommend leaders of social and labour groups endorse studies. In this study, although an endorsement letter from the president of the Saskatchewan Union of Nurses (SUN) ideally would have been included in each survey package, the request for support was inadvertently delayed until approximately two weeks into the data collection. At that time, the researcher telephoned to request a letter of support, asking the president to send this letter to each manager. A fax was sent to the SUN president, with a list of managers on wards where the study was being conducted. The managers in turn were asked by the researcher to post the letters for the nurses to see, to remind them of the study, and to encourage them to complete a survey if they had not already done so. However, when the researcher made inquiries about the SUN president’s letter, only some managers reported receiving the letter. Some had not received it. Unfortunately, the actual distribution of the letter is not known to the researcher. In addition, when managers were asked about the letter, it became apparent that not all
had interpreted it positively. One manager indicated that she was offended at the letter, as she felt she had already been very supportive of the study in encouraging nurses to complete the surveys. Including the letter of endorsement by the union president in the initial survey would have prevented this situation, and may have encouraged some nurses who did not participate to do so.

5.2.2 CE Participants and CE Nonparticipants

Respondents were grouped as CE participants (CEP) or CE nonparticipants (CENP) based on their answer to the question asking whether they had participated in any form of optional or voluntary CE in the year prior to the survey. Overall, more nurses stated that they attended CE events in the past year than those who stated they did not. Almost 60% (58.8%, n=80) were CEPs and 40.4% (n=55) CENPs, with one respondent (0.7%) not answering this question. A large study done by Puetz (1980) revealed a somewhat greater proportion of CEP (68%). However, that study and the current study are not directly comparable because the time frame in the Puetz study was 5 years as compared to 1 year in this study and the definitions of CE were somewhat different. Sparling’s (2003) definition of CE participants was based on whether the respondents had requested time for CE (67.5%) or had received days off for CE (44.4%). Beatty (2001) asked rural nurses whether they had participated in professional CE in the past two years, and 86% (n=160) responded positively. Beatty’s study involved nurses from Pennsylvanian counties designated as 75% or more rural, and who lived a specific distance from a major metropolitan area. Since specific information regarding the definition of both rural and CE are not provided, it is not known to what extent the results of this study can be compared.
with Beatty’s study. The studies by Beatty (2001), Puetz (1980), and Sparling (2003) highlight the difficulties in comparing study results because of differing definitions of rural, CE participant, and different time frames for CE participation.

5.2.3 Demographic Characteristics

5.2.3.1 Age, Gender, Marital Status

The sample is demographically representative of acute care rural nurses in Saskatchewan with regards to age, gender, and marital status. The mean age of the respondents was 43.45 years, comparable to the average age of nurses in rural Saskatchewan (44.21 years) and rural Canada (42.97 years) (CIHI, 2002). The sample, therefore, reflects the population of rural nurses in Saskatchewan with regards to age.

In this study, no significant difference was found between the mean ages of CEPs and CENPs. Beatty (2001), in a recent study, also found no relationship between age and participation in CE. Puetz (1980) found participants to be younger than nonparticipants, but that study was conducted over 20 years ago and may not be relevant today. Gender distribution in this study was similar to CIHI data (2002) and to similar studies (Beatty, 2001; Puetz, 1980).

Similar to other studies (Beatty, 2001; Puetz, 1980; Remus, Smith, & Schissel, 2000), 82.3% of the sample was either married or living with a partner. No significant differences or relationships were found when marital status for the two groups was examined, in contrast to Puetz’s finding that CE attendees were more likely to be single but similar to Beatty’s finding of no significant relationship between the marital status of rural nurses and their CE participation.
5.2.3.2 Education and Income

For the vast majority (90.4%) of this sample, initial licensure followed graduation from a diploma program. This is considerably higher than Remus et al.’s (2000) finding of 80%. That study, however, sampled all nurses in Saskatchewan, while only rural acute care nurses participated in this study. A degree has long been a requirement for public health nurses in our province, and so it is expected that a much smaller proportion of acute care nurses would have a bachelor’s degree than would nurses in general. According to CIHI (2002), only 12.5% of rural (defined as outside populations of 10,000 or more) Saskatchewan nurses were initially degree prepared. Only 7.4% (n=10) of this rural sample indicated that a degree in nursing was their initial nursing education, which is lower than the CIHI sample. This sample is more comparable to rural nurses in all of Canada, where 9% are initially degree prepared (CIHI, 2002).

A crosstabulation was conducted with the basic nursing education data and CEP / CENP groups and no significant relationship was found. However, this finding is not a strong one due to the small number (9.6%, n=13) of the overall group who were other than diploma prepared. Puetz (1980) found that diploma graduates tended to be nonattenders rather than attenders. Likewise, Beatty (2001) found that rural nurses from hospital-based diploma programs were less likely to participate in CE. In Saskatchewan, where hospital-based diploma programs have not existed for more than 30 years, few nurses in this sample would have this as their initial preparation.
The range of responses to the question asking respondents what year they were initially registered to practice spanned 1960 to 2002, the year the study was conducted. Most (59.6%) graduated from nursing between 16 and 35 years ago, comparable to the sample of Remus et al. (2000) where 56% graduated 20 or more years ago. Participants in the current study had nursed an average of 20.3 years, similar for both CEPs and CENPs. Likewise, the number of years in the current area of responsibility revealed no statistically significant difference. The respondents of this study graduated an average of 20 years ago. While learning does occur in practice, nursing knowledge is often considered to be outdated within 10 years (Gillies & Pettengill, 1993). This supports the need for CE for all nurses to keep knowledge and skills updated.

Although the factor of cost was ranked third overall as a deterrent and many nurses commented on lack of financial support from their employer, crosstabulations revealed no significant influence of income on CE participation. There are many factors affecting family income that were not explored in this study. Crosstabulations were conducted with the variables of employment status and annual income. No relationship was found. Other studies (Beatty, 2001; Puetz, 1980; Staring, 1995) did not report the relationship of income and CE participation.

5.2.4 Life Situation Variables

Life situation variables, according to Urbano and Jahns (1984), include both personal and family relationships and professional or work environment.
5.2.4.1 Family Responsibilities

The majority of respondents (57.3%, n=78) reported having dependent children, a result comparable to Remus et al. (2000). The large number of nurses with dependant children is noteworthy because when Dowswell et al. (2000) studied CE participation and child care responsibilities, they found nurses with children were less likely to perceive CE in a positive light than those without. However, in this study, crosstabulations revealed no significant relationship between having dependent children and CE attendance or the number of dependent children and CE participation. Studies conducted by both Puetz (1980) and Beatty (2001) were inconclusive regarding a relationship between the number of dependent children and CE participation.

The factor of family constraints ranked fourth overall as a deterrent. In the study conducted by Glass and Todd-Atkinson (1999), nurses and Licensed Practical Nurses (LPN’s) working in long term care facilities in North Carolina gave family responsibilities as the second most common reason after cost for not participating in CE. In the sample of urban and rural nurses studied by Puetz (1980), the most frequently given reason given by CE nonattenders was, “Cannot attend because of family obligations.” Beatty (2001) however, found family responsibilities were not a significant barrier to participation in CE. Family roles and responsibilities may have changed since the Puetz study was conducted.

The family constraint factor scored significantly higher for CENPs than CEPs in this study. In addition, three of the ten individual items in the DPS that CENPs rated higher than CEPs related to the factor of family constraints. It is
interesting to note that, despite there being no significant difference between the
groups regarding the presence or number of dependent children, the CENPs
perceived their family responsibilities to be a stronger deterrent than did the CEP
group. CEPs appear to be more motivated to find ways to participate in CE even
though they have childcare responsibilities as do the CENPs. Although the issue of
childcare would apply to both groups, the results may indicate the perception of
insufficient childcare in rural Saskatchewan and the possible need for childcare at
CE events should be considered. More detailed data regarding ages of children,
special needs, and the availability of spousal / extended family support might
describe the family responsibilities in each group more fully and therefore reveal the
extent to which family as a deterrent is real or perceived. Comments related to single
parenting, having new grandchildren, and going through stressful family incidents
were made by only CENPs, consistent with the family constraint factor being more
influential for the CENP than the CEP.

Adult caregiving responsibilities were reported by 13.2% (n=18) of
respondents. Crosstabulations revealed no significant relationship but there was a
tendency for a higher percentage of CENPs than CEPs to have adult caregiving
responsibilities. This needs further study. An American study (Monahan & Hopkins,
2002) recommended that employers address eldercare issues to create an
environment conducive to effective nurse employees. This would lead to positive
behaviours within the organization such as CE participation (Monahan & Hopkins).
A family-friendly culture would apply to both elder and childcare and so could lead
to increased CE participation.
5.2.4.2 Employment

Most respondents worked full time (64.7%, n=88), with 27.2% (n=37) working part time, and the other 8.1% (n=11) casual. There was a statistically significant difference between the CEP and CENP groups related to employment status. Nurses employed full-time were more likely to be CEP than CENP, a finding consistent with other studies (Barriball and While, 1996; Beatty, 2001; Puetz, 1980). Although it may be that nurses working other than full time are less engaged with nursing, crosstabulations revealed no relationship between employment status and the deterrent factor of disengagement. The difference in participation may in part be accounted for, as noted in some comments, by full-time employees being more likely to be reimbursed by employers for attendance at CE events. Some nurses indicated that as part-time and casual employees, they were ineligible to receive the two paid 8-hour education days per year to which full time employees are entitled.

The respondents’ primary area of work was varied, with Emergency the area most frequently reported. Twenty-six percent of the sample worked in small centres (Facilities A and B), and these small centres are largely emergency wards in nature. When the primary area of work was examined across the two groups, no significant relationships were found but a tendency for nurses working primarily in Emergency, Intensive Care, and Obstetrics to be CEPs was suggested (p=0.065). Beatty (2001) was also unable to make conclusions about CE participation and primary work area due to the large number of nurses indicating they worked in the ‘other’ category. Puetz (1980) found that in one area of acute care (intensive care / coronary care), nurses were more likely to be attenders, but in other areas no differences were
apparent between CE attenders and nonattenders. For this sample of rural acute care nurses, there are likely fewer differences between their areas of work than for nurses working in larger facilities, as the areas are more generalized than specialized. The lack of significant differences in CE decision-making related to area of work may be explained by the more ‘generalist’ (Bushy & Bushy, 2001) nature of rural practice when compared to the more specialized practice of larger centers.

Second and third areas of work were reported by 61.8% (n=84) of the sample, indicating that many nurses in rural acute care settings work in more than one area. This suggests that rural acute care nurses need to attain and maintain a broad base of knowledge to deal with a wide range of situations, and be what Bushy & Bushy (2001) call “expert generalists”.

Slightly over half of the total group (53.7%, n=73) worked a combination of 12-hour days and 12-hour nights. There was no significant difference between CEPs and CENPs and type of shifts worked although Barriball and While (1996) found that CE participants were more likely to work day shifts only. Staring’s (1995) study also revealed no differences between day and night shift nurses when examining motivation scores for CE.

5.2.4.3 Disengagement

The items in the DPS were summed into six factors (see Appendix F). Disengagement was ranked highest of all factors for the whole sample, similar to other studies (Cullen, 1998; Manning & Vickery, 2000; Scanlan & Darkenwald, 1984), but distinct from Sparling’s (2003) study, where disengagement scored low for urban critical care nurses. Lack of benefit, cost, family constraints, work
constraints, and lack of quality followed this, and the differences were found to be statistically significant.

Disengagement, statistically higher in the CENP group than the CEP group (p=0.001), is defined as “inertia, boredom, uncertainty, diffidence, apathy, and alienation” (Scanlan & Darkenwald, 1984, p. 159). Four of the ten individual items of the DPS that scored significantly higher for CENPs than CEPs related to the factor of disengagement. Both CEPs and CENPs expressed feelings of exhaustion and not being appreciated. Even though the factor of disengagement was present in both groups, there were few comments by either group directly referring to apathy or boredom. Perhaps taking the time and effort to complete a questionnaire indicates that these respondents were not totally apathetic and indifferent to their profession.

The deterrent factor of disengagement was significantly higher for the CENP group than for the CEP group, suggesting that nurses who felt apathetic, alienated, or unmotivated in their practice did not attend as many CE events as those who were more enthusiastic or engaged with their practice. This is not surprising. Does disengagement and apathy deter nurses from participating in CE, or does the lack of participation in CE contribute to disengagement? How can employers and educators increase engagement in order to increase CE participation? Or, if employers and educators find a way to increase CE participation, will this increase engagement of nurses?

Consistent with Urbano and Jahns’ framework (1988), nurses in this study who indicate feelings consistent with disengagement, i.e., apathy and alienation, have a tendency to be CE nonparticipants, and not to seek change in their practice.
Disengagement may indicate unmet needs, but disengaged nurses are not addressing these needs through CE. Furthermore, they perceive no benefit in doing so. The lack of benefit factor also scored significantly higher for CENPs than CEPs. Urbano and Jahns state that the degree of satisfaction nurses feel about their current stage of professional development affects their decision to participate in CE. If nurses are highly satisfied in their current position and are able to meet their needs for achievement and recognition, they will not likely seek additional advancement. Conversely, if nurses are dissatisfied, they may be motivated to change and seek CE opportunities to do so. Dissatisfaction, as contrasted to disengagement, may imply at least some level of engagement. Dissatisfaction, then, could provide a motivation for CE participation (Urbano & Jahns, 1988).

Urbano and Jahns (1988) refer to professional development and CE as leading to career advancement. However, this is not a relevant motivator for nurses in this study. All of them are members of a collective bargaining unit in which the desire for promotion, a possible source of dissatisfaction identified by Urbano and Jahns, is based primarily on hours worked (seniority) with no consideration of participation in voluntary CE. The collective agreement addresses financial compensation but, currently, there is very limited monetary recognition of CE. Completion of an approved post-registration course in nursing will entitle a nurse to a wage allowance of just 17 cents per hour and completion of a baccalaureate degree in nursing, 21 cents per hour (SUN, 2002), which is just 4 cents more. Other CE is not recognized. The insufficient funding for nurses to attend CE and minimal reward for taking part discourages nurses from participating.
Disengaged nurses should be a serious concern for the public, professional associations, and employers. The quality of patient care provided by these nurses may be compromised. Disengagement relates closely to lack of morale, and creative ways must be found to help nurses in rural settings care about their nursing practice and value themselves and the unique work they do. Initiatives such as the SRNA Quality Workplace programs are helpful in rural facilities, and must be continued. Strong nurse leaders need to be developed and supported. Further study regarding the apathy, uncertainty, and frustration of rural acute care nurses as identified by the disengagement factor, is needed. If nurses are more engaged with their nursing work, CE participation will increase and ultimately job satisfaction and improved patient care will follow.

5.2.4.4 Importance of CE

Several respondents indicated that attendance at CE events was important and relevant to their professional nursing practice. Not unexpectedly, these comments were made by CEPs, as CEPs made decisions permitting them to overcome deterrents and participate in CE activities within the past year. It is apparent that many nurses feel professional responsibility for maintaining currency in their practice. This professionalism needs to be acknowledged and fostered by employers and educators.

5.2.5 Educational Opportunity Structure

Educational opportunity structure, as described by Urbano and Jahns (1984), includes the congruency between nurses’ interests and CE offered, fee structure,
availability and scheduling of CE programs, and location. These factors will influence nurses’ participation in CE.

5.2.5.1 Lack of Perceived Benefit

Lack of benefit was described by Scanlan and Darkenwald (1984) as “questioning of the relative worth and need for participation in organized continuing education” (p. 160). The items comprising the lack of benefit factor in the DPS relate to a perceived lack of monetary rewards or incentives as well as to personal satisfaction. A significant difference between CEPs and CENPs was found for the factor of lack of benefit (p=0.004), and this factor was ranked second overall. Of the ten individual items where CENPs scored significantly higher than CEPs, four related to the factor of lack of benefit. Cullen (1998) found the lack of benefit factor to be ranked fourth in influence in her study of nurses but differences between CEP and CENP were not reported. Scanlan and Darkenwald (1984) also found this factor to rank fourth.

In this study, CENPs were more likely than CEPs to be negatively influenced by the perception that no personal, professional, or monetary benefit will be gained through CE participation. One nurse, a CEP, commented on the lack of monetary recognition. CEPs and CENPs expressed the lack of perceived benefits of CE, related to both irrelevant topics at CE events and an inappropriate level of information. Consistent with the principle of adult learning that adults must see a practical relevance for learning (Cross, 1981), rural acute nurses need CE that they perceive as applicable to their practice. The Saskatchewan Registered Nurses Association’s (SRNA) intention to include a requirement for CE portfolio
development in the future may partially address the issue of relevance, since one of
the benefits of CE participation could be perceived to be maintenance of registration. However, recognition (monetary or in advancement) by the employer will still be lacking.

It is not surprising that the lack of benefit factor was significantly higher for the CENPs than for the CEPs. Questioning the worth and need for CE may be related to disengagement. Since learning must be perceived to be relevant in order for adults to want to participate (Cross, 1981), nurses who are disinterested in their work and unmotivated to provide excellent care will be less likely to participate in CE.

5.2.5.2 Cost and Funding for CE

The factor of cost ranked third overall for the entire sample, with no statistical significance between the two groups for cost as a deterrent. Glass and Todd-Atkinson (1999) found that tuition costs were the leading reason for not participating in CE. Cost was also found to be the main barrier to attending CE events for nurses in Illinois (Parochka, 1985). Generally, there is now less funding available to support CE attendance than previously, especially for CE outside the local area (Rice, 2001). Even urban nurses in Sparling’s (2003) study chose cost (described as both direct cost of programs, and indirect associated expenses) above several other factors on a given list of deterrents. For rural nurses, the additional expense of travel is implicit, as fewer programs are available in rural areas due to associated provider costs.
The issue of who should pay for CE is an ongoing one. The cost factor was not different for the two groups and nurses from both groups provided many comments related to lack of available and consistent funding by the employer, further substantiating cost as a perceived deterrent to both groups. It appears, however, that although cost is a concern and a deterrent for many nurses in the sample, it does not actually prevent all of them from participating in CE.

When asked how their employer usually handles attendance and expenses for CE events, many respondents replied that they were often required to trade shifts with co-workers or to attend during their time off without payment. Others reported having to take holiday time in order to attend. Employers do pay some CE expenses. Slightly over half (55.1%) indicated that their employer usually paid registration fees for CE events, but fewer than one third stated that travel and accommodation were usually covered. Remus et al. (2000) also found that many Saskatchewan nurses identified a lack of time and money available for CE. Nurses are required to pay for much of their own CE, whether in time, registration, or travel and accommodation costs.

Frustration with both insufficient funding and inconsistent guidelines for funding are issues. Although cost is a factor for employers due to limited budgets, communication and clear division of financial responsibilities would help to alleviate frustration due to perceived inconsistencies. This open communication between management and nursing staff would enhance job satisfaction (MacPhee & Scott, 2002), prompting nurses to become more interested in and engaged with their practice and, therefore, more likely to participate in CE.
In rural Saskatchewan, changes associated with health reform, such as decreased staffing levels and altered responsibilities, have had an impact on nursing as a profession, as well as individual nurses. Employers who do not encourage or promote participation in CE, and financial support that is inconsistent, surely further harms the morale of nurses. Feelings of isolation and lack of professional support (Beatty, 2001; Bellaver et al., 1999) experienced by rural acute care nurses will increase unless issues related to CE are addressed.

5.2.5.3 Staffing Shortage

The staffing shortage in nursing is not new and continues to haunt rural hospitals (MacPhee & Scott, 2002). Although not addressed specifically as a DPS factor, the staffing shortage is included in the work constraints factor, which was not significantly different for the two groups. However, many comments indicated that lack of staff to cover a shift was a deterrent to CE participation for both CEPs and CENPs. Difficulty trading shifts and obtaining time off to attend CE events prevented many nurses from attending and therefore from having the most recent research-based practice. The ongoing staffing challenge in rural facilities requires further research because of its effect on nurse retention and job satisfaction (MacPhee & Scott). Strategies to improve recruitment and retention in rural settings must be ongoing and one of these is CE opportunity. Consistently, studies show that CE improves job satisfaction and therefore retention. Job satisfaction and the factors influencing it have been identified as some of the more consistent predictors of retention of nurses (Stratton et al., 1995).
5.2.5.4 Distance

The highest scored single item on the DPS was “Because the program locations are often inconvenient”. This is consistent with the many comments about distance being a factor. Very often CE offerings are held at larger centres. Travel for nurses in rural areas is an issue in terms of cost, time off required to attend, and time away from family.

The issue of distance and the resulting professional isolation has been described in the literature (Beatty, 2001; Bellaver et al., 1999; Hegney & McCarthy, 2000; Morgan et al., 2002; Silverman et al., 2001; Stratton et al., 1995) and relate to what Urbano and Jahns (1980) call “educational opportunity structure”. Availability of CE opportunities must be recognized as affecting CE participation in a positive or negative way. In rural Saskatchewan, distance to CE events is a negative influence on the participation of many nurses and therefore must be addressed.

5.2.5.5 Lack of Quality

The lack of quality factor ranked sixth overall and was not significantly different between the CEP and CENP groups. For this sample of nurses this factor does not seem to be a major influence on CE participation, although a few CEPs and CENPs commented on poorly administered courses and poor quality of programs.

5.2.5.6 Suggested Methods of CE Delivery

Rural nurses recognize that urban nurses have more opportunities for CE, and have educators in their facilities. This further separates rural nurses professionally from their urban counterparts and increases the isolation they feel. It is noteworthy that although both CEPs and CENPs expressed a desire for more
employer funding for CE, they are aware that cost is a factor for employers as well as for themselves. Respondents made suggestions for alternative CE delivery methods that might be more cost effective for the participant, such as on-line courses, teleconferences, and mail-outs. Many see the importance of CE, while also recognizing the financial constraints of employers. Some respondents expressed a need for full time educators in all facilities. Even though individual rural facilities may not have the resources for this, arrangements could be considered for sharing educators between regions or facilities.

Methods of providing CE to nurses in rural settings must be examined. Inadequate educational opportunities for rural nurses have a negative influence on job satisfaction (Hegney & McCarthy, 2000). Tanner (2002) suggests alternatives such as self-directed and computer-based programs to reduce costs associated with live, instructor-led programs. Atack and Rankin (2002) found that web-based learning was effective and satisfactory for nurses who participated. Perhaps CENPs would participate in web-based CE as the deterrents of distance, cost, and staffing shortages are reduced. Because the development costs of web-based methods are high, there must also be support and recognition of the importance of CE by the government, educational institutions, and professional associations. MacPhee and Scott (2002) recommend rural hospitals develop partnerships with educational centres to enhance distance education, a possibility that could have promise in this province.

5.3 Limitations of the Study

The researcher recognizes the following limitations of this study:
1. The study had a relatively small sample size (n=136), making some types of analysis impossible. For example, with a larger sample, logistic regression could have been used to explore relationships among demographic variables and to predict participation or nonparticipation in CE.

2. The response rate, although not as high as desired, is consistent with other studies. In addition, the unknown exact number of eligible potential respondents makes the response rate somewhat inaccurate. A higher response rate would strengthen the findings of the study and increase generalizability.

3. No attempt was made to ensure representativeness in this study and so findings should be generalized with caution.

4. The possibility of inaccuracy of self-reported information is a limitation. Questioning people directly may bring into question the validity and accuracy of the information – one wonders how we can be sure that respondents feel or act the way they say they do (Polit & Hungler, 1991). However, data collected by surveys has been used for many nursing studies and is an acceptable and appropriate methodology for this study.

5. The instrument used was the most appropriate found by the researcher but may not have encompassed all reasons for nonparticipation in nursing CE.

5.4 Implications for Nursing Practice

This study has a number of implications for nursing practice.

5.4.1 Implications for Educators and Providers of CE

As long as nurses are apathetic, alienated, and bored with their nursing practice, they will not attend even the most available and relevant CE event. Nurses
must begin to care about their nursing practice, even if dissatisfied with it, in order to want to create change. CE sessions in motivation, self-esteem, stress management, team building, and valuing the work of nursing might be useful as an initial exercise, followed by other CE events that are relevant to particular areas of practice. These initial sessions will need to pique the interest of disengaged nurses, which will be challenging, but creative methods must be found.

On-line and distance courses should be increased. CE offerings should be increasingly provided by distance using available technology. Where appropriate technology is not available, such as areas with slow dial-up internet access, televised or teleconference methods should be supported. More decentralized offerings would also help decrease costs and distance for rural nurses. CE should focus on evidence-based practice as well advances in health care technology. CE must be interactive and participatory to prevent further isolation of rural nurses. If rural nurses are motivated and current in their practice, the people of rural Saskatchewan will be provided with high quality care.

These recommendations are consistent with Eustace’s (2001) suggestion that nurses in rural or remote areas should have access to technology and distance learning technology. Such programs are available elsewhere. For instance, Hill and Alexander (1996) developed a highly interactive program in which nurses in rural and remote areas of Australia used technology and self-directed learning with a high degree of satisfaction. Similar options need to be explored and developed for nurses in rural Saskatchewan.
5.4.2 Implications for Employers

Simply motivating nurses to become more involved and engaged in their nursing may not be the total answer for rural areas. Some nurses who are engaged and enthusiastic may seek to advance to management or other roles or seek further education in nursing. This may cause them to leave rural practice, even though they may continue to contribute to nursing. In order for rural acute care facilities to motivate and retain experienced nurses, systems must be set up so that not only can nurses become and remain motivated and enthusiastic about their rural nursing practice, but also have opportunities to use and build their talents within the rural facility. Lifestyle circumstances lead to many nurses working for long periods in rural Saskatchewan. They must be supported to stay current and engaged in their practice.

Employers must not only support CE but also ensure CE is applicable and perceived as relevant by nurses in the facility. For example, rural nurses could be encouraged to develop study groups to work on CE such as post-registration courses, postgraduate studies, or certification in specialty areas pertinent to the rural facility. Facilities should make technology available so nurses can participate in distance or on-line courses. This should not only encourage CE participation but could also contribute to scholarly thinking and research in the facility, benefiting the organization and the quality of patient care.

5.4.3 Implications for Unions

In order to address the lack of monetary incentive for CE, the feasibility of providing financial rewards for CE participation should be explored. Nurses should
be encouraged to seek better financial recognition for CE during contract negotiations.

5.4.4 Implications for Government

The issues surrounding who should pay for CE in nursing must be addressed. The participants in this survey made many comments about inconsistencies and lack of funding provided for CE by employers. These concerns increase feelings of isolation and alienation of rural acute care nurses. Comments indicated that rural nurses may feel ‘less than’ their urban counterparts. There must be open lines of communication between government and nurses about making CE a priority and its implementation for nurses in rural acute care settings. Tuition and registration reimbursement consistently corresponds with higher levels of job satisfaction among rural nurses (Stratton et al., 1995). There must be demonstrated consistent financial support, such as assured funding for nurses for CE and for CE providers for educational development, delivery, and evaluation.

5.4.5 Implications for Undergraduate Programs

In order to ensure that nursing graduates enter their profession valuing life-long learning, the importance of CE must be reinforced throughout undergraduate programs. The concepts of research, knowledge dissemination and evidence-based practice should be presented as a way of thinking and practicing in nursing.

5.5 Recommendations for Further Research

Results of this study lead to the following recommendations for future research.
1. More studies are needed around issues of motivation and disengagement. What motivates nurses to excel at their profession? What prevents them from doing so? What are the most effective strategies employers can implement to motivate nurses to seek excellence in their practice? Answers to these questions are critical to increasing participation in CE, and ultimately improving patient care and retention of nurses.

2. Influence of family responsibilities, such as childcare and eldercare on participation in CE must be examined further. If family responsibilities deter nurses from participating in CE, measures must be identified to facilitate participation.

3. The perceived lack of benefit that some nurses indicate as a deterrent to CE participation should be further examined. Are learning needs being appropriately assessed and addressed? What would the benefits be of providing monetary incentives to CE participation?

4. The impending requirement for developing a CE portfolio in order to maintain registration to practice in Saskatchewan will provide a valuable research opportunity. What types of CE will nurses engage in to maintain their licensure? Are the CE opportunities available for rural nurses in Saskatchewan appropriate and adequate?

5. Further study is required to determine the nature of the relationship between employment status and CE participation. Indeed, if nurses working full-time are more likely to participate in CE, then what would encourage and support part-time and casual employees to attend?
6. Further study is needed regarding the most efficient and beneficial methods of providing CE for rural acute care nurses. How can distance education be provided without further isolating nurses in rural and remote areas? What technology is appropriate?

5.6 Conclusion

Continuing education for rural acute care nurses is essential to the provision of safe, quality care for the rural residents of Saskatchewan. Complex factors affect nurses’ decisions to participate in CE. Many strategies, from strengthening the leadership of nurse managers to improving recruitment of new nurses, should be used to address the challenges of CE and rural nursing. Nursing in rural settings is a specialty in which general skills can be enhanced through appropriate and relevant CE. The frustration felt by rural acute care nurses as they are required to have a broad knowledge base was expressed by one nurse;

“In small hospitals, where you are required to work all areas, there are so many certifications and recertifications required that if you have to study one more thing, you will scream.” (CEP)

Although required certifications were not included in this study’s definition of optional CE, the stress felt by some nurses around these requirements may influence their desire to not participate in voluntary CE events.

The advent of primary care nursing as advanced practice may become a specialty for a select number of rural nurses who will be seen as specialists, with autonomy in their advanced role. However, not all rural acute care nurses will become primary care nurse practitioners, and the practice of all nurses must be supported and valued. Perceived inequality may increase the undervaluing of nurses
who are not advanced care practitioners. Rural nurses must also be supported in
terms of child and elder care, providing relevant CE opportunities, and providing
consistent CE funding.

The issue of disengaged nurses must be addressed. Nurses who are apathetic
and alienated from their practice must be supported, and methods must be found to
engage these nurses. CE may be a way to accomplish this and it may be also be the
result. In either case, the ongoing learning of rural acute care nurses will benefit the
public and the profession.
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Appendix A:

University of Saskatchewan Ethics Approval
UNIVERSITY OF SASKATCHEWAN
BEHAVIOURAL RESEARCH ETHICS BOARD

NAME: Barbara L. Smith, Nursing
Marg Olfert

BSC: 02-560

DATE: 26-Jul-2002

The University of Saskatchewan Behavioural Science Research Ethics Board has reviewed the Application for Ethics Approval for your study "The Similarities and Differences between Participants and Nonparticipants of Continuing Nursing Education" (02-560).

1. Your study has been APPROVED.

2. Any significant changes to your proposed study should be reported to the Chair for Committee consideration in advance of its implementation.

3. The term of this approval is for 5 years.

4. This approval is valid for five years on the condition that a status report form is submitted annually to the Chair of the Committee. This certificate will automatically be invalidated if a status report form is not received within one month of the anniversary date.

I wish you a successful and informative study.

Dr. Valerie Thompson, Chair
Behavioural Research Ethics Board
Appendix B:

Letter to Ethics Committee,
*Facility D* Health Region
October 1, 2002

XXXX
Executive Director of Community Services

Dear XXXX,

I am interested in conducting a study with acute care registered nurses at the XXX Hospital. This survey study will be part of the requirements of my Master's in nursing degree.

Enclosed please find 2 copies of the Ethics proposal, as well as components of the proposed questionnaire. I am also including a copy of the letter from the University of Saskatchewan Behavioural Research Ethics Board, which indicates their approval of the study.

I am requesting approval from your Ethics Committee to conduct this study, and I shall await your reply.

Thank you.

Sincerely,

Marg Olfert

1809 17th Ave W
Prince Albert, SK S6V 6Y9
Phone (306) 763-3437
Email: m.olfter@sasktel.net
Appendix C:

Facility D Health Region Ethics Approval
2002/12/04

Ms. Marg Olfert
1808-17th Avenue West
Prince Albert Saskatchewan

Re: Study: Attitudes/Availability of Continuing Education
    Acute Care

Dear Ms. Olfert:

Please accept this letter as the Ethics Committee approval for your proposal to go forward. We had provided you with tentative and verbal approval to proceed in order for you to continue your research as part of your Masters program. We also acknowledge that your research design and the ethics of the design have already been reviewed by the University of Saskatchewan’s body.

We would like to make one point which was raised in our review of your project. The issue has to do with your relative closeness to the study group and the precautions taken by you in the research to insure that your relationship with this group does not in any way effect the results. To a large degree your study design has addressed this issue and we encourage you to follow this design to the letter. This should address our concerns.

Thank you again for submitting your proposal and good luck in your quest for higher education.

Sincerely,
Appendix D:

Survey Cover Letter
November 6, 2002

Dear Acute Care Registered Nurse:

You are a nurse from one of four hospitals in Saskatchewan that were chosen to participate in a nursing study. The study seeks to determine why nurses participate and do not participate in continuing education. As a Master’s student in the College of Nursing at the University of Saskatchewan, I want to understand how acute care registered nurses feel about the role of continuing education in their practice. For the study to be most useful, it is important that each questionnaire be filled out and returned. Responses are needed both from nurses who do attend continuing education events and those who, for whatever reason or reasons, do not attend continuing education events.

I hope that you will chose to participate in the study. It will take you 10 – 15 minutes. Please be assured that your participation in this study is completely voluntary, and whether or not you participate will have absolutely no bearing on your employment or future continuing education opportunities.

You are assured of complete confidentiality. The questionnaire itself will have a number for tabulation purposes only, and your name will never be placed on the questionnaire. The return of the survey implies consent to participate in the study, and the understanding that the data will be used in the manner described below.

The results of this research will be made available to members of the faculty of the College of Nursing at the University of Saskatchewan, as well as the regional health authorities, and other interested parties. Results will also be published in nursing and/or research journals, with confidentiality of participants and locations being maintained. A summary of results will be sent to each participating facility. You may receive your own copy by checking “copy of results requested” on the sheet provided, and printing your name and address in the space provided. This page will be separated from the rest of the questionnaire as soon as it is received. Please do not put identifying information on the questionnaire itself.

Please keep this cover letter for your records and return the completed questionnaire to any one of the green-labeled boxes provided at your facility by December 1, 2002.

The University of Saskatchewan Behavioural Research Ethics Board has approved this study.

I would be most happy to answer any questions you might have. Please write, email, or call. My phone number is (306) 763-3437, and my email address is m.olfert@sasktel.net. You are also welcome to contact my supervisor, Professor Barbara Smith at (306) 966-6261, or the Office of Research Services at the University of Saskatchewan at (306) 966-8575.

Thank you for your help with this important study.

Sincerely,

Marg Olfert, RN, BSN, MN (candidate)
1809-17th Ave W
Prince Albert, SK S6V 6Y9
Appendix E:

Questionnaire
Continuing Education Questionnaire

November 2002

Please place your completed questionnaire in the envelope provided, seal the envelope, and place it in any one of the drop boxes in your hospital.

Marg Olfert, RN, BSN, MN(c)
Master’s Thesis Study
Part I: Deterrents to Participation Scale (DPS) Questionnaire (Developed by Scanlan & Darkenwald [1984])

Most nurses have the opportunity to attend a variety of continuing education events. You may or may not have participated in some of these events in the past. Think back to times over the past year when you did not desire to participate in formal continuing education activities, or were unable to participate in formal continuing education activities.

For the purposes of this study, formal continuing education activities does not include certifications and inservices required by your employer. Please consider only optional or voluntary events, which may have been presented by your facility or by an outside organization.

Below are some statements that provide possible reasons for not participating in continuing education. For each statement, indicate by circling the appropriate number how influential each reason was in contributing to your decision not to attend or participate in formal continuing education events during the past year.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Not Influential</th>
<th>Slightly Influential</th>
<th>Somewhat Influential</th>
<th>Moderately Influential</th>
<th>Very Greatly Influential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Because sometimes I just don’t have the energy or stamina</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Because I don’t always have the discipline to set my learning priorities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Because I tend not to be that active in professional activities</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Because I’m already getting a bit “burned out”</td>
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<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Because I don’t like to attend programs alone</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Because there is little encouragement for participation from my peers</td>
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<td>8. Because the program(s) tend to be of poor quality</td>
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</tr>
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<td>9. Because the program sponsor(s) had a poor reputation</td>
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</tr>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Because my previous experiences with these programs have been disappointing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Because the methods of instruction used are unsatisfactory to me</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
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<td>4</td>
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</tr>
<tr>
<td>15. Because the program content was not relevant to my practice needs</td>
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<td>2</td>
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<td>4</td>
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</tr>
<tr>
<td>16. Because I tend not to be much of a participant in outside activities</td>
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<td>3</td>
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<td>5</td>
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<td>18. Because sometimes I lack confidence in my learning abilities</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Please Circle the number that best describes your answer to:

"Why do I not attend or participate in continuing education events?"

<table>
<thead>
<tr>
<th>Question</th>
<th>Not Influential</th>
<th>Slightly Influential</th>
<th>Somewhat Influential</th>
<th>Moderately Influential</th>
<th>Very Greatly Influential</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Because attendance generally infringes upon my family time</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Because I tend to feel guilty when away from my home or family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. Because it is often difficult to arrange for child care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. Because my family/spouse objects to my outside activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. Because other things happen to have a higher priority in my life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. Because with all my other commitments, I just don't have the time</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. Because my employer does not assist with the cost of attending</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. Because I can't afford the registration or course fees</td>
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<td>27. Because the indirect costs (food, travel, etc) tend to be excessive</td>
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<td>29. Because the program locations are often inconvenient</td>
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<td>31. Because there are better things to spend my time and money on</td>
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<td>32. Because I can generally keep up-to-date on my own</td>
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<td>33. Because there are few incentives or rewards for my participation</td>
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<td>34. Because a majority of my learning needs are satisfied by on-the-job instruction</td>
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</tr>
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</tr>
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<td>36. Because the program(s) were scheduled at inconvenient times</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37. Because the demands of my practice leave no time</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38. Because it is difficult to get others to cover for me in my absence</td>
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</tr>
<tr>
<td>40. Because I don't feel the need to participate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Part II Demographics

*Please enter today's date: Day: _______ Month: _______ Year: _______

In order to make the results of this study most meaningful, it would be helpful to know a little about you. Please answer the questions below. Remember that you will not be identifiable.

A. Nursing Experience

1. What is the total number of years you have worked as a nurse? _______

2. What is the current area of clinical practice in which you work the most number of hours (primary area)?
   (e.g. Medicine, Obstetrics, Emergency, etc)
   Primary area _______
   - If you currently practice in more than 1 area, name the areas in which you work the second and third most number of hours: Second _______ Third _______

3. How long have you worked in your current (primary) area of nursing? _______

4. What is your current employment status in your primary position (please check one):
   - Full Time ______
   - Part time ______
   - Casual ______
   - Other (Please specify) _______

5. What are the usual shifts that you have worked during the past year?
   (Please include all positions, and check all that apply):
   - 8-hour Days ______ 12-hour Days ______ 8-hour Evenings ______
   - 8-hour Nights ______ 12-hour Nights ______ Other (Please specify) _______

B. Continuing Education

6. Have you participated in any form of optional or voluntary continuing education within the past year?
   (Please do not include certifications and inservices required by your employer.)
   Yes ______ No ______
   (If no, please go to question 8)
7. If yes, please fill in the table below (use other side of page if necessary):

<table>
<thead>
<tr>
<th>Program / Event</th>
<th>Description</th>
<th>Length of Program (hours, days, weeks, etc)</th>
<th>Time Off Paid (yes/no)</th>
<th>Tuition Paid By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: If you attended a 2-hour workshop on wound care management, offered by your health authority (employer), on an unpaid day off, your response would look like this:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wound Care Management</td>
<td>Hands-On Workshop</td>
<td>2 hours</td>
<td>on day off</td>
<td>employer</td>
</tr>
</tbody>
</table>

8. How does your employer usually handle attendance / expenses at formal Continuing Education events?

Do not consider certifications and inservices required by your employer. (Check all that apply):

- [ ] Time off with Pay (i.e. paid education leave)
- [ ] Time off without pay (i.e. unpaid education leave, unpaid personal leave, etc.)
- [ ] Must take holiday
- [ ] Must trade shifts
- [ ] Must attend on days off
- [ ] Employer pays registration fee for event
- [ ] Employer pays travel / accommodation expenses if event not local
- [ ] Other

Comments

9. Do you have any other comments regarding either your participation in continuing education or continuing education participation in general that you feel would be useful for the researcher?
C. Personal Information

10. What is your gender? Female ____ Male ____

11. What is your current marital status?
   Single ____ Married ____ Divorced ____ Widowed ____ Living with a partner ____
   Other ____

12. What is your date of birth? Day _______ Month _______ Year _______

13. Do you have caregiving responsibilities for children (aged up to 18 years)?
   Yes ____ No ____ (If no, go to question 15)

14. How many dependent children (aged up to 18 years) do you have? _______

   What are their ages? __________________________________________

15. Do you have caregiving responsibilities for adult(s)? Yes ____ No ____

   Please describe: ____________________________________________

16. What type of program led to your first being licensed to practice as a registered nurse?

   Diploma ____
   Degree ____
   Other (please specify) ______________________

17. What year did you first become licensed to practice as a registered nurse? _______

18. Some nurses obtain education beyond their initial program. Please indicate what, if any, further nursing education you are taking, or have taken?

   None ____

   Nursing Degree (e.g. BSN)  ___________________  _______

   Master’s Degree (e.g. MN)  ___________________  _______

   Other (include certifications)  ___________________  _______
19. Please indicate what, if any, non-nursing education you are taking or have completed:

None ____

<table>
<thead>
<tr>
<th>Degree (Please specify)</th>
<th>Currently Enrolled</th>
<th>Completed (Include year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>__________</td>
<td>__________</td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td>__________</td>
<td>__________</td>
</tr>
</tbody>
</table>

20. What is your family’s annual household income before taxes (gross)?

$30,000 – 40,000 __________
$41,000 – 50,000 __________
$51,000 – 60,000 __________
$61,000 – 70,000 __________
$71,000 – 80,000 __________
$81,000 – 90,000 __________
$91,000 – 100,000 __________
$101,000 + __________

21. Please make any additional comments here:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Once again, thank you for your participation!
If you would like a copy of the summary of the results of this study, please:

1. Supply your name and address

2. Detach this sheet

3. Place it separately in the green-labeled collection box.

Name_____________________________________________________________________

Address___________________________________________________________________

_________________________________________________________________________
### Appendix F: Deterrents to Participation Scale Items and Related Factors

<table>
<thead>
<tr>
<th>DPS Item</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Because sometimes I just don’t have the energy or stamina.</td>
<td>Disengagement</td>
</tr>
<tr>
<td>2. Because sometimes I’m just tired of lectures and formal schooling.</td>
<td>Disengagement</td>
</tr>
<tr>
<td>3. Because I don’t always have the discipline to set my learning</td>
<td>Disengagement</td>
</tr>
<tr>
<td>priorities.</td>
<td></td>
</tr>
<tr>
<td>4. Because I tend not to be that active in professional activities.</td>
<td>Disengagement</td>
</tr>
<tr>
<td>5. Because I’m already getting a bit “burned out”.</td>
<td>Disengagement</td>
</tr>
<tr>
<td>6. Because I don’t like to attend programs alone.</td>
<td>Disengagement</td>
</tr>
<tr>
<td>7. Because there is little encouragement for participation from my peers.</td>
<td>Disengagement - Cost</td>
</tr>
<tr>
<td>8. Because the program(s) tend to be of poor quality.</td>
<td>Lack of Quality</td>
</tr>
<tr>
<td>9. Because the program sponsor(s) had a poor reputation.</td>
<td>Lack of Quality</td>
</tr>
<tr>
<td>10. Because the programs tend to be geared the wrong level for me.</td>
<td>Lack of Quality</td>
</tr>
<tr>
<td>11. Because my previous experiences with these programs have been</td>
<td>Lack of Quality</td>
</tr>
<tr>
<td>disappointing.</td>
<td></td>
</tr>
<tr>
<td>12. Because the methods of instruction are unsatisfactory to me.</td>
<td>Lack of Quality</td>
</tr>
<tr>
<td>13. Because I’m not willing to sacrifice what little leisure time I have.</td>
<td>Disengagement - Lack of Benefit</td>
</tr>
<tr>
<td>14. Because I do not find participation to be personally satisfying.</td>
<td>Lack of Quality</td>
</tr>
<tr>
<td>15. Because the program content was not relevant to my practice needs.</td>
<td>Lack of Quality</td>
</tr>
<tr>
<td>16. Because I tend not to be much of a participant in outside activities.</td>
<td>Disengagement</td>
</tr>
<tr>
<td>17. Because there was insufficient lead time to make arrangements.</td>
<td>Lack of Quality - Work Constraints</td>
</tr>
<tr>
<td>18. Because sometimes I lack confidence in my learning abilities.</td>
<td>Disengagement</td>
</tr>
<tr>
<td>19. Because attendance generally infringes on my family time.</td>
<td>Family Constraints</td>
</tr>
<tr>
<td>20. Because I tend to feel guilty when away from my home or family.</td>
<td>Family Constraints</td>
</tr>
<tr>
<td>21. Because it is often difficult to arrange for childcare.</td>
<td>Family Constraints</td>
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<tr>
<td>22. Because my family / spouse objects to my outside activities.</td>
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</tr>
<tr>
<td>23. Because other things happen to have a higher priority in my life.</td>
<td>Family Constraints - Lack of Benefit</td>
</tr>
<tr>
<td>24. Because with all my other commitments, I just don’t have the time.</td>
<td>Family Constraints - Work Constraints</td>
</tr>
<tr>
<td>25. Because my employer does not assist with the cost of attending.</td>
<td>Cost</td>
</tr>
<tr>
<td>26. Because I can’t afford the registration or course fees.</td>
<td>Cost</td>
</tr>
<tr>
<td>27. Because the indirect costs (food, travel, etc) tend to be excessive.</td>
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<td>29. Because the program locations are often inconvenient.</td>
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</tr>
<tr>
<td>31. Because there are better things to spend my time and money on.</td>
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</tr>
<tr>
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<tr>
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<td>Disengagement - Lack of Benefit</td>
</tr>
</tbody>
</table>
Appendix G:

Letter of Permission to Use Deterrents to Participation Scale
Thank you for your interest in the DPS. Unfortunately, the scale is not available commercially. However, you have my permission to use it for any noncommercial purpose, including your research. I only ask that you cite the original source (AEQ) and use my correct middle initial (Scanlan, CL vs the incorrectly published Scanlan, CS).

In terms of obtaining the tool, you will have to either reconstruct it from the 40 items items provide in the journal article or from the appendix in my 1982 dissertation (available from Proquest/UMI at http://www.umi.com) Factors Deterring Allied Health Professional from Participation in Continuing Education.

Dr. Craig L. Scanlan
Director, MS and PhD in Health Sciences
University of Medicine and Dentistry of NJ
School of Health Related Professions
65 Bergen Street
Newark, NJ 07107
Program Office: 973-972-8576
Program Fax: 973-972-7854
Direct Voice & Messaging: 732-670-4958
E-mail: scanlan@umdnj.edu
Appendix H:

Posters
Attention
Acute Care
Registered Nurses:

You are invited to participate in a Nursing Study about Continuing Education

Here’s how:

1. Pick up the envelope with your name on it**
2. Take 10 – 15 minutes to complete the survey (further information in the envelope)
3. Place the completed survey in one of the Green- Labeled Boxes by December 4, 2002

**If you work on other wards, please also check there for your envelope
**If your name has been inadvertently missed please take one marked ‘Extra’ and complete it.

Thanks for participating.
Marg Olfert RN, BSN, MN(c)
Attention
Acute Care
Registered Nurses:

You are invited to participate in a Nursing Study about Continuing Education

Here's how:

1. Pick up an envelope found

2. Take 10 – 15 minutes to complete the survey (further information in the envelope)
3. Place the completed survey in the Green-Labeled Box by December 4, 2002

Thanks for participating.
Marg Olfert RN, BSN, MN(c)
Appendix I:

Collection Box Notice
Acute Care RN’s:

Please place your completed nursing survey here by December 4, 2002:

>  

>  

>  

Thank you again!
Appendix J:

Letter to Saskatchewan Union of Nurses President
Fax No: (306) 522-4616
Attention: Rosalee Longmoore

Saskatchewan Union of Nurses

November 26, 2002

Rosalee:
As discussed on the phone this morning, here is the list of Managers in the four facilities in which I’ve asked Acute Care RN’s to fill out a survey regarding Continuing Education.

XXXXX Director of Care

XXXXX Acute Care Coordinator

XXXXX Director of Nursing

XXXXX Nursing Unit Manager, Intensive Care
XXXXX NUM Surgery
XXXXX NUM, Pediatrics
XXXXX NUM, OR / RR
XXXXX NUM, Emergency
XXXXX NUM, Obstetrics
XXXXX NUM, Dialysis / Chemo
XXXXX NUM, Ambulatory Care / Day Surgery

I believe that a letter from SUN endorsing this study and asking acute care registered nurses to fill out a questionnaire would increase the response rate. This would help to ensure accurate and useful results regarding continuing education participation in Saskatchewan.

Thank you very much.

Marg Olfert
Prince Albert, SK
Phone (306) 763-3437
Appendix K:

Letter from Saskatchewan Union of Nurses President
November 27, 2002

Dear

We understand that one of our members, Marg Olfert, who is employed at Prince Albert Victoria Hospital in ICU, is working on a paper in order to obtain her Masters. The paper is to examine what deters nurses who are working in acute care from accessing continuing nursing education.

Access to Continuing Nursing Education is identified anecdotally and in research as a factor in job satisfaction of nurses. It was an issue in our recent collective bargaining with SAHO.

The Saskatchewan Union of Nurses endorses this project, as it is an issue identified by our members as contributing to job satisfaction.

We would ask that you encourage SUN members working on units under your management to complete the questionnaire so that the response rate will ensure accurate and useful data about continuing education in Saskatchewan.

Yours truly,

Rosalee Longmoore RN
SUN President

c.c. SUN Board of Directors

SUN is affiliated with the Canadian Federation of Nurse’s Unions, the Saskatchewan Federation of Labour and the Canadian Labour Congress
Appendix L: Marital Status of Entire Sample

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>f</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Married</td>
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<tr>
<td>Divorced</td>
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<tr>
<td>Single</td>
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<td>6.6</td>
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<tr>
<td>Living with Partner</td>
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<td>2.2</td>
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<tr>
<td>Widowed</td>
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<td>1.5</td>
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<tr>
<td>Other</td>
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<td>2.2</td>
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