2008

# NURSING CAREER STRESS PREVENTION BY BACCALAUREATE NURSING EDUCATION: FACULTY VIEWS

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# NURSING CAREER STRESS PREVENTION BY BACCALAUREATE NURSING EDUCATION: FACULTY VIEWS

(Spine Title: Nursing Career Stress Prevention and Nursing Education)

(Thesis Format: Integrated-Article)

by

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Graduate Program in Nursing

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Science in Nursing

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**Abstract**

Nursing career stress (NCS) will continue to gain prominence as impacts of the nursing shortage worsen. Measures targeting NCS are well researched, although predominately focus on the existing workforce and/or workplaces. Little exploration has occurred about preventing nurses' stress *prior to* workforce entry. Baccalaureate nursing education (NE) has unparalleled access to, and influence with, *nursing students* (NS). It is thus proposed that explicitly preparing NSs for realities of nursing practice and work life can prevent exposures to NCS, ameliorate responses to it, and prevent its negative outcomes. Stress prevention/management has previously been incorporated into baccalaureate curricula; however, in all cases except one, NSs' stress was the sole focus. The potential role of NE in preventing its graduates' future NCS has yet to be explored.

This descriptive study was part of a larger study about NCS prevention (NCSP). The specific purpose of this study was to begin exploring NE's potential participation in NCSP, by garnering views of baccalaureate nursing faculty about NCS, and NE's past, present, and potential roles, opportunities, barriers, and responsibilities in NCSP. The study was theoretically framed on a researcher-developed model that demarcated potential modalities for NE-driven NCSP. Using a researcher-developed instrument, 215 faculty teaching in baccalaureate nursing programs in Ontario were surveyed.

Nursing education was not perceived by faculty as significantly impacting NCS; however, NE was perceived to share responsibility for, and be capable of doing so; therefore, *can* and *should* explicitly expand its role in NCSP, focusing on that specific to stressors and responses to them. Several barriers to NE's role expansion were noted, including: a lack of understanding of NE's current role and what an expanded role could be; a knowledge deficit among nurse educators about the subject; a lack of room in current curricula; a shortage of faculty; and faculty's heavy workloads and time constraints. Current curricula, especially the clinical portions, were seen as ineffectively impacting graduates' NCS and/or negatively contributing to it, and warranting critical assessment and radical revision.

There are no simple solutions for NCS or the nursing shortage. However, this research gives impetus for further study of NE's potential involvement in NCSP, and

provides initial direction for NE to expand its involvement in NCSP through explicitly incorporating NCS and NCSP content and processes into the baccalaureate curriculum.

**Keywords:** Baccalaureate nursing education, nursing career stress, stress prevention.

## CO-AUTHORSHIP

Jason McCready completed the following work under the supervision of Dr. Mary-Anne Andrusyszyn and Dr. Carroll Iwasiw.

## ACKNOWLEDGEMENTS

This thesis research was supported financially by the Provincial Nurse Educators Interest Group of the Registered Nurses Foundation of Ontario Graduate Research Award, 2008 (Administered by the Registered Nurses Foundation of Ontario) and the Iota Omicron Chapter of Sigma Theta Tau International Graduate Research Grant, 2007.

I gratefully acknowledge Dr. Mary-Anne Andrusyszyn and Dr. Carroll Iwasiw for all of their time and expert input for this thesis and other projects over the time of my Masters degree. I also would like to acknowledge the many other professors and administrative personnel in the School of Nursing who were integral to the fulfilment of this thesis and this degree.

I would also like to acknowledge my extended family, friends, academic and clinical colleagues, and professors for their time, input, and encouragement.

I offer a very special acknowledgement and appreciation to my wife Laura, and my daughters Madelaine and Alexandra, for their love, encouragement, and understanding throughout this process. This could not have happened without your support. I also acknowledge her for when she was 'wearing her professional hat', as Dr. Laura Stephenson, whose academic expertise, feedback, and advice was repeatedly given in proof-reading and assisting to develop this thesis and other papers. Many thanks.

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# PART ONE: INTRODUCTION

Nursing career stress (NCS) will continue to gain prominence as impacts of the nursing shortage worsen, as the two are intractably linked. Nursing career stress and measures targeting it are highly researched, although almost exclusively focused on the existing nursing workforce and/or nursing workplaces. There has been little exploration about preventing NCS *prior to* workforce entry; a time in which baccalaureate nursing education (NE) has unparalleled access to, and influence with, *nursing students* (NS). It is thus proposed that explicitly preparing NSs for realities of clinical practice and working life can prevent NCS exposures, ameliorate responses to it, and prevent its negative outcomes. There are multiple examples in which stress prevention/management components were built into baccalaureate curricula; however, in all cases except one, the sole explicit focus was NSs' stress. The potential role of NE in preventing its graduates' future NCS has not yet been explored.

This study begins to explore NE's involvement in NCS prevention (NCSP), by garnering views of baccalaureate nursing faculty about NCS and NE's past, present, and potential roles, opportunities, barriers, and responsibilities in NCSP. To preface the manuscript, this introductory section contains brief reviews of the fundamental concepts and processes of stress, and its applications in the general occupational setting and in the specific occupation of nursing. Preventative measures will also be briefly reviewed in terms of general and nursing-specific occupational stress.

## Stress as a Construct and Process

Everyone deals with stress and its sequelae on a daily basis, but what exactly is it? Stress is a construct evident across diverse disciplines (e.g., medicine, nursing, psychology, sociology), commonly operationalized as a process comprised of three basic components: stressor, response, and outcome. All facets of the stress process are highly variable depending on characteristics of involved individual(s), and the situational and broad contexts in which the process occurs (Lazarus, 1966; McGrath, 1970a).

The stress process commences with an individual's exposure to a potential source of stress in his/her environment (i.e., *potential stressor*), and continues when the individual *physically* and *cognitively interacts* with it, and *appraises* and *perceives* it as a substantive and negative stimulus (i.e., *perceived stressor*) requiring a response (Cooper

& Marshall, 1976; Ivancevich & Matteson, 1980; Jex & Beehr, 1991; Lazarus, 1966).

Responses to perceived stressors include *stress response manifestations*, *problem-directed responses*, and *coping responses*. *Stress response manifestations* are non-specific, autonomic nervous system-based, involuntary reactions to perceived stress; exibited behaviourally, psychologically, and physiologically. These signal the individual to the need for other responses, and, in 'fight-or-flight' fashion, prepare him/her to respond (Selye, 1950, 1976). *Problem-directed* and *coping responses* are voluntary, although not necessarily conscious, actions occuring simultaneously, iteratively, and dynamically. *Problem-directed responses* directly target the stressor to resolve, nullify, and/or depotentiate it as a source of stress. *Coping responses* are emotion-based reactions to deal with the 'stressfulness' of the situation (Clarke & Cooper, 2000; Edwards, 1998; Ivancevich & Matteson, 1980; Lazarus, 1966; McGrath, 1970b).

Outcomes of stress may manifest in individuals and/or their environment, some short-lived with minimal impact, others enduring and damaging. Effective and adaptive responses lead to positive/neutral outcomes, while ineffective or maladaptive responses result in deleterious ones (Clarke & Cooper, 2000). Stress outcomes include *situational outcomes*, *strains*, and *consequences*. *Situational outcomes* are real-time end-products of distinct stress situations, and from a behaviourist perspective, give the individual confirming/refuting feedback about the stressors, the responses chosen and used, and effectiveness thereof. Lasting deleterious outcomes (i.e., strains, consequences) are the result of prolonged, repeated, chronic, and/or cumulative situational stress (Clarke & Cooper; Jex & Beehr, 1991; McGrath, 1970b). *Strains* are short-term outcomes resulting from *emotional and physical toll* incurred by exposures and responses to stress. They are low to moderately-impacting and enduring indicators of ineffectively managed stress; yet, are precursors of long-term stress outcomes (i.e., consequences) if not dealt with effectively (Ivancevich & Matteson, 1980; Jex & Beehr; McGrath). *Consequences* are advanced or terminal states of dysfunction/disease from chronic, ineffectively managed strains. They are highly impacting and more enduring than their short-term precursor. Manifest consequences are more impervious to resolution or cure, leaving symptom and impact management as primary options (Clarke & Cooper; Cooper & Marshall, 1976).

## Occupational Stress

Much of adult life is spent at work, and while it can be a fulfilling and positive force, it can also be an important and powerful source of stress. Occupational stress has been highly discussed and researched across many disciplines, and the study of its components and processes has suggested an important conclusion: Although some stress is necessary and inevitable in working life, many causes of, responses to, and outcomes of occupational stress can be managed, improved, and/or most importantly, prevented.

### *Occupational Stress Prevention*

Taking a preventative medicine-based approach and viewing occupational stress as a *chronic disease process*, many have asserted it to be substantially preventable and have promoted a risk-reducing, preventative approach in addressing it over strict reliance on after-the-fact (and thus its reactive and palliative) management (Biron, Ivers, Brun & Cooper, 2006; Clarke and Cooper, 2000; Cooper and Marshall, 1976; Quick, Quick & Nelson, 1998). Depending on what part of a disease process is targeted, prevention is delineated into three modes: primary, secondary, or tertiary prevention (Michie & Williams, 2003; Quick et al.; Sauter & Murphy, 2006). As applied to the work setting, *primary* prevention is stressor-targeted to "reduce, modify, or manage the intensity, frequency, and/or duration" of work-related stressors (Quick et al., p. 253). *Secondary* prevention is response-targeted and focused on positively modifying individual responses to perceived occupational stressors. *Tertiary* prevention is outcome-targeted to minimize negative symptomatology and progression of strains and consequences resulting from work stress. Just as the stress process may be demarcated into three main components (viz., stressor, response, and outcome) and sub-components within each (e.g., stressor = potential stressor + individual-stressor interaction + perceived stressor), each mode of prevention (viz., primary, secondary, and tertiary) can be further delineated according to which sub-component is targeted within a given main facet of the stress process. Preventative measures can therefore be determinedly focused on a specific target within the stress process (e.g., potential stressors, coping responses).

## Nursing Career Stress

Stress experienced by nurses is generally conceptualized using narrow-focused terminologies such as *job*, *work*, *work-related*, and *occupational* stress, and is

operationalized in research and practice as that which is experienced while at work and/or linked directly to work. *Nursing career stress* is described by McCready (2008a) as a nursing-focused, broadened, and holistic re-conceptualization of the individual stress process/structure foundational to most stress models (viz., stressor, response, outcome, and modifiers of the stress process). McCready defined NCS as "a dynamic process involving the reciprocal interaction between...RNs and their professional *career*-related environments....influenced by their unique individual characteristics, the context in which they live *and* practice, and the situation-specific interactions between...individuals and their contexts/environments (p. 9).

Within nursing, NCS has become a high priority for healthcare organizations and researchers alike. Nursing is consistently classified as a high stress profession (Charnley, 1999; Jamal & Baba, 2000; McVicar, 2003; Shields & Wilkins, 2006), and exacerbating this, the nursing workforce is aging, many nurses are approaching retirement, and others are leaving high-need areas or the profession outright (Jamal & Baba; Ontario Ministry of Health and Long-Term Care [OMHLTC], 1999, 2001, 2003; Registered Nurses' Association of Ontario [RNAO], 2000; Shields & Wilkins). The need for nursing care, however, continues to increase with the aging and subsequent amplified health needs of the general population (Canadian Nurses Association [CNA], 2002).

Nursing career stress is also a highly pertinent issue as it is clearly associated with one of the greatest issue of our time in healthcare: the nursing shortage (Baumann et al., 2002; Shields & Wilkins, 2006; American Association of Colleges of Nursing, 2001). The relationship between NCS and the nursing shortage is a cyclical one; NCS is blamed as a major contributor to it, and in turn, the nursing shortage has and will continue to exacerbate NCS. Concurrent with nurse retention/attrition issues, the recruitment and education of potential new nurses has not kept up with the demand (OMHLTC, 2003; RNAO, 2000; CNA, 2002); thus increasing pressure on the NE system to increase enrolment and graduation rates. This comes without sufficient financial support for increasing enrolments, with limited physical facilities, and with a dramatic and worsening faculty shortage (Bartfay & Howse, 2007; Kelly, 2002).

The nursing shortage cannot be resolved solely by increasing the pool of nurses. Retention-focused initiatives that support those already practicing and of those preparing

to enter practice are of utmost importance, and arguably must precede, or at minimum, coincide with recruitment efforts. In order for retention-focused efforts to be successful, NCS must be substantively addressed. But therein lies the rub: to optimally manage and prevent NCS, there must be greater understanding not only of NCS itself, but also of *who* can be agents of positive change and *how* this change can be effected. The concerted and collaborative efforts of governments, nurse-employing organizations, nursing regulatory and professional bodies, clinical nurses, nurse researchers, and nurse educators are needed in order to gain this necessary insight.

***Nursing Career Stress Prevention***

There is no argument NCS is of dire importance to individual nurses, the health care system and its consumers, and to the nursing profession. There is likely little disagreement that NCS is substantially preventable, and stress prevention is potentiated if it occurs before its onset and progression (Karasek & Theorell, 1990). In light of the consistent references to NCS and its negative outcomes in the nursing workforce, optimal NCSP should thus occur *prior to workforce entry*. Nursing education has unparalleled access to, and influence with, NSs at a time prior to beginning their practice careers and before exposure to NCS. Thus, NE is proposed as potentially effective agent in NCSP, yet is altogether unexplored. Therefore, a three-pronged attempt was made to address this gap in the literature. First, based on a comprehensive review of the literature, a theoretical model, entitled the Nursing Career Stress Prevention Model for Baccalaureate Nursing Education, was developed to delineate ways in which NE can potentially participate in NCSP (McCready, 2008a), and as the theoretical framework for two distinct descriptive, exploratory studies. As a *needs assessment* for NCS and NCSP content and processes, the first study involved an NCS/NCSP-focused assessment of nine of the 13 basic baccalaureate nursing curricula in Ontario for the presence and qualities of NCS and NCSP-associated subject matter (McCready, 2008b). Baccalaureate nursing faculty are most intricately involved in preparing nursing students for careers in nursing, and as such, the second study garnered the views of 215 baccalaureate nursing faculty in Ontario about NCS and past, present, and potential future roles, responsibilities, limitations, and opportunities for NE in NCSP. This manuscript will focus exclusively on the latter of the two studies.

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# PART TWO: MANUSCRIPT

# NURSING CAREER STRESS PREVENTION: FACULTY VIEWS

## Introduction and Background

Nursing retention and quality of worklife are prime topics in the nursing literature, and will be even more so as the current nursing shortage worsens. Nursing stress is seen as inherent to nurses' practice experiences and satisfaction with their work, and contributory to attrition from high-need practice areas and the profession outright (Baumann et al., 2002; Hodges, Keely & Grier, 2005; Hays, All, Mannahan, Cuaderes & Wallace, 2006; O'Brien-Pallas et al., 2006). Nursing stress is also cyclically linked to the nursing shortage, seen as a causative factor, and, in turn, exacerbated by it.

Nursing is consistently deemed a high-stress profession, and individual nurses and the collective are showing symptoms of chronic ineffectively managed stress (Jamal & Baba, 2000; Shields & Wilkins, 2006; Sulsky & Smith, 2005). Common sources of NOS include stressors related to *physical workload* (Baumann et al., 2002; Hays et al., 2006); *work environments and resources* (Hall, 2004; Kalliath & Morris, 2002; Tyson, Pongruengphant, & Aggarwal, 2002); *control and autonomy in nursing practice* (Hoffman & Scott, 2003; Sengin, 2003); *moral, ethical, and emotional demands* (Ehrenfield & Cheifetz, 1990; McNeely, 2005); *personal and professional relationships and interactions*, including *nurse-directed abuse* and *intra/inter-professional conflict* (Doran, 2005; Lavoie-Tremblay et al., 2005); the *interface between work and home life* (Marshall, 1980; Tyson et al.); and, specific to new graduates, *preparation for clinical practice* (Charnley, 1999; Malach-Pines, 2000).

The literature about nurses' stress responses is far less robust than that about stressors and outcomes, and there is a collective and fervent call for further research. Clarke and Cooper (2000) assert an extremely simple $a + b = c$ equation highly applicable in this case, where $a$ = *perceived stress,* $b$ = *ineffective/maladaptive responses,* and $c$ = *negative outcomes.* Since high levels of NOS are noted in, and self-reported by, nurses at such high levels and negative outcomes of NOS are consistently observed, a logical inference, therefore, is that nurses are not responding effectively or adaptively to NOS. Specific types of responses researched in nursing include *stressor-directed, problem-solving responses* (Dewe, 1987; Farrington, 1997; Kagan & Evans,

1995; Sauter & Murphy, 2006; Tyson et al., 2002), and *emotion-based, coping responses*, including: *seeking support* from others; and *avoidance* through physical or psychological withdrawal from a stressful situation or outwardly suppressing stress-associated emotions (Lavoie-Tremblay et al., 2005; Marshall, 1980; Tyson et al.).

Commonly studied and discussed negative NOS outcomes include: *job dissatisfaction* (Baumann et al., 2002; Kalliath & Morris, 2002); *professional dissatisfaction* (Hodges et al., 2005); *absenteeism* (Kelloway & Day, 2005; Lavoie-Tremblay et al., 2005; Thomson, 2005); *burnout* (Jamal & Baba, 2000); *organizational nurse turnover* (Hays et al., 2006; O'Brien-Pallas et al., 2006); *chronic stress-related disease prevalence* and *long-term mental/physical disability* (Shields & Wilkins, 2006); and *professional attrition* (Canadian Nurses Association, 2002; Shields & Wilkins).

Ways in which NOS has, or can potentially be prevented and/or managed are also highly researched, primarily using political, administrative, and/or organizational approaches. Primary focus has been on the existing workforce and nursing workplaces; preventing and/or managing stress exposure by changing work environments and processes; helping individuals and organizations respond to work stress; and/or managing the impacts of negative NOS outcomes (Farrington, 1997; Kohler & Munz, 2006; Lavoie-Tremblay et al., 2005; McGillis Hall, 2005). These initiatives, while crucial, are palliative and reactionary in nature, as stress and its outcomes already exist in the targeted individuals and their environments (Karasek and Theorell, 1990). There is little evidence of initiatives that explicitly aim to proactively *prevent* individual nurses' stress *before* their workforce entry and exposure to stress.

## Literature Review

Baccalaureate nursing education (NE) is seen responsible for new graduates' lack of preparedness for nursing practice *and* working life, and blamed for the oft discussed *theory-practice gap*; seen in this case to be a clash of *academic idealism* and *practice realism* (Beck, 2000; Charnley, 1999; Duchscher & Cowin, 2004; Flaskerud, Halloran, Janken, Lund & Zetterlund, 1982; Kramer, 1974; Pugh, 1986; Schmalenberg & Kramer, 1982; Storlie, 1982). Grossman and Wheeler (1999) asserted that "if nurses are to assimilate...career-long self-care, stress management strategies must be integrated throughout nursing education programs" (p. 23). Some have identified specific nursing

stress-related areas (e.g., personal health promotion, self-care, resilience-building, coping strategies) which are seen as lacking in baccalaureate curricula (Billingsley, Collins & Miller, 2007; Casden Meadows, 1998; Grossman & Wheeler; Hodges et al., 2005; Manderino, Ganong & Darnell, 1988; Stark, Manning-Walsh & Vliem, 2005), however, few have offered substantive theoretical or pragmatic solutions.

There is significant theoretical and empirical research regarding nursing students' (NS) stress and NE's role in addressing it (Billingsley et al., 2007; Beddoe & Murphy, 2004; Grossman & Wheeler, 1999; Lengacher, 1996; Manderino et al., 1988; Russler, 1991; Stark et al., 2005), and several curricula have integrated stress management content (Billingsley et al.; Casden Meadows, 1998; Cook, 1997; Grossman & Wheeler; Manderino & Yonkman, 1985; Russler). However, all of these studies focused on NSs' stress; only two make passing mention of preventing stress to be encountered later in practice (Billingsley et al., Grossman & Wheeler); and none collected outcome measures after workforce entry. Only one example was found of a BN curriculum-based program explicitly targeting the graduates' future stress (Kramer, 1974), which aimed to reduce 'reality shock'; seen as the basis for much of the stress encountered by new graduates when starting their careers. The NS participants were made explicitly aware of common stressors with structured opportunities to rehearse constructive, stressor-specific response strategies. Significant and positive results were seen in graduates well after entry to the workforce. As compared to the cohort from the year prior to this program's implementation, Kramer's program graduates were more involved in professional activities; were viewed as happier, more engaged in their work, more active, and successful as agents of change; and showed greater degrees of empathy and leadership. In relation to specific negative stress outcomes, nurses who completed the program had fewer absences from work, remained longer at their initial jobs and in hospital-based nursing, and did less 'job-hopping'. The positive outcomes seen as a result of Kramer's program provide some support for curriculum-based stress prevention targeting graduates' future stress. However, this program is more than 30 years old, and as such, its applicability to *current* curricula and nursing practice is speculative.

Expository literature exists about NE's place in addressing its graduates' practice-related stress, but no research-based literature was found in which perspectives of those

currently or potentially vested in this relationship were comprehensively gathered. The perspectives of current NSs, past graduates, and educators repeatedly deemed failing in its regard have been left unexplored. Manderino et al., (1988) were the only ones who evaluated baccalaureate curricula en masse and found that curricula implicitly contained such content. However, this study was conducted more than two decades ago and is thus dated, considering the vast changes in nursing practice and curricula since that time.

Nursing education has unparalleled access to, and influence on NSs: individuals beginning to develop perceptions about nursing and nursing work, as well as knowledge, skills, and professional behaviour patterns. Curricular initiatives in NE programs could address its graduates' future stress proactively by increasing students' awareness of common potential stressors and helping them to develop evidence-based repertoires of effective and adaptive response strategies, all of which can occur prior to the onset and progression of NCS. Despite its unique position to positively shape its graduates' future experiences with stress, there is no substantive evidence of NE as explicitly focusing on preventing graduates' future stress.

## Theoretical Framework

This study's theoretical basis is the *Nursing Career Stress Prevention Model for Baccalaureate Nursing Education* (NCSPM-BNE; McCready, 2008a; see Figure 1). and is centered on the construct of *nursing career stress* (NCS); holistic, nursing-focused re-conceptualization of the individual stress process/structure foundational to most stress models (viz., stressor, response, outcome, modifiers of the stress process). Nursing career stress is "a dynamic process involving the reciprocal interaction between...RNs and their professional *career*-related environments....influenced by their unique individual characteristics, the context in which they live *and* practice, and the situation-specific interactions between...individuals and their contexts/environments (McCready, p. 9).

The model was adapted from the *Preventative Stress Management Model* (PSMM) (Quick, Quick & Nelson, 1998), in which the basic modes of prevention (viz., primary, secondary, tertiary) are overlaid upon an organizationally-focused stress process (viz., *organizational demands and stressors, stress responses, distress*, and *modifiers of the stress response*). While straightforward and satisfactory in relaying a basic understanding of the OS-specific application of prevention, the OS process as depicted is

preclusive in its primarily organizational focus, is oversimplified, and important aspects of OS are unaddressed, leaving the PSMM appearing simpler and more linear than is in vivo OS. Without extensive revision and development, the PSMM is limited in pragmatic applicability to a specific organization, or as is the intention in this research, in its applicability outside of organizations to a specific occupation. In developing the NCSPM-BNE (see Figure 1), this writer adapted the PSMM to address the aforementioned issues and deficiencies; to make possible application to a specific occupation, namely nursing; and delineate the potential roles of a specific agent of OS prevention, namely NE.

Alike the PSMM, the core of the NCSPM-BNE is the occupational stress process, although in this case, it is the stress process specific to NCS as previously discussed. Corresponding to seven of the nine NCS pathway components in the NCSPM-BNE are preventative medicine-based modes and sub-modes within each mode in which it is proposed by McCready (2008a) that NE-driven NCS prevention (NCSP) can potentially occur. The main tenets of NCSP enacted by NE are summarized briefly below by the modes and sub-modes of NCSP conceptualized in the NCSPM-BNE.

- Primary NCSP by NE can target *individual-potential stressor interactions* by preparing graduates to constructively and effectively interact with potential stressors both cognitively (appraisal and perception processes) and instrumentally. The goal is to block transformation of *potential stressor* to *perceived stressor*, or minimize its potency if/when perceived as such.
- Secondary NCSP by NE can target *problem-directed* and *coping responses* by promoting effective and adaptive actions to deal with perceived stress, thus minimizing the physical and mental toll incurred. Effective problem-directed responses resolve the stressor situation itself (i.e., a positive situational outcome); whereas effective coping responses allow illicited negative emotions to be given an outlet and/or be resolved.
- Tertiary NCSP by NE can promote critically reflective and constructive assessment/management of *situational outcomes*, reducing their potential to become lasting, negative outcomes. Additionally, NE can prepare its graduates to glean knowledge and skills from situational experiences and apply them in the future. *Strains* can be targeted by promoting critical self-awareness; recognizing early symptoms of

negative outcomes and taking steps to resolve them and/or slow their progression to longer-term outcomes. *Consequences* can also be targeted, although as more enduring and terminal in nature, NE's primary foci are teaching graduates *how* to manage impacts and slow progression.

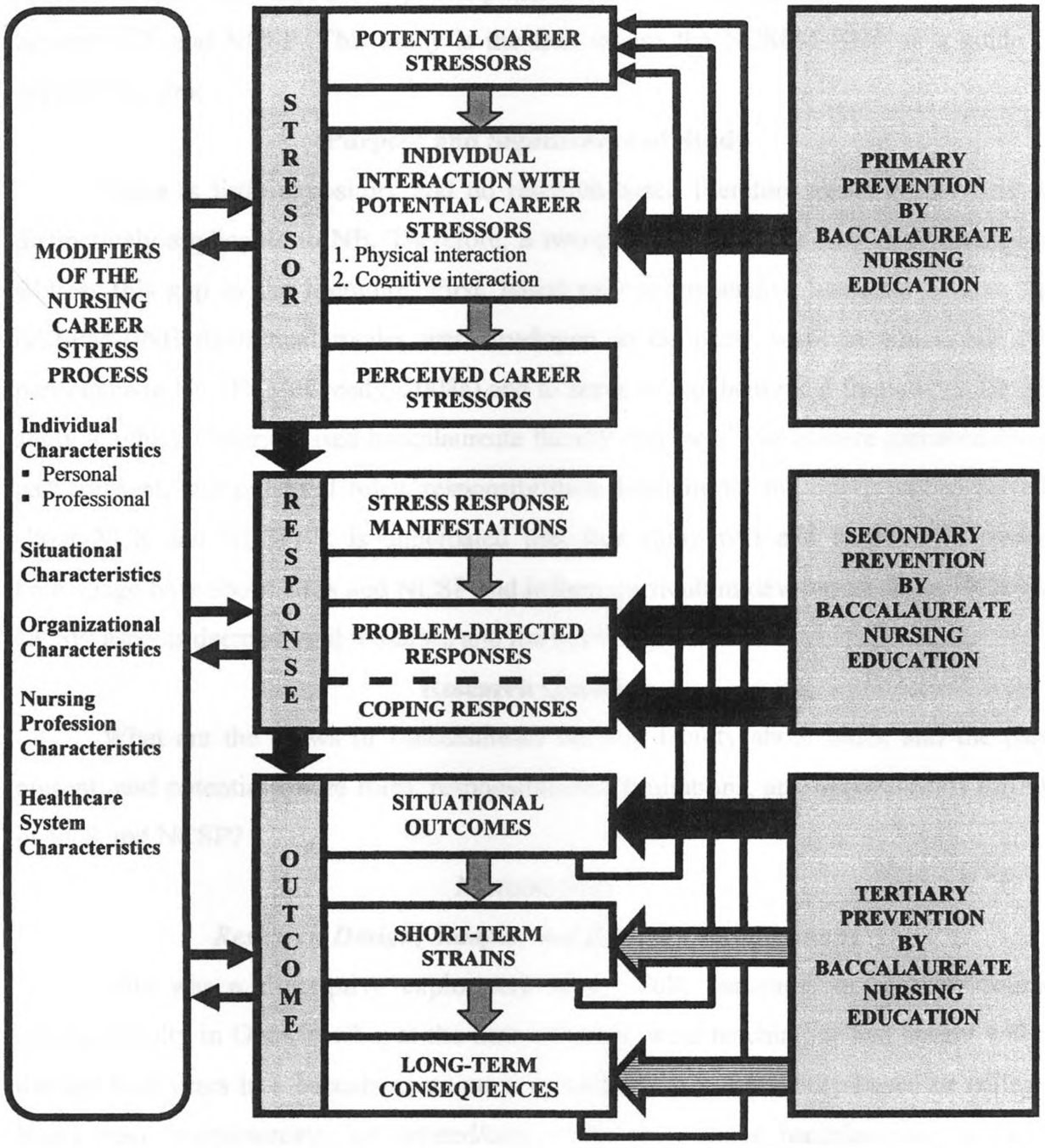


***Figure 1.*** **The Nursing Career Stress Prevention Model for Baccalaureate Nursing Education**

*Note.* Reprinted from McCready (2008a) with permission. Originally adapted from the *Preventative Stress Management Model* (Quick, Quick & Nelson, 1998). Copyright McCready, 2008.

The NCSPM-BNE was developed to theoretically and pragmatically frame curriculum development to incorporate NCS as a core concept and NCSP as an important curricular goal (McCready, 2008a). However, foundational evidence must be gathered by exploring this under-addressed area. The concepts of NCS and NCSP as well as the proposed model were also developed as potential bases for research about the relationship between NE and NCSP. This study is the first to use the NCSPM-BNE as a guide to explore this link.

## Purpose and Significance of Study

There is little expository and no research-based literature about NCS/NCSP as distinctively applicable to NE. Therefore, a two-pronged approach was implemented to address this gap in the literature. First, based on comprehensive literature review, the NCSPM-BNE theoretical model was developed to delineate ways in which NE can participate in NCSP (McCready, 2008a) and to serve as the theoretical framework for this study in which Ontario-based baccalaureate faculty members' views were garnered about past, present, and potential roles, responsibilities, limitations, and opportunities for NE about NCS and NCSP. It is anticipated that this study will add to the NE-specific knowledge base about NCS and NCSP and inform curriculum developers about NCS and NCSP; aspects deemed vital to nurses and the nursing profession.

## Research Question

What are the views of baccalaureate nursing faculty about NCS, and the past, present, and potential future roles, responsibilities, limitations, and opportunities for NE in NCS and NCSP?

## Methodology

### *Research Design, Sample, and Ethical Considerations*

This was a descriptive exploratory study. Full, part-time, or recently retired nursing faculty in Ontario who, at the time of study, were teaching or had taught within the last four years in a baccalaureate nursing program (i.e., university-based or college-based basic baccalaureate, accelerated/compressed time-frame baccalaureate, and/or a post-diploma baccalaureate program) were eligible for inclusion. Those who met this criterion and also taught in other programs (e.g., graduate) were also eligible. Of the 1257 individuals identified by the College of Nurses of Ontario (CNO), 764 had consented to

be contacted for research purposes. A randomly-generated list of 750 of eligible faculty was purchased from the CNO. Co-supervisors of this study were excluded, leaving 748 contacts. Of these, individuals not meeting inclusion criteria based on demographic responses were automatically excluded from study completion. The University of Western Ontario's Research Ethics Board for Health Sciences Research Involving Human Subjects approved this study (see Appendices A and B).

### *Instrumentation*

The Faculty Viewpoints Assessment Questionnaire (FVAQ) (see Appendix C) was researcher-developed and evaluated by two nursing professors for ease of use, comprehensibility, and face/content validity in terms of relevance to baccalaureate nursing curricula and to NCS and NCSP. It was also evaluated by two nursing graduate students for usability and comprehensibility, and took 15-20 minutes to complete.

The FVAQ is an online questionnaire with open and closed-ended questions mounted on the Survey Monkey© platform. Content was drawn from literature on NCS, NCSP, and NCSM. Guided by the theoretical framework, questions focused on NCS in general; common nursing career stressors; responses to NCS; outcomes of NCS; and the role, responsibilities, limitations, and opportunities for NE's involvement in NCSP. The demographic section consisted of eight questions and the NCS-specific section had nine, most of which were comprised of multiple items, for a total of 54 items. Response option types included multiple-choice with only one response and more than one response, numerical rankings, and comment areas for voluntary narrative clarification. Except for the demographic question about eligibility to participate, respondents could choose not to answer questions by selecting 'no response'.

### *Data Collection and Analysis*

Potential participants were contacted and invited to participate. Three invitations (see Appendices D and E) were mailed at two-week intervals. All invitation letters contained study information and a URL link to the FVAQ. If initial contacts chose to not participate or noted their ineligibility to do so, they were asked to email the researcher to request exclusion from future mailings.

The closed-ended data were analyzed using descriptive statistics; qualitative data were analysed thematically and markedly unique responses were identified and reported.

## Results

### *Sample Description*

Of the 748 potential participants contacted, 28 declared themselves ineligible. Six invitations were undeliverable; four respondents attempted to complete the survey but were ineligible. The final number of eligible participants was 710; of these, 215 (30.3%) returned usable FVAQs.

Three quarters of educators were older than 45 years with more than 20 years of experience as nurses. Almost 40% (n=83) had been educators for greater than 15 years. Fewer than 2% (n=3) had been registered nurses (RN) for less than 5 years and 22.3% (n=48) had fewer than 5 years of experience as educators. Respondents had expertise as nurses in all areas of practice; three quarters (n=157) were employed full-time; and almost an equal number taught in university (n=97; 45.1%) and college-based (n=108; 50.2%) basic baccalaureate programs. Faculty were most engaged in undergraduate classroom teaching (n=158: 73.5%), followed by clinical (n=123; 57.2%), and lab teaching (n=87; 40.5%). Complete FVA sample description is included in Table 1, Appendix F.

### *Research Question*

Faculty members' views about NCS and past, present, and potential future roles, responsibilities, limitations, and opportunities for NE in NCSP are reported. Results are organized according to the perceived impact of NCS, responsibility for addressing NCS, ability to impact NCS, NE's current and potential future roles in NCSP, barriers to expanding NE's role in NCSP, and operationalizing NE's future potential role in NCSP.

### *Perceived Impact of NCS*

Perceptions about the degree of NCS's impact on 21 disparate aspects of RNs' lives and/or aspects and areas of practice were explored. Nursing faculty perceived NCS to impact all areas (see Table 2). Nine items most frequently received a *high impact* rating (e.g., job satisfaction, psychological health/well-being, new graduate retention) and the remaining 12 were most frequently perceived as *moderately impacted* (e.g., job-hopping, retention of experienced nurses). In only two cases (viz., nurses' hindsight opinion of their baccalaureate NE, image of nursing) *very little impact* was chosen more frequently than *high impact*; in two others (viz., recruitment to profession, nursing

education), the frequencies of *very little* and *high impact* were nearly equivalent. For all, *very little* was indicated less often than *moderate impact*. *Moderate* and *high impact* responses accounted for a combined 88% of the total.

In comparing four practice areas, *acute* and *long-term care nursing* were seen most impacted, although *community-based nursing* and *nursing education* were deemed considerably impacted, but to a lesser degree. The impact of NCS on *nursing education* was identified as *moderate* by 57% of respondents, while those perceiving it as *little* or *high impact* were essentially equivalent (21%, 22%).

**Table 2**
***The Perceived Impact of NCS***

| | No Response | Very Little Impact | Moderate Impact | High Impact |
|---|---|---|---|---|
| | Frequency | Frequency (Corrected Percent) | | |
| A nurse's hindsight opinion of his/her baccalaureate education | 10 | 82 (41%) | **96 (48%)** | 20 (10%) |
| The quality of a nurse's home life | 1 | 9 (4%) | 71 (34%) | **127 (61%)** |
| Job satisfaction | 0 | 6 (3%) | 41 (20%) | **161 (77%)** |
| Reason to leave a job | 4 | 7 (3%) | 61 (30%) | **136 (67%)** |
| Frequent, multiple job changes (job hopping) | 8 | 22 (11%) | **91 (45%)** | 87 (43%) |
| Satisfaction with nursing as a career | 0 | 8 (4%) | 69 (33%) | **131 (63%)** |
| Physical health and well-being | 0 | 4 (2%) | 79 (38%) | **125 (60%)** |
| Psychological health and well-being | 0 | 6 (3%) | 59 (28%) | **143 (69%)** |
| Work effectiveness | 1 | 15 (7%) | 93 (45%) | **99 (48%)** |
| Nurse-nurse conflict | 3 | 10 (5%) | 78 (38%) | **117 (57%)** |
| Patient safety | 5 | 31 (15%) | **91 (45%)** | 81 (40%) |
| Quality patient care | 1 | 20 (10%) | **99 (48%)** | 88 (42%) |
| Recruitment into profession | 5 | 51 (25%) | **100 (49%)** | 52 (26%) |
| Retention of new graduates (< 5 yrs) | 3 | 18 (9%) | 87 (42%) | **100 (49%)** |
| Retention of experienced nurses (> 5 yrs) | 3 | 22 (11%) | **101 (49%)** | 82 (40%) |
| The nursing shortage | 1 | 26 (12%) | **96 (46%)** | 85 (41%) |
| The public image of nursing | 6 | 67 (33%) | **91 (45%)** | 44 (22%) |
| Acute care nursing | 13 | 17 (9%) | **96 (49%)** | 82 (42%) |
| Long-term care nursing | 17 | 29 (15%) | **106 (56%)** | 56 (29%) |
| Community-based nursing | 15 | 36 (19%) | **112 (58%)** | 45 (23%) |
| Nursing Education | 8 | 42 (21%) | **114 (57%)** | 44 (22%) |
| Column Totals | 104 | 528 (12%) | 1831 (43%) | 1905 (45%) |

*Note.* Percentages rounded to nearest whole number and *corrected* by removing *no response* data

### *Responsibility for Addressing NCS*

Respondents' perceptions about entities *responsible* for addressing NCS were explored by ranking researcher-supplied entities in order of *greatest* through *least*

*responsibility*. The results are presented in Table 3 and the entities logically associated with NE are bold highlighted and ranked 6th and 7th, respectively, in relative mean rank.

Respondents had an optional opportunity to identify additional entities sharing responsibility to address NCS. Many expanded upon their closed-ended rankings, especially in terms of *health care organizations, individual baccalaureate programs/Schools of Nursing* (SON), and *individual nurses*. Within health care organizations, nursing administrators and unit-level nursing leaders were seen to be primarily responsible. Within individual baccalaureate programs, faculty were noted responsible to be positive examples of stress prevention and management for NSs, and responsible to attend to NSs' well-being through mentoring and support. Nurses were seen responsible to publicly advocate for the profession and its members. In addition to nurses' responsibility for addressing their own NCS, RNs were also seen to be accountable for mentoring and supporting each other. Other entities identified by respondents included: *nursing unions*, *nursing researchers*, *the general public*, *the media*, *career counsellors*, *non-nursing health care providers*, and *collaborations*. Nurse researchers were deemed responsible for providing evidence about NCS and for NCSP development in curricula. RN-employing organizations and SONs were seen responsible for collaborating to address NCS.

**Table 3**
***Entities Responsible for Addressing NCS***

| | Relative Rank[a] | Mean Rank[a] | Mode Rank[a] |
|---|---|---|---|
| Individual healthcare organizations that employ nurses | 1 | 2.39 | 1 |
| Individual nurses | 2 | 3.95 | 2 |
| The provincial government | 3 | 4.21 | 7 |
| Professional nursing bodies | 4 | 4.27 | 4, 5 |
| Regulatory nursing bodies | 5 | 4.73 | 5 |
| **Individual baccalaureate programs via their curricula** | **6** | **5.30** | **7** |
| **Baccalaureate programs as a collective** | **7** | **5.40** | **6** |
| The federal government | 8 | 5.74 | 8 |

[a] *greatest responsibility* = 1 through *least responsibility* = 8.

### *Ability to Impact NCS*

Respondents' perceptions were explored as to the entities having *ability* to impact NCS by ranking eight researcher-supplied entities in order of *greatest* through *least ability*.

The results are presented in Table 4 and the entities logically associated with NE are bold highlighted, and ranked 6th and 7th relative to the other entities in mean rank.

Respondents had opportunity to identify other entities with significant *ability* to address NCS. Many expanded upon their ranking choices, specifically about *health care organizations, individual baccalaureate programs,* and *individual nurses*. Nursing administrators and unit-level nursing leaders were seen as highly able to effect change in NCS within organizations. Nurse educators were viewed as highly influential as exemplars of NCSP/NCSM and by supporting their NSs' well-being. Individually and collectively, RNs were seen highly capable of addressing NCS through advocating for the profession and mentoring and supporting colleagues, especially new graduates. Other entities included: *nursing unions*, *nursing researchers*, the *general public*, the *media*, *career counsellors*, *non-nursing health care providers*, and *collaborations*. Nurse researchers were seen able to provide evidence for curriculum development, and interdisciplinary education was often proposed as potentially effective in NCSP. Collaborations between SONs and local health care organizations were seen highly able to ensure that NCSP in both are congruent and symbiotic by mobilizing expertise inherent in each.

***Table 4***
***Entities that Impact NCS***

| | Relative Rank[a] | Mean Rank[a] | Mode Rank[a] |
|---|---|---|---|
| Individual healthcare organizations that employ nurses | 1 | 2.22 | 1 |
| Individual nurses | 2 | 3.70 | 2 |
| Professional nursing bodies | 3 | 4.38 | 5 |
| The provincial government | 4 | 4.40 | 7 |
| Regulatory nursing bodies | 5 | 4.97 | 6 |
| **Individual baccalaureate programs via their curricula** | **6** | **4.99** | **7** |
| **Baccalaureate programs as a collective** | **7** | **5.39** | **6** |
| The federal government | 8 | 5.96 | 8 |

[a] *greatest ability* = 1 through *least ability* = 8.

### *Nursing Education's Current and Potential Future Roles in NCSP*

Respondents' perceptions about the degree of NE's *current* role in NCSP were explored. Two graded *yes* options (viz., *Yes, a substantial role; Yes, not a substantial role*) and a *no* option (viz., *No, nursing education plays no role at all in this area*) were available. After removing *no response* data, 18% (n=37) perceived NE plays a substantial role in NCSM/NCSP; 69% (n=140) indicated NE's role to exist, but not to any significant

degree; 13% (n=27) indicated NE plays no role whatsoever. Perceptions about whether NE *can* and *should* expand it role in the *future were also explored.* After factoring out *no response* data, 82% (n=159) of respondents indicated that NE can and should play a more substantial future role in NCSP.

The perceived *current impact* of NE for each sub-mode of NCSP was explored. It was perceived that NE makes *little impact* along each sub-mode, accounting for 46-53% of the total responses for each (see Table 5). No sub-mode had another response category distributed within 7% of *little impact.* Relatively, each primary and secondary sub-mode targets were seen as more impacted by NE than were any of the tertiary ones, each of which had much higher *no impact* frequencies.

**Table 5**
***The Modes of NCSP and NE's Current Perceived Impact*** (n=197)

| | No Response | No Impact | Little Impact | Moderate Impact | High Impact |
|---|---|---|---|---|---|
| NCSP Sub-mode | Frequency | Frequency (Corrected Percent) | | | |
| **Primary prevention** targeting potential stressors themselves | 14 | 22 (12%) | **88 (48%)** | 57 (31%) | 16 (9%) |
| **Primary prevention** targeting nurses' instrumental interactions with potential stressors | 16 | 15 (8%) | **92 (51%)** | 66 (36%) | 8 (4%) |
| **Primary prevention** targeting nurses' cognitive interactions with potential stressors | 15 | 13 (7%) | **84 (46%)** | 72 (39%) | 13 (7%) |
| **Secondary prevention** targeting nurses' problem-directed responses | 16 | 17 (9%) | **84 (46%)** | 67 (37%) | 13 (7%) |
| **Secondary prevention** targeting nurses' coping responses | 16 | 15 (8%) | **83 (46%)** | 71 (39%) | 12 (7%) |
| **Tertiary prevention** targeting slowing, reversing, preventing progression of strains | 20 | 47 (26%) | **91 (51%)** | 35 (20%) | 4 (2%) |
| **Tertiary prevention** targeting slowing, reversing, preventing progression of consequences | 21 | 51 (29%) | **93 (53%)** | 27 (15%) | 5 (3%) |
| **Tertiary prevention** targeting managing symptoms/impact of strains/consequences | 21 | 52 (29%) | **85 (48%)** | 35 (20%) | 4 (2%) |
| Column Totals | 139 | 232 (16%) | 700 (49%) | 430 (30%) | 75 (5%) |

*Note.* Percentages rounded to nearest whole number and *corrected* by removing *no response* data.

In post hoc data analysis, the *current impact* responses were clustered into derived categories representing *Degree of Current Impact* (DOCI); including *insignificant DOCI* (i.e., *no impact* + *little impact* responses) and *significant DOCI* (i.e., *moderate impact* + *high impact* responses). In every case, *insignificant DOCI* is greater than *significant DOCI,* ranging from 6 to 64%. Despite *significant DOCI* distributions below 50%, the

NCSP sub-mode targets seen most impacted were *primary NCSP targeting nurses' cognitive interactions with potential stressors* (47%); and *secondary NCSP targeting nurses' coping responses* (47%) and *problem-directed responses* (44%).

Respondents' perceptions about NE's *future potential focus* along the modes/sub-modes of NCSP were explored. All warranted *moderate* or *high focus* in future curricula (see Table 6). For *no focus*, frequencies ranged from 3-11% of total responses for each sub-mode and distributions ranged widely (6-23%) with highest percentages in tertiary sub-modes. *Little focus* never out-proportioned *moderate focus,* and once out-proportioned *high focus,* by 2%. Two modes merited *high focus*; namely *primary prevention targeted at nurses' cognitive interactions with potential stressors* (n=88, 48%) and *secondary prevention targeted at nurses' coping responses* (n=88, 48%). The remaining sub-modes were most frequently deemed of *moderate focus*, with distributions ranging from 46-49%. For all but the tertiary sub-modes, the *high focus* distributions were within 4-8% of those for *moderate focus*.

**Table 6**
***The Modes of NCSP and NE's Future Recommended Foci* (n=197)**

| | No Response | No Focus | Little Focus | Moderate Focus | High Focus |
|---|---|---|---|---|---|
| NCSP Sub-mode | Frequency | Frequency (Corrected Percent) | | | |
| **Primary prevention** targeting potential stressors themselves | 13 | 3 (2%) | 23 (12%) | **86 (47%)** | 72 (39%) |
| **Primary prevention** targeting nurses' instrumental interactions with potential stressors | 13 | 3 (2%) | 22 (12%) | **84 (46%)** | 75 (41%) |
| **Primary prevention** targeting nurses' cognitive interactions with potential stressors | 13 | 3 (2%) | 14 (8%) | 79 (43%) | **88 (48%)** |
| **Secondary prevention** targeting nurses' problem-directed responses | 13 | 6 (3%) | 11 (6%) | **87 (47%)** | 80 (43%) |
| **Secondary prevention** targeting nurses' coping responses | 13 | 5 (3%) | 18 (10%) | 73 (40%) | **88 (48%)** |
| **Tertiary prevention** targeting slowing, reversing, or preventing progression of strains | 18 | 11 (6%) | 37 (21%) | **88 (49%)** | 43 (24%) |
| **Tertiary prevention** targeting slowing, reversing, or preventing progression of consequences | 18 | 11 (6%) | 42 (23%) | **88 (49%)** | 38 (21%) |
| **Tertiary prevention** targeting managing symptoms/impact of strains/consequences | 18 | 14 (8%) | 37 (21%) | **84 (47%)** | 44 (24%) |
| Column Totals | 119 | 56 (4%) | 204 (14%) | 669 (46%) | 528 (36%) |

*Note*. Percentages rounded to nearest whole number and *corrected* by removing the *no response* data.

Apart from *no focus*, response descriptives were not distinct and quantifiable, thus open to interpretation. In post-hoc data analysis, results were clustered into distinct categories to aid comparing to and contrasting with *no focus* responses. Responses were clustered representing the derived variable *Degree of Future Foci* (DOFF), including: *insignificant DOFF* (i.e., *no focus* + *little focus* responses), *some DOFF* (i.e., *little focus* + *moderate focus* + *high focus* responses), and *significant DOFF* (i.e., *moderate focus* + *high focus* responses). In this, the majority of respondents felt NE should commit *some DOFF* to all aspects of NCSP, as for each area, 92-98% of respondents chose either *little*, *moderate*, or *high focus*. The distributions for five of the NCSP targets remained very high (86-91%) as warranting *significant DOFF*. For tertiary sub-modes, fewer perceived the need for *significant DOFF* (70-73%). Overall, at least 70% of educators felt that NE should commit curricular time to all aspects of NSCP.

***Barriers to Potentially Expanding NE's Role in NCSP***

Faculty shared perceptions about barriers impeding potential expansion of NE's role in NCSP. Lack of available room in curricula to accommodate additional subject matter (50%) and a faculty shortage (32%) were highly selected. Other barriers included *unsure of what role is presently* (21%) and *what role could* be (26%), and *unsure of what would be taught* (31%) and *how it would be taught* (33%). Seven (4%) perceived that NCS is inevitable, thus making NCSP an inappropriate use of teaching time; and 20 (10%) indicated they didn't think NE can substantively expand its role in NCSP. Sixty-nine (34%) respondents chose to specify additional barriers, grouped thematically in Table 7, by choosing the 'other' response option.

**Table 7**
***Additional Perceived Barriers to Expanding NE's Role in NCSP***

| Barrier | Respondents' Key Points |
|---|---|
| Nursing students and faculty are stressed | ▪ NSs highly stressed by baccalaureate workload; not supported by faculty or curricula in learning and developing how to deal with their stress<br>▪ NSs' stress affects their ability to learn and retain that which is taught<br>▪ If not taught now to manage their stress, NSs learn ineffective stress prevention/management<br>▪ Educators fear that too much realism about NCS will lead to attrition of NSs<br>▪ Faculty also highly stressed and often are not positive examples of stress prevention/management for NSs |
| Under-prioritization of NCS and NCSP | ▪ NCS/NCSP wrongly undervalued by NSs and faculty, resulting in lack of perceived impetus to integrate NCSP into curricula |

| | |
|---|---|
| The current clinical curricula will require substantial revisions | ▪ Clinical curricula seen to inadequately prepare NSs for clinical practice; perceived as most critical source of NCS for new graduates<br>▪ The setting/role for which NSs are the least adequately prepared is acute care, hospital-based nursing, followed by long-term, institutional nursing.<br>▪ Not enough opportunities for NSs to develop clinical knowledge, psychomotor skill efficacy, and self-confidence in clinical skills<br>▪ Not enough time for in vivo clinical learning and application of stress prevention/management strategies |
| Barriers to curriculum change itself | ▪ Radical curriculum change is needed to integrate NCSP, but there is internal resistance against making these radical changes. Many of those resistant to change have power, influence, and authority in curriculum development<br>▪ Lack of research needed for evidence-based curriculum development |
| Not supported by organizations | ▪ Lack of NCSP in RN-employing organizations may nullify NE's NCSP efforts |
| Underdeveloped collaborations | ▪ Lack of collaborative relationships between NE and other entities (e.g., healthcare organizations, governments, allied health professions), but would require substantial time and effort to initiate and develop. |
| Lack of faculty expertise and clinical credibility | ▪ Lack of faculty expertise on subjects of NCS and NCSP<br>▪ Many faculty lack credibility, first-hand knowledge, and recent experience in clinical practice. This contributes to unrealistic and outdated curricula |

*Note.* NS=nursing student; NCSP=nursing career stress prevention; NCS=nursing career stress; NE=nursing education.

### *Operationalizing NE's Future Potential Role in NCSP*

An open-ended opportunity was provided to respondents to explore perceptions of what NE would need to *do more of, do better at,* and/or *start doing* to effectively expand its role in NCSP. The data were grouped thematically, and summarized briefly. A more detailed account of the data by theme is in Table 8, Appendix G.

The theme most evident was that NCSP content is not currently, but should be explicitly integrated into baccalaureate curricula; offered as distinct course(s) and/or core concepts threaded across curricula in classroom, lab, and clinical-based courses. It was proposed that NCS/NCSP concepts be introduced early (i.e., Year 1) and emphasized throughout the curriculum as clinical experiences helped make these concepts 'real' to NSs. Many were concerned that graduates leave NE's humanistic-idealistic model and enter the workforce caught unaware by the realities of clinical practice and working lives, and health care's business-medical model. To best serve graduates, many were adamant that although some idealism should be retained, it can and must be balanced with realism about nursing practice and specifically, NCS.

Clinical curricula were targets of repeated criticism as not adequately preparing graduates for clinical practice. Many commented about inadequate *quality* and *quantity* of

clinical experiences and subsequently underdeveloped psychomotor skills and clinical efficacy. Many asserted the vast majority of graduates choose to, and will continue to work in, hospital-based settings after graduation, and thus, in view of these career choices, *want* and *need* more (and better) acute, hospital-based experiences. However, respondents perceived low emphasis on hospital-based nursing practica, and placed inordinately high emphasis on non-institutional, community-based care. Clinical practica's incongruence to nursing practice was also a recurring concern, in terms of shiftwork (i.e., minimal exposure to night shifts and 12-hour shifts) and patient load (i.e., 2 patients maximum in clinical practica; double or triple that in practice). Many acknowledged difficulties in securing acute care clinical sites for students, and quality ones at that; due to the increased numbers of students, multiple programs (nursing and non-nursing) vying for the same sites, and the inability of many sites to manage the increased workload inherent in NS learning in addition to their existing pressures and workloads (e.g., nurse understaffing and turnover, insufficient numbers of experienced nurses to precept NSs). There were also multiple criticisms about insufficient amounts and inconsistent quality of experiences in long-term, institutional environments.

Concerns were expressed by many respondents about disparity between who *develops* clinical curricula and who *implements* them. Many faculty highly involved with the clinical curricula development process were seen as having little recent experience with clinical practice (especially, acute, hospital-based practice), leading to clinical curricula 'out of touch' with the 'real world' of nursing practice and the needs and desires of graduates. On the other hand, many commented that implementation of clinical curricula is left to those who, while clinical experts, may not have been involved in curriculum development; may not have educational preparation for teaching; may be unfamiliar with the overall curriculum and its philosophies and goals; are not properly evaluated for their teaching methods or for upholding and furthering the goals and philosophies of the program; and are undervalued and inadequately supported by non-clinical faculty.

The levels of stress experienced by faculty (i.e., related to workload and shortage of baccalaureate educators) and NSs (i.e., related to workload and lack of support) were previously noted as barriers to NE's expanded role, and were brought forward again as

issues requiring explicit and concerted attention for NE's future potential role in NCSP to be optimized. Faculty were repeatedly asserted as role models for NSs in terms of stress prevention/management, yet were often negative ones.

Multiple suggestions were offered about which concepts/foci to *retain* as fundamental to nursing and NE, and/or to be *added* or *increasingly emphasized*, including: critical thinking; professionalism; leadership theory; self-awareness and reflection; empowerment; nurse-focused health promotion and self-care; ethics; change theory; interpersonal communication (e.g., team/group theory, assertiveness, self-advocacy, conflict prevention and management); systems issues (e.g., human resources issues, union and labour law; health care systems structures and functions); political action and professional advocacy; nurse abuse and violence prevention; career planning and development; home-work balance; technology and informatics; and nursing-medicine interprofessional education. Also suggested was *how* to cover NCSP, including, clinical case studies, problem-based learning, role playing, simulation technology, and increasing the use of clinical nurses as guest lecturers. Across methodologies, it was suggested that explicit attention be paid to nurse-focused outcomes of clinical situations, rather than just patient-focused outcomes of nursing care.

There was significant support for primary NCSP, as per the NCSPM-BNE, focused on increasing awareness of stressors and targeting both cognitive and instrumental interactions between nurses-potential stressors. In terms of secondary NCSP, there was substantial support for targeting nurses' problem-directed *and* coping responses. Many recognized that NCS is not entirely preventable, that differences exist in how individuals respond to it, and ultimately, there are no assurances graduates will use what they were taught. The role of NE was thus proposed as providing graduates with the *tools and mindset* to be able to constructively and effectively address NCS. It was frequently noted that NE cannot definitively deal with NCS on its own, and as such, collaborative relationships between NE and other entities (e.g., local health care organizations, governments, other health care disciplines and their professional education systems) were recommended. However, it was also conceded that NE may have to take the lead in forming, developing, and maintaining these collaborations.

## Discussion

The views of baccalaureate faculty about NCS and the past, present, and future potential role, responsibilities, barriers, and opportunities for NE in NCSP were garnered, and the main results will be discussed in two main sections reflecting the research question: *About the Past and Present* and *Towards the Future*. In terms of the past and present, NCS was seen as a highly pertinent issue and NE was seen to share responsibility for addressing NCS and be capable of impacting NCSP; however, its current impact on NCS was perceived as negligible. As to NE's future potential role in NCSP, it was seen that NE can and should increase its role through curriculum development; although, multiple, concurrently-acting barriers were identified and substantive curricula changes were seen necessary to operationalize NE's potential role. Overall, these diverse results can be synthesized into two main overall findings: (a) through its curricula, NE is perceived to be inadequately preparing graduates for NCS; and (b) NE can and should expand its role in NCSP by explicitly incorporating NCS/NCSP content and processes into curricula. The findings, as applicable, will be discussed in relation to NCS and NCSP as conceptualized in the NCSPM-BNE.

### *About the Past and Present*

The subject matter of this study was of significant interest and importance to baccalaureate faculty; inferred by three results. First, the number of study respondents (n=215) was significant in light of the survey occurring during a school term when faculty workload is significant. Second, there were 248 instances where respondents took the time to make comments for the two open-ended questions, most of which were substantive, and despite being located at the *end* of a lengthy survey. Third, many explicitly commented about the importance, pertinence, and timeliness of this study's exploration of NCS and NE's role in it, as well as the need for further research. These comments support the underlying premise of this study: NE's role in NCSP comprises a highly relevant gap in the literature warranting comprehensive exploration.

Nursing career stress was seen by faculty to substantively impact nurses' lives and nursing practice, results consistent with literature in which attention is called to NCS's pervasiveness across roles and settings (McVicar, 2003; Shields & Wilkins, 2006). Among the impacted areas, three are directly applicable and pertinent to NE. First, NCS

was perceived to significantly impact *nursing education*, which logically includes impact on *individual educators*, as well as that on the NE system *as a whole*. Many commented on high NCS among faculty; citing time and workload pressures, a shortage of nurse educators, and an inadequate number of full-time faculty positions. These concerns are substantiated in the nursing literature (Bartfay & Howse, 2007; Kelly, 2002). The issue of faculty NCS is something that was often suggested to be addressed through research and SON-level NCSP measures. *Recruitment into the profession* is the second, and significantly impacted, area pertinent to NE; pertinent to NE since individual SONs are involved in recruitment measures and are highly affected by their outcomes (i.e., quantity and quality of applicants). The third area applicable to NE pertains to the degree to which NCS impacts n*urses' retrospective judgment of whether/how their baccalaureate program is accountable for their NCS.* In this, only a slim majority felt that they or their programs are substantially deemed culpable by their graduates who experience the negative impacts of NCS. If faculty involved in curriculum development do *not* believe their programs' effectiveness is evaluated on this count, they may not perceive an overwhelming impetus (i.e., sense of *responsibility*) for NCSP-focused curricular changes; a significant barrier to NE's role expansion.

A wide perception was evident that those directly involved with the current workforce are most responsible and most capable in addressing and impacting NCS. The fact alone that the NCS literature is predominantly organizationally-based corroborates these inferences. The entities associated with NE were not highly ranked in *responsibility* or *ability*, from which two logical scenarios arise: First, NE is not considered *at all* in terms of NCS/NCSP and/or second, NE is considered, but not deemed able to affect NCS. The predominance of organizational approaches in the NCS literature, paired with NE's lack of access to and power within health care organizations, therefore, make it logical that NE is rarely, if ever, considered as an agent in NCSP (i.e., lacking organizational access), let alone one that is able to substantively impact NCS (i.e., lacking organizational influence). Both scenarios likely contribute to, and explain NE's low relative rankings. Overall, the perceived *responsibility* and *ability* rankings for all entities, upon comparison, are essentially equivalent, leading to two inferences. The first, and most obvious, is entities' levels of *responsibility* for addressing NCS are, for the most

part, perceived commensurate with their *ability* to impact it. The second inference is the possibility of conceptual overlap between the *responsibility* and *ability* constructs.

Nursing education is perceived not to be currently impacting NCS to a significant degree. A very large majority indicated that NE currently plays a role in NCSP/NCSM, albeit not substantial, while those perceiving it substantial only slightly out-numbered those who felt NE plays no role at all. Two contrasting inferences can be made from these results. With a 'glass-half-full' mindset, almost all saw NE as having at least *some degree* of a current role; or with a 'glass-half-empty' approach, a similar sized majority saw NE's current role to be of little consequence, or nonexistent. Specific to each of the NCSPM-BNE's sub-modes of NCSP, NE's current impact was seen as insignificant along every sub-mode. Overall, the consistent perceptions about NE's current role in NCSP suggest that NE's increased involvement in NCSP is a highly reasonable venture with untapped and immense potential for positively impacting NCS.

### *Towards the Future*

The vast majority of respondents communicated that NE can and should play a bigger role in NCSP; an apparent contradiction to NE's low responsibility and ability rankings. However, since NCS was seen so important an issue and NE's current impact on NCS and its role in NCSP were seen so minor, a logical inference is that NE was viewed as *sufficiently* responsible for (i.e., *should*) and able to (i.e., *can*) address NCS through NCSP; thus, making it both appropriate (i.e., *responsible*) and worthwhile (i.e., *able*) to move forward more substantially in NCSP. Another possible explanation for the seemingly contradictory results is that as respondents progressed through the survey, learning occurred about NCS and NCSP and perceptions changed about NE's potential role in NCSP. The results may also suggest that the NCSPM-BNE was adequately understood and compelling in its operationalization of potential NE-driven NCSP. In any case, there is clear recognition of impetus for incorporating NCSP into curricula, which is essential for the process to begin.

Although there was a clear belief that NE can and should increase its footprint in NCSP, there was acknowledgement by baccalaureate program educators that the venture would be logistically and theoretically difficult, and numerous and overlapping

theoretical and/or pragmatic barriers were identified, and are discussed as applicable to NE.

- Consistent with the literature, respondents conceded in closed and open-ended responses that they do not fully understand the current or potential roles of NE in NCSP; arguably the most pertinent barrier. Recognizing and accepting the need for change are necessary for the NCSP-focused curriculum development process to begin.
- Baccalaureate curricula were perceived to lack room for additional material; a problem often discussed in the nursing literature. A 'hypertrophied' curriculum may require substantial, if not sweeping revision to incorporate an additional subject matter (Arthur & Baumann, 1996), such as NCSP. However, the time and workload-intensive nature of curriculum revision may be daunting (Iwasiw, Goldenberg, & Andrusyszyn, 2005) in light of high workloads and time constraints reported as primary contributors to baccalaureate faculty's high NCS levels.
- Concerns with the culture within NE were repeatedly communicated, specifically, perceived resistance of some faculty against substantive changes to the content, direction, and/or foci of curricula. In order to make curricular changes, those who appreciate the need for these changes will need to get buy-in from those who are either reluctant to change current curricula or parts thereof, or may not see impetus to incorporate NCSP.
- The NCS experienced by faculty is an issue to be addressed on its own merit, and it is also pertinent to the prospect of NCSP integration in curricula. For NCSP to be recognized as a priority for curriculum development, be implemented, and be successful, many relayed that their own NCS must be explicitly addressed at the SON-level through faculty-directed education. It would be appropriate to address this prior to, or concurrently with, NCSP-focused curriculum development.
- Stress amongst NSs was another identified barrier; a result highly consistent with the literature about NSs' stress levels and its effects on their learning and experiences in, and after, nursing school (Billingsley et al., 2007; Beddoe & Murphy, 2004; Grossman & Wheeler, 1999; Lengacher, 1996; Stark et al., 2005). If NCSP were explicitly incorporated into baccalaureate curricula, it is reasonable that NSs could, in real-time, apply NCSP knowledge and skills as *nursing student* stress prevention/management.

There was diversity in qualitative responses about operationalizing the potential incorporation of NCS/NCSP into curricula. Many faculty explicitly and implicitly, in their qualitative comments, expressed discontent and concern about the current goals and foci of clinical curricula; particularly with respects to preparation for nursing practice in acute care, hospital-based settings. It is plausible that these comments were from those with clinical backgrounds in those practice areas and/or from those teaching in courses focused on those types of nursing care, and that their views are not shared collectively; however, it is noteworthy that not a single respondent communicated concerns about *too much focus* on acute care and/or long-term care or about *inadequate focus* on nursing practice areas often cited by the above respondents as over-emphasized in curricula (e.g., community, public health, administrative).

Curricula were repeatedly described as incongruent with the realities of nursing practice; seen to contribute to a 'reality shock' for graduates upon workforce entry and to difficult socializations to nursing practice (especially clinical practice) and working life. This perception parallels assertions in the occupational stress literature that individuals respond more effectively and adaptively to stressors if they are explicitly forewarned about them and are pre-emptively prepared to deal with them (Charnley, 1999; Janis & Mann, 1977; Kramer, 1974). These results are important as they potentially lead to three concerning scenarios in graduates' experiences with NCS as conceptualized in the NCSPM-BNE. First, graduates may be inadequately prepared to: a) recognize and constructively interact with potential stressors inherent in work life and nursing practice (i.e., primary NCSP) and b) effectively respond if perceived as stressors (i.e., secondary NCSP). Second, if unrealistic curricula, as proposed by respondents, contribute to a reality shock for graduates upon workforce entry, it is likely they will be exposed to substantial, *unanticipated* potential stressors (i.e., primary NCSP) for which they are unprepared to respond effectively (i.e., secondary NCSP). Third, if curricula lack realism about NCS's negative outcomes, graduates may be ill-prepared to recognize signs and symptoms in themselves, and therefore, reduce the likelihood that treatment will be sought when strains and consequences are in their early and most treatable stages (i.e., tertiary NCSP).

A great deal of emotion was evident, and many of the comments were unexpectedly extensive in the qualitative responses. From this, an impression was gained that many of the respondents have either not had opportunity or confidence to speak their minds about curricula and the direction/foci of NE; or, have done so and not been acknowledged by those felt necessary to hear their perspectives. For NCSP to be incorporated into baccalaureate curricula, a logical first step is in grass-roots dialogue about the subject amongst nurse educators. Based on several respondents' comments, this discussion may well have been stimulated through study participation.

The purpose of this study was not to test the NCSPM-BNE; however, many of the results have implications related to it. As previously discussed, respondents learned about NCS and NCSP as they progressed through the survey; inferred by results that indicated a positive change in respondents' perceptions about NE's role in NCSP. This may plausibly suggest that the conceptualization of NCSP and the potential avenues for NE-driven NCSP in the NCSPM-BNE were understood by respondents. In support of this conjecture, respondents explicitly communicated support for the NCSPM-BNE as a valid and promising theoretical and pragmatic guide for future NCSP-related research, and a legitimate theoretical framework with which to explore and guide NCSP-focused curriculum development and organize potential content and processes.

All sub-modes of NCSP were deemed insignificantly impacted by current curricula and all were seen to warrant significant foci in future NCSP-focused curriculum development. Primary and secondary NCSP sub-modes both received very strong support as future foci. This suggests that nurse educators perceive that significant exposure to stressors can be prevented through primary NCSP, and thus, it warrants significant focus. It also infers that they also acknowledge that considerable NCS is inherent in nursing work and unpreventable; thus, graduates' responses to stress must be supported by emphasizing secondary NCSP in curricula. Relative to primary and secondary NCSP, tertiary had markedly less support as necessitating substantial foci; however, support for it was reasonable enough to include tertiary NCSP in curricula, although, to a lesser degree. These results correspond with literature in which primary and secondary prevention are promoted over tertiary (Biron, Ivers, Brun & Cooper, 2006; Clarke & Cooper, 2000). In light of the results about primary and secondary NCSP, it is inferred in

the tertiary NCSP results that respondents grasped the concept of NCSP on the whole. If significant emphases were placed on primary and secondary NCSP, if content and processes were implemented effectively in curricula, and in turn, if learned knowledge and skills were used by its graduates, there would potentially be a reduction in the emergence of NCS's deleterious outcomes, and thus, less need for graduates to apply tertiary NCSP. Using this logic, there is thus less rationale to highly prioritize tertiary NCSP in curricula.

## Implications and Recommendations

Implications and recommendations will be addressed for NE in relation to curriculum development and faculty development; processes that should be philosophically and pragmatically in complement to each other (Iwasiw et al., 2005). Implications and recommendation for nursing research are also addressed. Implications for the NCSPM-BNE will also be discussed, as applicable, within each section.

### *Implications and Recommendations for Curriculum Development*

Faculty involved in baccalaureate nursing curricula should consider how their programs *do*, and potentially *should* address NCS and NCSP. If a decision is made to incorporate NCSP, the SON should undergo an NCSP-focused, systematic assessment as to the NCSP-related strengths and weaknesses of the current curriculum as a basis for making decisions about curriculum modification.

Evaluative research should also be conducted to assess longitudinal effects of revisions. Nursing student outcomes should be measured to gain *formative* information about the curriculum's effects as they progress through it; and from graduates to assess effectiveness and provide *summative* evidence for future revisions (Iwasiw et al., 2005; Sauter & Applegate, 2005).

The NCSPM-BNE is proposed as applicable for use in each phase of NCSP-focused curriculum development as a theoretical framework and organizational tool. The model can be used in assessing a current curriculum for its applicability to NCSP; in revising an assessed curriculum and developing a new NCSP-focused curriculum; in implementing an NCSP-focused curriculum; and in evaluative curriculum research.

### *Implications and Recommendations for Faculty Development*

Respondents acknowledged their own learning needs about NCS and NCSP, and that they must be addressed to build their expertise and credibility to support their teaching, and to effectively integrate NCSP into curricula. There is plentiful expository and research-based information about NCS and NCSP; although it is primarily organizationally-focused. This information would need to be made applicable to faculty education and curriculum development.

The NCS of baccalaureate faculty was repeatedly mentioned, and as such, it would be highly beneficial for individual faculty members to critically reflect about their own personal stressors, responses to them, and whether negative outcomes are present. It is also recommended that within a SON, the collective faculty be assessed and a plan developed to address internal NCS. Although the NCSPM-BNE does not address quantitative stress levels, in conjunction with a tool that does so, it may be a useful framework to guide and organize a SON's assessment of its faculty for NCS by its components and sub-components, and in developing, implementing, and evaluating measures to address faculty members' NCS.

### *Implications and Recommendations for Nursing Research*

In addition to the curriculum evaluation studies addressed above as a component of curriculum development, other recommendations for nursing research include:

- An assessment of faculty perspectives about NCS and the roles of NE in NCSP on a larger scale and/or replication at similar scale within different discrete samples is/are recommended. These studies would potentially provide comprehensive data to influence governments' NCSP initiatives, inform nursing organizations in their NCSP endeavours and curriculum recommendations, and guide NCSP measures by individual SONs.
- In addition to individual SON-level curriculum assessment studies, larger, multi-curricula assessments are recommended to potentially provide generalizable results upon which other SONs can base their NCSP-focused curriculum development. If curricula are assessed that were developed using the NCSPM-BNE as a theoretical and/or pragmatic framework, these recommended studies can also potentially evaluate the model's effectiveness in guiding the incorporation of NCSP in baccalaureate curricula.

- Studies exploring the perspectives of current NSs and baccalaureate graduates are recommended to explore perceptions about what is/was taught about NCS and NCSP; how/if perceptions and expectations about NCS change as NSs progressed through a curriculum and how/if they changed for graduates after workforce entry; and what content and processes could/should have be included in curricula about NCS and NCSP so as to better prepare graduates for NCS, work life, and nursing practice.
- A study exploring the views of faculty about their own NCS and NCSP/NCSM behaviours should be undertaken.

## Limitations

In relation to response rate and sample size alone, qualified inferences can be reasonably made about the target population of baccalaureate faculty in Ontario; although, as the sample's representativeness is not known, inferences must be made with caution (Polit & Beck, 2004). Results cannot be extrapolated and applied with any degree of confidence to theoretically similar samples (e.g., baccalaureate educators in other provinces/states), to other types of nurse educators (e.g., graduate nurse educators, clinical nurse educators), or to baccalaureate faculty in general.

The FVAQ did not undergo comprehensive pilot testing due to time and other resource constraints inherent to Masters thesis research. Face/content validity was assessed. Potential biases arise in instrument development. The FVAQ's closed-ended portions are highly dependent on this researcher's interpretation of the literature on which he based what was included or excluded in tool development, and how questions and response options were worded and placed. The inclusion of open-ended comment areas may have compensated for this by allowing respondents to qualify answers, refute a question or response option, and/or append something not included in instrument development. The FVAQ is a self-report instrument, and as such, there is potential for response biases (i.e., respondents may potentially answer according to what they perceive the researcher expects or wants; Polit & Beck, 2004).

## Summary

The purpose of this study was to garner the views of nursing faculty teaching in baccalaureate programs in Ontario about the link between NE and NCSP. In this, the

views of 215 baccalaureate faculty were obtained through a researcher-developed, closed and open-ended, online survey instrument.

Respondents perceived the topics of this study as important and timely for the profession and that NCS significantly affects many diverse aspects of RNs' personal and professional lives and multiple practice areas and roles. However, NCS was seen as a multi-factorial issue without simple answers. Addressing NCS was perceived as a shared responsibility, although NE's responsibility was viewed as low relative to other entities. Respondents agreed that many entities, including NE, are able to impact NCS; although NE was again ranked poorly. Although not currently understood, NE's current role is seen as neither substantive nor effective.

It was widely communicated that NE can and should expand its role in NCSP. However, many barriers to this were identified, including: (a) the quantitative shortage of nurse educators; (b) the high NCS level of faculty; (c) a perceived lack of room in baccalaureate curricula for new subject matter; (d) considerable NCS/NCSP-specific learning needs among nurse educators; and (e) the current structure and foci of curricula. Clinical curricula were often specifically noted to contribute to graduates' perceived lack of preparedness for clinical practice and the demands of nursing careers; specifically, an excessive focus on non-institutional, non-acute care and a lack of connection to realities of nursing practice and working life.

Nursing education was perceived able to impact NCS on its own, although positive impact on NCS was seen to be optimized through NE's collaborations with other entities applicable to nursing practice (e.g., nursing's regulatory and professional bodies), nursing education (e.g., medical education) and health care work environments (e.g., nursing unions, RN-employing organizations).

As to the modes of NCSP per the NCSPM-BNE, primary and secondary prevention are seen to warrant substantial focus in baccalaureate curricula. For primary NCSP, there was a frequent call to increase awareness of potential career stressors and in doing so, support nurses' instrumental and cognitive interactions with stressors. For secondary NCSP, problem-directed *and* coping responses were seen as skills NSs should learn about and have opportunity to practice. Overall, it was widely agreed that NE should integrate NCSP as a core concept and goal of curricula.

## Conclusions

Nursing education was not perceived as a *current* collaborator in measures to deal with NCS; however, NE was deemed able and responsible to expand its role in addressing NCS through curriculum-based NCSP. Nursing education is currently underutilized as a potentially effective agent in addressing NCS, and as such, NCS is being less than optimally addressed. There can be no debate that if not effectively addressed, NCS in the workforce will be worsened by the progressing nursing shortage and measures to address it will thus become all the more difficult. This accentuates the immediate need for *all* those capable of affecting NCS to step forward and do so.

This study adds some initial evidence to the collective knowledge base, although, it is only the beginning of what can and should be done. To provide impetus and evidence for NCSP-focused curriculum and faculty development, additional research is needed to further examine the link between NE and NCSP and ways to actualize and optimize it. Current curricula should be comprehensively and systematically assessed for whether and how NCS and NCSP are addressed to inform potential NCSP-focused curriculum development. Nursing education can and should explicitly incorporate NCS and NCSP as core concepts in curricula. In doing so, NE will take advantage of its unparalleled access to, and influence on, the NSs who will comprise tomorrow's workforce.

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# PART THREE
# DISCUSSION

Nursing career stress (NCS) is a pertinent topic for the profession of nursing, for organizations that employ nurses, and for local, national, and global health care systems and their consumers, especially in light of the current and worsening nursing shortage. Measures to manage and/or prevent NCS originate from many different corners (e.g., government, nursing, and healthcare bodies; nurse-employing organizations), although the vast majority of these measures are enacted within individual organizations; focusing on the existing nursing workforce and its workplaces. There is a dearth of research about NCS prevention (NCSP) occurring prior to workforce entry; a potentially ideal point as it is prior to the onset and progression of NCS. Baccalaureate nursing education (NE) has unparalleled access to, and influence with, nursing students (NS). Therefore, NE is the logical entity to enact NCSP with explicit aim of positively impacting NSs' *future* NCS. However, there is a gap in the literature about NE's place in this and about NCSP content and processes currently and/or potentially incorporated in curricula.

In this study, NE's past, present, and future roles, responsibilities, barriers, and opportunities in NCSP were explored by garnering the views of nursing faculty teaching in baccalaureate programs in Ontario. The study was theoretically framed by a researcher-developed model entitled the *Nursing Career Stress Model for Baccalaureate Nursing Education* (NCSPM-BNE). The model was based upon the concept of NCS; a holistic nursing application of the basic stress process (viz., stressor, response, outcome, modifiers of the stress process) also developed by the researcher. Based on principles of preventative medicine (i.e., primary, secondary, tertiary prevention), various ways in which BNE can theoretically and pragmatically enact NCSP were demarcated. In total, 215 faculty members participated in this closed and open-ended online survey.

Respondents viewed NCS as a high-impact and pervasive force across practice areas and in nurses' professional and personal lives. Pertinent to NE are NCS's impact on three items: *Nursing education, recruitment into the profession,* and *nurses' hindsight opinions of their NE*; each seen as considerably impacted by NCS. The results of the latter one stand out as somewhat anomalous. Although a small majority believe graduates' experiences with NCS have significant bearing on how they retrospectively

feel about the quality of their baccalaureate programs, there is a significant number that *refute* this. The views of this latter contingent seem to contradict graduates' concerns about NCS arising from a perceived lack of preparation for clinical practice (Charnley, 1999; Malach-Pines, 2000), and it seems counter-intuitive not to expect nurses to cast significant blame on their baccalaureate program when perceived, by themselves or others, as ill-prepared for working life and/or nursing practice. Potentially explaining these apparent contradictions, there is possibility of *differential respondent interpretation.* This question did not specifically target *new graduates'* perceptions, who, logically, would be more likely to assign blame to their just-completed NE (i.e., a 'recency effect') than those whose NE is further in the past. As such, it is possible that the generic wording affected results; in that those choosing *very little impact* may have been thinking of nurses in general, not specifically new graduates. It also leads to question *whether* and *how* results would have differed if the question was instead worded 'a *new graduate's* hindsight opinion...' or, if both were included and compared.

Respondents perceived that NE is currently making little impact on NCS through NCSP in general, and specifically, along each of the modes/sub-modes of NCSP as per the NCSPM-BNE. Respondents widely agreed that NE can and should take an expanded role in NCSP. However, there are some important barriers perceived by respondents to stand in the way of NE's role expansion. There was an acknowledged lack of understanding of NE's current role and of what an expanded role could be; and a recognized knowledge deficit among nurse educators about NCS and NCSP. Nurse educators' own NCS was also seen to be a priority issue. Curricula were seen to lack room for any additional content and processes; thus, incorporating NCSP would require changes to current curricula. There were substantive problems identified in current curricula, especially clinical curricula, which were seen to be ineffective in positively impacting graduates' NCS or contributing to it. As well, there was perceived internal resistance against changing the foci, goals, and direction of current curricula.

Overall, the main findings of this study applicable to NE are: (a) faculty did not perceive current baccalaureate nursing curricula to be adequately preparing graduates for clinical practice, nursing worklife, and specifically, for future exposures and dealings

with NCS; and (b) faculty believed that BNE can and should expand its role in NCSP through explicitly addressing NCS/NCSP in baccalaureate nursing curricula.

## Implications and Recommendations for Baccalaureate Nursing Education

From the results, implications and recommendations will be addressed for NE in terms of *curriculum* and *faculty development*; processes that should philosophically and pragmatically complement each other (Iwasiw, Goldenberg & Andrusyszyn, 2005). Implications and recommendation for *nursing research* will also be addressed. Implications for the NCSPM-BNE will also be discussed, as applicable, within each section.

### *Implications and Recommendations for Curriculum Development*

By increasing appreciation of NCS and NCSP as priorities for NE, this study is intended to provide impetus for comprehensive NCSP-focused curriculum assessments by individual SONs. Participating faculty were clear that NE should engage more explicitly in NCSP through curriculum development. In light of this, there are several implications related to curriculum development, as follow:

- Faculty involved in baccalaureate curricula should consider how their programs *do*, and potentially *should*, address NCS/NCSP; starting with internal dialogue to see if/how needs, desires, and philosophies of the faculty compare to those expressed in this study.
- It is essential for faculty involved in all processes of curriculum development (e.g., pre-development assessment, development, implementation, and evaluation) to incorporate the perspectives and experiences of all other vested parties (e.g., clinical instructors and preceptors, current NSs, past graduates, and clinical partners). This will aid in assessing current curricula for NCSP content and processes, guiding development and implementation, and the *effectiveness* thereof.
- If a decision is made to incorporate NCSP, it is recommended that the SON undergo an NCSP-focused, systematic curriculum assessment to assess the NCSP-related strengths and weaknesses of the current curriculum. The initial assessment should encompass all learning environments (i.e., classroom, lab, clinical). However, there were repeatedly expressed concerns about clinical curricula; in terms of their realism and applicability to clinical practice and nurses' working lives, and their efficacy in preparing

graduates for practice and supporting their experiences with NCS. As such, clinical curricula should be a prime focus in a comprehensive critical curriculum assessment.

- Respondents asserted that NCS/NCSP does not explicitly exist in current curricula; however, through the curriculum assessment process, current content and processes may be identified as seemingly applicable to NCS/NCSP. It is important to assess this identified subject matter as to whether it can appropriately be considered NCSP.
- In accordance with the nursing literature, respondents communicated concerns about 'overstuffed' current curricula; thus, adding new content and processes may require revisions to whether and how other content is addressed (i.e., time, scope, breadth). In lieu of existing research-based evidence in this regard, it is crucial that the perspectives of all vested in the curriculum are solicited and critically incorporated to substantiate these crucial curricular decisions. Multiple NCS/NCSP-applicable concepts, processes, and philosophies were noted as those which should be *retained* as fundamental to BNE, *added*, and/or *covered* to higher degrees. These data provide initial guidance for curriculum development.
- Once content and processes have been decided, there will be need to determine where (e.g., Year 1 or 3) and how (i.e., teaching methodologies, learning environments) they could be addressed in the curriculum. Many suggested integrating the concepts as a thread throughout a curriculum and across all learning environments; introducing the concepts early in the program and increasing focus and depth later on. There were also specific recommendations about specific methodologies with which to address NCSP (e.g., clinical case studies, role playing). Curriculum-level changes may also require complementary and supportive changes be made at the program level.
- Formative and summative evaluative research should also occur as a part of the curriculum implementation process to assess.

### *Implications and Recommendations for Faculty Development*

Many respondents conceded a considerable NCS/NCSP-specific knowledge deficit amongst those involved in curriculum development and implementation. The NCSP-focused curriculum development process should include faculty development to address this on three main fronts. First, for NCSP to be recognized as a necessary core concept and goal of curricula, nurse educators will require access to NCSP-focused

literature; however, very little research exists about curriculum-based NCSP. This study adds much needed information to the collective knowledge base. Second, faculty education will be necessary to inform NCSP-specific curriculum development process, in relation to what and how to incorporate (i.e., content, processes) and eventually, how to effect the curriculum changes (e.g., teaching/learning methodologies, learning environments). Finally, before implementation can begin, nurse educators must address their acknowledged knowledge deficits about NCS/NCSP to support their credibility and efficacy in teaching it.

### *Implications and Recommendations for Nursing Research*

Implications from this study and recommendations for future research applicable to NE are as follow:

- Following development and implementation of an NCSP-integrated curriculum, *evaluative studies* are needed to assess its longitudinal effects. Comprehensive and systematic curriculum evaluations must include outcome measures to truly assess effectiveness and provide evidence with which to inform future revisions and development (Iwasiw et al., 2005; Sauter & Applegate, 2005).
- An assessment of faculty perspectives about NCS and the roles of BNE in NCSP on a larger (i.e., national) scale and/or replication at similar scale within different discrete samples (i.e., other provinces, states) is/are recommended. These studies would potentially provide comprehensive data to influence governments' NCSP initiatives, inform nursing regulatory and professional organizations in their NCSP endeavours and curriculum recommendations, and guide NCSP measures by individual SONs.
- In addition to individual SON-level curriculum assessment studies, larger, multi-curricula assessments are recommended to potentially provide generalizable results upon which other SONs can base their NCSP-focused curriculum development. Additionally, if curricula are assessed that were developed using the NCSPM-BNE as a theoretical and pragmatic framework, these studies can also potentially evaluate the model's effectiveness in guiding the incorporation of NCSP in baccalaureate curricula through its proposed avenues for BNE to prevent their graduates' future NCS.
- Studies exploring the perspectives of both current NSs and baccalaureate program graduates are highly recommended to explore perceptions about what is/was taught about

NCS/NCSP; how/if perceptions and expectations about NCS changed after entering the workforce; and what could/should have been included in their programs' curricula.

- An exploratory study focusing on operationalizing BNE's curriculum-based role in NCSP is recommended to provide a more detailed look at themes and ideas garnered in this study's qualitative data. This study should target which *specific* content and processes to incorporate and *how* to do this. Results could provide evidence for, and direct, future NCSP-focused curriculum development.
- A study exploring views of baccalaureate nursing faculty about their own NCS and NCSP/NCSM behaviours was frequently suggested by respondents. This is important as a stand-alone subject, but as it also affects effectiveness as educators, mentors, and role models, its relevance and importance as needed research is thus amplified.
- A study exploring the career stress and prevention and management behaviours of other professions/disciplines associated with nursing was also suggested by respondents. The results could provide insight and collaborative ideas for solutions to the shared and interrelated phenomenon that is healthcare professionals' career stress.

## Summary and Conclusions

The purpose of this study was to begin exploration of an important, yet understudied issue; NCSP and BNE's involvement in it. In this study, the views of nursing faculty teaching in baccalaureate programs in Ontario were garnered about NCS and the past, present, and potential future roles, opportunities, barriers, and responsibilities of BNE in the prevention of the future NCS of its graduates. A substantial number provided exploratory data about the past and present status of NE in NCSP, and about potential directions for NE to increase its contribution in NCSP. There is potential to benefit the health and well-being of nursing graduates, and ultimately, the profession.

Nursing education is not evident as a *current* collaborator in measures to deal with NCS and nearly all faculty members perceived NE's *current* role as non-existent or insignificant. Nursing education is also rarely named as a *potential* agent in addressing NCS; however, in this study, nursing faculty widely asserted that NE is *responsible* for addressing NCS and is *able* to do so by incorporating NCSP as a core concept and goal of curricula. There was widespread agreement that NE *should* expand its role in addressing NCS by developing curricula that explicitly focus on NCSP; although, this was seen to be

a difficult endeavour due to a complete lack of research in its regard and other significant barriers *within* NE. The above study findings lead to two highly pertinent conclusions. The first is that NE is considerably underutilized as a potentially effective agent in addressing NCS through NCSP. If an effective entity is not being used, then the second conclusion must then be that NCS is being *less than optimally addressed.* As the nursing shortage progresses, NCS in the workforce will undoubtedly worsen and measures to address it will be thus made all the more difficult. This accentuates the immediate need for *all* those capable of affecting NCS to step forward and do so.

This study adds some initial evidence to the collective knowledge base, although, it is only the beginning of what can and should be done. To provide impetus and evidence for NCSP-focused curriculum and faculty development, additional research is needed to further examine the link between NE and NCSP and ways to actualize and optimize it. Additional perspectives must be sought, especially those of current NSs and recent graduates, to obtain a more detailed picture of what can and should be done in terms of NCSP and how NE could potentially do so. Current curricula should be comprehensively and systematically assessed for whether and how NCS and NCSP are addressed to inform potential NCSP-focused curriculum development. Nursing education has been definitively identified in this study as a potentially crucial entity against NCS; by explicitly incorporating NCS and NCSP as core concepts in curricula. In doing so, NE will take advantage of its unparalleled access to, and influence on, the NSs who will comprise tomorrow's workforce.

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# Appendix A

## University of Western Ontario Health Sciences Research Ethics Board Letter of Approval for Faculty Viewpoints Assessment


**Office of Research Ethics**

The University of Western Ontario
Room 00045 Dental Sciences Building, London, ON, Canada N6A 5C1
Telephone (519) 661-3036 Fax (519) 850-2466 Email ethics@uwo.ca
Website www.uwo.ca/research/ethics

**Use of Human Subjects - Ethics Approval Notice**

**Principal Investigator:** Dr. M. Andrusyszyn
**Review Number:** 13945E **Review Level:** Expedited
**Review Date:** February 6, 2008
**Protocol Title:** Baccalaureate Nursing Education and Prevention-Based Nursing Career Stress Management
**Department and Institution:** Nursing, University of Western Ontario
**Sponsor:** Student Research Award-Iota Omicron Chapter (Sigma Theta Tau International
**Ethics Approval Date:** February 13, 2008 **Expiry Date:** August 31, 2008
**Documents Reviewed and Approved:** UWO Protocol, Letter of Information
**Documents Received for Information:**

This is to notify you that The University of Western Ontario Research Ethics Board for Health Sciences Research Involving Human Subjects (HSREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the Health Canada/ICH Good Clinical Practice Practices: Consolidated Guidelines; and the applicable laws and regulations of Ontario has reviewed and granted approval to the above referenced study on the approval date noted above. The membership of this REB also complies with the membership requirements for REB's as defined in Division 5 of the Food and Drug Regulations.

The ethics approval for this study shall remain valid until the expiry date noted above assuming timely and acceptable responses to the HSREB's periodic requests for surveillance and monitoring information. If you require an updated approval notice prior to that time you must request it using the UWO Updated Approval Request Form.

During the course of the research, no deviations from, or changes to, the protocol or consent form may be initiated without prior written approval from the HSREB except when necessary to eliminate immediate hazards to the subject or when the change(s) involve only logistical or administrative aspects of the study (e.g. change of monitor, telephone number). Expedited review of minor change(s) in ongoing studies will be considered. Subjects must receive a copy of the signed information/consent documentation.

Investigators must promptly also report to the HSREB:

a) changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
b) all adverse and unexpected experiences or events that are both serious and unexpected;
c) new information that may adversely affect the safety of the subjects or the conduct of the study.

If these changes/adverse events require a change to the information/consent documentation, and/or recruitment advertisement, the newly revised information/consent documentation, and/or advertisement, must be submitted to this office for approval.

Members of the HSREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the HSREB.

Chair of HSREB: Dr. John W. McDonald

**Ethics Officer to Contact for Further Information**

☐ Janice Sutherland ☐ Jennifer McEwen ☐ Grace Kelly ☒ Denise Grafton

*This is an official document. Please retain the original in your files*

# Appendix B

## University of Western Ontario Health Sciences Research Ethics Board Letter of Approval for Revisions to Faculty Viewpoints Assessment Questionnaire

**Office of Research Ethics**

The University of Western Ontario
Room 00045 Dental Sciences Building, London, ON, Canada N6A 5C1
Telephone: (519) 661-3036 Fax: (519) 850-2466 Email: ethics@uwo.ca
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**Use of Human Subjects - Ethics Approval Notice**

**Principal Investigator:** Dr. M. Andrusyszyn
**Review Number:** 13945E **Revision Number:** 1
**Review Date:** February 25, 2008 **Review Level:** Expedited
**Protocol Title:** Baccalaureate Nursing Education and Prevention-Based Nursing Career Stress Management
**Department and Institution:** Nursing, University of Western Ontario
**Sponsor:** Student Research Award-Iota Omicron Chapter (Sigma Theta Tau International
**Ethics Approval Date:** February 25, 2008 **Expiry Date:** August 31, 2008
**Documents Reviewed and Approved:** Revised Instruments
**Documents Received for Information:**

This is to notify you that The University of Western Ontario Research Ethics Board for Health Sciences Research Involving Human Subjects (HSREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the Health Canada/ICH Good Clinical Practice Practices: Consolidated Guidelines; and the applicable laws and regulations of Ontario has reviewed and granted approval to the above referenced revision(s) or amendment(s) on the approval date noted above. The membership of this REB also complies with the membership requirements for REB's as defined in Division 5 of the Food and Drug Regulations.

The ethics approval for this study shall remain valid until the expiry date noted above assuming timely and acceptable responses to the HSREB's periodic requests for surveillance and monitoring information. If you require an updated approval notice prior to that time you must request it using the UWO Updated Approval Request Form.

During the course of the research, no deviations from, or changes to, the protocol or consent form may be initiated without prior written approval from the HSREB except when necessary to eliminate immediate hazards to the subject or when the change(s) involve only logistical or administrative aspects of the study (e.g. change of monitor, telephone number). Expedited review of minor change(s) in ongoing studies will be considered. Subjects must receive a copy of the signed information/consent documentation.

Investigators must promptly also report to the HSREB:

a) changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
b) all adverse and unexpected experiences or events that are both serious and unexpected;
c) new information that may adversely affect the safety of the subjects or the conduct of the study.

If these changes/adverse events require a change to the information/consent documentation, and/or recruitment advertisement, the newly revised information/consent documentation, and/or advertisement, must be submitted to this office for approval.

Members of the HSREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the HSREB.

[redacted]

Chair of HSREB: Dr. John W. McDonald

| Ethics Officer to Contact for Further Information | | | |
|---|---|---|---|
| ☐ Janice Sutherland ([redacted]) | ☐ Jennifer McEwen ([redacted]) | ☐ Grace Kelly ([redacted]) | ☐ Denise Grafton ([redacted]) |

*This is an official document. Please retain the original in your files.*

cc: ORE File

# Appendix C

## Faculty Viewpoints Assessment Questionnaire

### 1. Demographic Information

This demographic information is being collected so that we are able to describe our study sample population as a group.
Please remember that this information is confidential and anonymous.

*** 1. How many years have you been an RN?**

- ◯ < 5 years
- ◯ > 5 and < 10 years
- ◯ > 10 and < 15 years
- ◯ >15 and < 20 years
- ◯ > 20 years
- ◯ No response

**2. What age group do you belong to?**

- ◯ Less than 25 years old
- ◯ > 25 and < 35
- ◯ > 35 and < 45
- ◯ > 45 and < 55
- ◯ > 55
- ◯ No response

*** 3. How many total years have you been a nurse educator?**

- ◯ < 5 years
- ◯ > 5 and < 10 years
- ◯ > 10 and < 15 years
- ◯ >15 and < 20 years
- ◯ > 20 years
- ◯ No response

*** 4. What would you consider to be (or was) your MAIN area of clinical experience/expertise?**

- ◯ Medical-Surgical
- ◯ Critical Care/Emergency
- ◯ Perioperative (PACU/OR)
- ◯ Psychiatry
- ◯ Long-Term/Chronic Care
- ◯ Community-Based Care
- ◯ Maternity
- ◯ Pediatrics
- ◯ Neurology/Neurosurgery
- ◯ Other
- ◯ No one specific area
- ◯ No response

*** 5. What type of program do you currently teach in (classroom, lab, and/or clinical)? Please check ALL that apply to your current situation.**

- ☐ University-based basic baccalaureate program
- ☐ College-based collaborative baccalaureate program
- ☐ University-based accelerated/compressed timeframe baccalaureate program
- ☐ University-based post-RN baccalaureate program
- ☐ Graduate program
- ☐ No response

*** 6. Have you taught undergraduate students in some capacity (classroom, lab, and/or clinical) within the last 4 years?**

- ◯ Yes
- ◯ No

*** 7. What is your current faculty employment status? Choose ALL that apply to your current situation.**

- ☐ Full-time
- ☐ Part-time
- ☐ Retired
- ☐ Other
- ☐ No response

*** 8. What is/are your current faculty teaching roles? (Choose ALL that best describe your current role)**

- ☐ Undergraduate classroom teaching
- ☐ Undergraduate lab teaching
- ☐ Undergraduate clinical teaching
- ☐ Graduate classroom teaching
- ☐ Graduate lab teaching
- ☐ Graduate clinical teaching
- ☐ Other
- ☐ No response

## 2. The impact of nursing career stress

*** 1. For this study, nursing career stress is conceptualized as stress that nurses encounter because of their roles as a professional nurse and as a nurse employee, and the interactions of these roles with the non-working aspects of their lives.**

**How much impact do you feel that nursing career stress has on the following aspects of nurses' lives and the following aspects, types, and areas of nursing practice?**

| | No response | Very little impact | Moderate impact | High impact |
|---|---|---|---|---|
| A nurse's hindsight opinion of his/her baccalaureate education | ○ | ○ | ○ | ○ |
| The quality of a nurse's home life | ○ | ○ | ○ | ○ |
| Job satisfaction | ○ | ○ | ○ | ○ |
| Reason to leave a job | ○ | ○ | ○ | ○ |
| Frequent, multiple job changes (aka 'job-hopping') | ○ | ○ | ○ | ○ |
| Satisfaction with nursing as a career | ○ | ○ | ○ | ○ |
| Physical health and well-being | ○ | ○ | ○ | ○ |
| Psychological health and well-being | ○ | ○ | ○ | ○ |
| Work effectiveness | ○ | ○ | ○ | ○ |
| Nurse-nurse conflict and abuse | ○ | ○ | ○ | ○ |
| Patient safety | ○ | ○ | ○ | ○ |
| Quality patient care | ○ | ○ | ○ | ○ |
| Recruitment into profession | ○ | ○ | ○ | ○ |
| Retention of new grads (<5yrs.) | ○ | ○ | ○ | ○ |
| Retention of experienced nurses (>5yrs.) | ○ | ○ | ○ | ○ |
| The nursing shortage | ○ | ○ | ○ | ○ |
| The public image of nursing | ○ | ○ | ○ | ○ |
| Acute care nursing | ○ | ○ | ○ | ○ |
| Long-term care nursing | ○ | ○ | ○ | ○ |
| Community-based nursing | ○ | ○ | ○ | ○ |
| Nursing Education | ○ | ○ | ○ | ○ |

## 3. Responsibility for addressing nursing career stress

*** 1. Of the following entities, who do you feel has the greatest RESPONSIBILITY in addressing nursing career stress?**

***Please number the following from 1 to 8, with 1 being the entity with the greatest responsibility and 8 being the entity with the least responsibility**

***Please use each number only once**

Baccalaureate Schools of Nursing as a collective (CASN) _____

Individual baccalaureate Schools of Nursing via their curricula _____

Individual healthcare organizations that employ nurses _____

Individual nurses _____

Professional nursing bodies (e.g., RNAO, CNA) _____

Regulatory nursing bodies (e.g. CNO) _____

The federal government _____

The provincial government _____

**2. For the above question, if you feel that there is one or more additional individuals/groups that also share RESPONSIBILITY for addressing nursing career stress, please indicate who this is.**

## 4. Ability to address nursing career stress

*** 1. Of the following entities, who do you feel has the greatest ABILITY to make a positive impact in preventing nursing career stress?**
***Please rank each from 1 to 8, with 1 being the entity with the greatest ability and 8 being the entity with the least ability**
***Please use each number only once**

Baccalaureate Schools of Nursing as a collective (CASN)

Individual baccalaureate Schools of Nursing via their curricula

Individual healthcare organizations that employ nurses

Individual nurses

Professional nursing bodies (e.g., RNAO, CNA)

Regulatory nursing bodies (e.g., CNO)

The federal government

The provincial government

**2. For the above question, if you feel that there is one or more additional individuals/groups that also have the ABILITY to address nursing career stress, please indicate who this is.**

## 5. The current role of baccalaureate nursing education

*** 1. Do you feel that nursing education presently plays a substantial role in nursing career stress prevention/management?**

- ◯ Yes, a substantial role
- ◯ Yes, but not a substantial role
- ◯ No, nursing education plays no role at all in this area
- ◯ No response

## 6. Potential future role of bacclaureate nursing education

*** 1. Ideally, do you feel that nursing education can and should play a more substantial role in nursing career stress prevention?**

- ◯ Yes
- ◯ No
- ◯ No response

## 7. Barriers to baccalaureate nursing education's future potential role

*** 1. What are the biggest barriers to expanding nursing education's role in nursing career stress prevention? (please check ALL that apply in your opinion)**

- [ ] *I don't think nursing education can play a more substantial role in nursing career stress prevention*
- [ ] Unsure of what this role is presently
- [ ] Unsure of what this role could potentially be
- [ ] Unsure of what would be taught
- [ ] Unsure of how it would be taught
- [ ] Lack of room in the baccalaureate curriculum to add anything more
- [ ] A shortage of nursing faculty
- [ ] Nursing career stress is inevitable - attempting to prevent it would not be a good use of teaching time
- [ ] No response
- [ ] Other (please specify)

## 8. Nursing career stress- primary, secondary, and tertiary prevention

To frame the final few questions, a conceptualization of nursing career stress and stress prevention is very briefly outlined below.

Potential nursing career stressors are aspects, interactions, situations, and/or demands in a nurse's career that can become sources of stress.

Potential stressors become active stressors when:
§ The nurse comes into contact with the potential stressor, and
§ The nurse physically/instrumentally interacts with the potential stressor, and
§ The nurse cognitively interacts with the potential stressor by appraising it and perceiving it as a negative stimulus which may lead to probable and important negative outcomes, and requires a response from the nurse.

The nurse responds to the active stressor by:
§ Responding to the situation or demand itself, and
§ Responding to the stress induced by the situation (i.e., coping)

Outcomes of the interaction with an active stressor include:
§ If and how the situation or demand was brought to a perceived conclusion, and
§ Short-term strains, which are the physical and psychological impacts of the stress encounter and residual stress that remains due to ineffective coping responses, and
§ Long-term consequences, which are the cumulative physical/psychological wear and tear as a result of repeated stress encounters and chronic residual stress that remains due to repeated or long-term ineffective coping

Reflective of this conceptualization of nursing career stress, there are multiple avenues for nursing career stress prevention to occur.

A. Primary prevention is focused on the sources of stress and can be targeted at:
a) The potential stressors themselves
b) The nurse's physical/instrumental interactions with potential stressors
c) The nurse's cognitive interactions (appraisal and perception processes) with potential stressors
B. Secondary prevention is focused on the responses to stress and can be targeted at:
a) The nurse's response strategies to stressor situations themselves
b) The nurse's coping strategies

C. Tertiary prevention is focused on the outcomes of stress and can be targeted at:
a) Attempting to slow, reverse, or prevent the progression of short-term strains
b) Attempting to slow, reverse, or prevent the progression of long-term consequences
c) Attempting to manage the symptoms of short-term strains and long-term consequences

*** 1. How much impact do you feel that nursing education CURRENTLY makes in each of the following areas of nursing career stress prevention?**

***Please refer to the brief conceptualization of nursing career stress and nursing career stress prevention above this question.**

*** If you do not want to respond within a row, please check "no response" in that row.**

| | No response | No impact | Little impact | Moderate impact | High impact |
|---|---|---|---|---|---|
| Primary (1°) prevention targeted at potential stressors themselves | ○ | ○ | ○ | ○ | ○ |
| 1° prevention targeted at nurses' physical/instrumental interactions with potential stressors | ○ | ○ | ○ | ○ | ○ |
| 1° prevention targeted at nurses' cognitive interactions with potential stressors (appraisal and preception processes) | ○ | ○ | ○ | ○ | ○ |
| Secondary (2°) prevention targeted at nurses' response strategies to stressor situations themselves | ○ | ○ | ○ | ○ | ○ |
| 2° prevention targeted at nurses' coping strategies | ○ | ○ | ○ | ○ | ○ |
| Tertiary (3°) prevention targeted at slowing, reversing, or preventing the progression of short-term strains | ○ | ○ | ○ | ○ | ○ |
| 3° prevention targeted at slowing, reversing, or preventing the progression of long-term consequences | ○ | ○ | ○ | ○ | ○ |
| 3° prevention targeted at managing the symptoms/impact of strains and consequences | ○ | ○ | ○ | ○ | ○ |

*** 2. In your opinion, how much FOCUS should be placed in each area in expanding the FUTURE role of nursing education in nursing career stress prevention?**

*** If you don't think nursing education's role can/should be expanded in a specific area, please check "no focus" in that area.**

*** If you do not want to respond within a row, please check "no response" in that row.**

| | No response | No focus | Little focus | Moderate focus | High focus |
|---|---|---|---|---|---|
| Primary (1°) prevention targeted at potential stressors themselves | ○ | ○ | ○ | ○ | ○ |
| 1° prevention targeted at nurses' physical/instrumental interactions with potential stressors | ○ | ○ | ○ | ○ | ○ |
| 1° prevention targeted at nurses' cognitive interactions with potential stressors (appraisal and preception processes) | ○ | ○ | ○ | ○ | ○ |
| Secondary (2°) prevention targeted at nurses' response strategies to stressor situations themselves | ○ | ○ | ○ | ○ | ○ |
| 2° prevention targeted at nurses' coping strategies | ○ | ○ | ○ | ○ | ○ |
| Tertiary (3°) prevention targeted at slowing, reversing, or preventing the progression of short-term strains | ○ | ○ | ○ | ○ | ○ |
| 3° prevention targeted at slowing, reversing, or preventing the progression of long-term consequences | ○ | ○ | ○ | ○ | ○ |
| 3° prevention targeted at managing the symptoms/impact of strains and consequences | ○ | ○ | ○ | ○ | ○ |

**9. Optional Open-ended question**

*** 1. For the role of nursing to be expanded in prevention-based nursing career stress management, nursing education will conceivably need to do more of certain things, do better at certain things, and/or start doing certain new things.**

**In your opinion, what would a couple of those specific things be?**
**AND**
**How could this be accomplished?**

***If you do not want to answer this question, please enter the word 'NO' into the box**

## 10. Further Comments / Completion of Survey

If you have been directed here from the demographic question area at the beginning of the questionnaire, you do not fit the inclusion criteria for this study. So as to not waste your time, you have been directed to this final question. Thank you for your interest.
Please click on the "Done" icon at the bottom of this question to exit the survey.

**1. If you have any further comments, please include them here.**

**Thank you for your time in completing this questionnaire.**

**Click on the "Done" icon at the bottom of the question to exit the survey.**

## Appendix D

### Faculty Viewpoints Assessment Invitation and Information Letter: Initial and Second Mailings

*(Note: This letter sent on University of Western Ontario School of Nursing Letterhead)*

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I am writing to invite you to participate in a research study about the role of baccalaureate nursing education in the prevention-based preparation of its graduates for future career-related stress. An initial step is to explore the viewpoints of *nursing faculty* regarding nursing career stress, and the past, present, and potential future roles, opportunities, and responsibilities for baccalaureate nursing education in regards to preparing graduates for dealing with their future career stress. You are being contacted through a mailing list obtained through the College of Nurses of Ontario. The College's involvement in this research is limited to the provision of a mailing list. The College does not endorse or participate in this research in any manner.

***Who is conducting the study?***

- I am Jason McCready, a graduate student at the School of Nursing at the University of Western Ontario. Dr. Mary-Anne Andrusyszyn and Dr. Carroll Iwasiw are professors in the UWO School of Nursing and are supervising this study.

***Why is this study important?***

- Nursing career-related stress receives a great deal of attention by those working to understand and improve the experiences and the retention of practicing nurses at work and in the profession.
- Nursing is consistently noted a high stress profession, and nurses, both individually and collectively, are exhibiting the negative effects of their career stress.
- Work-related stress and the nursing shortage go hand-in-hand. Career stress and the attrition of nurses from practice are seen as some of the main causes *and* exacerbators of the present nursing shortage; and inversely, the nursing shortage is seen to strongly and negatively contribute to the quality and quantity of stress experienced by practicing nurses.
- As such, it is important for the nursing profession to further their understanding of nursing career stress, and explore opportunities to better prevent and manage it.

***What is this study intended to accomplish?***

- It is my hope that the information we learn through this research will help us to better understand nursing career stress, and to explore the potential roles, opportunities, and responsibilities for nursing education in preventing future career stress for its graduates.
- This information may also act to guide future related research.

***Who is eligible to participate?***

- To obtain the most diverse and rich data, I am including both full and part-time nursing faculty, and those who currently teach, or have taught in one or more of the following types of undergraduate programs within the past 4 years:
    - University-based collaborative and/or non-collaborative basic baccalaureate programs,
    - College-based collaborative basic baccalaureate programs,

- Accelerated/compressed time frame baccalaureate programs, and
- Post-RN programs.

*NB. If by reading the eligibility criteria, you recognize that you are not eligible for participation and want to be removed from future mailings, please email me and inform me of such.*

***How do I participate?***

- If you take part in this study, you will be asked to complete an online questionnaire. The questionnaire should take no more than 15-20 minutes to complete.
- The web address for the online survey is: www.surveymonkey.com/NursingFacultySurvey
- Manually type the above URL into your web browser and you will be directed to the survey. Please note that the URL is case-sensitive and must be typed in exactly as it reads above.

***Is it confidential? Is it anonymous? Are there any risks?***

- Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions with no effect on you or your institution.
- You indicate your consent to participate by completing and submitting the on-line survey.
- The questionnaire is anonymous, and thus, no one will know whether you have participated or not. As the online questionnaires are anonymous, once you have submitted your responses to the questionnaire, it is not possible for us to withdraw your data from the study. The collected data will be stored within a password-protected Survey Monkey account will only be accessed by members of this research team. The data will be kept securely for a maximum of 3 years, at which time it will be deleted.
- All contact information will be kept strictly confidential. Your name will be held strictly confidential. No information that discloses your identity or that of your institution will be reported when the results are published. This contact information will only be accessible by the members of this research team, will only be used for the current purposes of this specific research study, and will be destroyed after all contacts are completed.
- There is no compensation, and are no direct benefits for taking part in this research.
- There are no known or conceivable risks for taking part in this research.

If you have any questions, please feel free to contact me via the information provided below. If you have any questions about your rights as a research participant or the conduct of this study, you may contact the Office of Research Ethics, The University of Western Ontario, at (519) 661-3036 or email at ethics@uwo.ca. This letter is yours to keep for future reference.

Thank you for considering taking part in this study.

Jason McCready, RN, BSc, BScN, MScN(c), Email: _____

Dr. Mary-Anne Andrusyszyn, RN, BScN, MScN, EdD, Email: _____

## Appendix E

### Faculty Viewpoints Assessment Invitation and Information Letter: Final Mailing

*(Note: This letter sent on University of Western Ontario School of Nursing Letterhead)*

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- This is the final invitation to participate in this study.
- If you have already completed the survey, we would like to extend to you our appreciation for your support in our research.
- If you are still planning to participate, please note that the online survey will close on May 9, 2008.

**Baccalaureate Nursing Education and Prevention-Based Nursing Career Stress Management: Nursing Faculty Viewpoints**

I am writing to invite you to participate in a research study about the role of baccalaureate nursing education in the prevention-based preparation of its graduates for future career-related stress. An initial step is to explore the viewpoints of *nursing faculty* regarding nursing career stress, and the past, present, and potential future roles, opportunities, and responsibilities for baccalaureate nursing education in regards to preparing graduates for dealing with their future career stress. You are being contacted through a mailing list obtained through the College of Nurses of Ontario. The College's involvement in this research is limited to the provision of a mailing list. The College does not endorse or participate in this research in any manner.

***Who is conducting the study?***

- I am Jason McCready, a graduate student at the School of Nursing at the University of Western Ontario. Dr. Mary-Anne Andrusyszyn and Dr. Carroll Iwasiw are professors in the UWO School of Nursing and are supervising this study.

***Why is this study important?***

- Nursing career-related stress receives a great deal of attention by those working to understand and improve the experiences and the retention of practicing nurses at work and in the profession.
- Nursing is consistently noted a high stress profession, and nurses, both individually and collectively, are exhibiting the negative effects of their career stress.
- Work-related stress and the nursing shortage go hand-in-hand. Career stress and the attrition of nurses from practice are seen as some of the main causes *and* exacerbators of the present nursing shortage; and inversely, the nursing shortage is seen to strongly and negatively contribute to the quality and quantity of stress experienced by practicing nurses.
- As such, it is important for the nursing profession to further their understanding of nursing career stress, and explore opportunities to better prevent and manage it.

***What is this study intended to accomplish?***

- It is my hope that the information we learn through this research will help us to better understand nursing career stress, and to explore the potential roles, opportunities, and responsibilities for nursing education in preventing future career stress for its graduates.

- This information may also act to guide future related research.

***Who is eligible to participate?***

- To obtain the most diverse and rich data, I am including both full and part-time nursing faculty, and those who currently teach, or have taught in one or more of the following types of undergraduate programs *within the past 4 years*:
  - University-based collaborative and/or non-collaborative basic baccalaureate programs,
  - College-based collaborative basic baccalaureate programs,
  - Accelerated/compressed time frame baccalaureate programs, and
  - Post-RN programs.

***How do I participate?***

- If you take part in this study, you will be asked to complete an online questionnaire. The questionnaire should take no more than 15-20 minutes to complete.
- The web address for the online survey is: www.surveymonkey.com/NursingFacultySurvey
- Manually type the above URL into your web browser and you will be directed to the survey. Please note that the URL is case-sensitive and must be typed in exactly as it reads above.

***Is it confidential? Is it anonymous? Are there any risks?***

- Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions with no effect on you or your institution.
- You indicate your consent to participate by completing and submitting the on-line survey.
- The questionnaire is anonymous, and thus, no one will know whether you have participated or not. As the online questionnaires are anonymous, once you have submitted your responses to the questionnaire, it is not possible for us to withdraw your data from the study. The collected data will be stored within a password-protected Survey Monkey account will only be accessed by members of this research team. The data will be kept securely for a maximum of 3 years, at which time it will be deleted.
- All contact information will be kept strictly confidential. Your name will be held strictly confidential. No information that discloses your identity or that of your institution will be reported when the results are published. This contact information will only be accessible by the members of this research team, will only be used for the current purposes of this specific research study, and will be destroyed after all contacts are completed.
- There is no compensation, and are no direct benefits for taking part in this research.
- There are no known or conceivable risks for taking part in this research.

If you have any questions, please feel free to contact me via the information provided below. If you have any questions about your rights as a research participant or the conduct of this study, you may contact the Office of Research Ethics, The University of Western Ontario, at (519) 661-3036 or email at ethics@uwo.ca. This letter is yours to keep for future reference.

Thank you for considering taking part in this study.

Jason McCready, RN, BSc, BScN, MScN(c), Email: _____

# Appendix F

**Table 1.** ***Description of Faculty Viewpoints Assessment Sample (n=215)***

| Characteristic | Participant Response Options | Frequency | Percent |
|---|---|---|---|
| **Years as RN** | < 5 years | 3 | 1.4% |
| | >5 and <10 years | 13 | 6% |
| | >10 and <15 years | 15 | 7% |
| | >15 and <20 years | 24 | 11.2% |
| | **>20 years** | **160** | **74.4%** |
| **Age Group** | < 25 years old | 0 | 0% |
| | >25 and < 35 years old | 16 | 7.5% |
| | >35 and <45 years old | 42 | 19.6% |
| | **>45 and <55 years old** | **78** | **36.4%** |
| | **>55 years old** | **78** | **36.4%** |
| | No response | 1 | 0.5% |
| **Total Years as Nurse Educator** | <5 years | 48 | 22.3% |
| | >5 and <10 years | 59 | 27.4% |
| | >10 and <15 years | 23 | 10.7% |
| | >15 and <20 years | 21 | 9.8% |
| | **>20 years** | **62** | **28.8%** |
| | No response | 2 | 0.9% |
| **Main Area of Clinical Experience/Expertise** | **Medical-Surgical** | **41** | **19.1%** |
| | Critical Care/Emergency | 38 | 17.7% |
| | Perioperative (PACU/OR) | 4 | 1.9% |
| | Psychiatry | 18 | 8.4% |
| | Long-Term/Chronic Care | 4 | 5.1% |
| | Community-Based Care | 27 | 12.6% |
| | Maternity | 18 | 8.4% |
| | Pediatrics | 20 | 9.3 |
| | Neurology/Neurosurgery | 2 | 0.9 |
| | Other | 21 | 9.8 |
| | No one specific area | 15 | 7.0 |
| **Type of Program Currently Teaching (Participants may choose > 1 option)** | University-based basic baccalaureate | 97 | 45.1 |
| | **College-based baccalaureate** | **108** | **50.2** |
| | Accelerated/Compressed timeframe | 25 | 11.6 |
| | Post-RN baccalaureate | 30 | 14.0 |
| | Graduate | 31 | 14.4 |
| | No response | 15 | 7.0 |
| **Current Employment Status** | **Full-time** | **157** | **73.0** |
| | Part-time | 78 | 22.3 |
| | Retired | 6 | 2.8 |
| | Other | 7 | 3.3 |
| | No response | 1 | 0.5 |

| | | | |
|---|---|---|---|
| Current Teaching Roles (Participants may choose > 1 option) | **Undergraduate classroom** | **158** | **73.5** |
| | Undergraduate lab | 87 | 40.5 |
| | Undergraduate clinical | 123 | 57.2 |
| | Graduate classroom | 26 | 12.1 |
| | Graduate lab | 2 | 0.9 |
| | Graduate clinical | 9 | 4.2 |
| | Other | 38 | 17.7 |
| | No response | 7 | 3.3 |

*Note.* In the cases where n = 0 for *no response*, this option was not reported.

## Appendix G

**Table 8.** ***Operationalizing Nursing Education's Expanded Role in Nursing Career Stress Prevention***

| Theme | Key Points / Suggestions |
|---|---|
| NCSP *must* be integrated into curricula | ▪ NCSP does not explicitly exist in curricula to any substantive degree; must be incorporated into the formal, required curriculum<br>▪ Introduce concepts early in curricula as a thread throughout a curriculum, and/or introduce NCSP-specific distinct course(s)<br>▪ Faculty, clinical instructors, clinical educators, and preceptors all need to develop their knowledge in NCS and NCSP.<br>▪ Use clinical case studies, problem-based learning, simulation technology, role-playing, using clinical expert nurses as guest speakers<br>▪ NE needs greater link to graduates to evaluate effectiveness of NCSP once integrated into curricula. |
| The current curriculum inadequately prepares graduates for practice | ▪ Curricula are overly idealistic; difficult for graduates to transition from NE's idealistic-humanistic model to the business-medical model of most workplaces. However, the humanistic focus and some degree of idealism should be retained; balanced with realism.<br>▪ NE is inordinately focused on creating future academics/researchers, administrators, and community-based and public health nurses; not on institution-based nursing practice. This is evident in clinical curricula:<br>o Inadequate quantity and quality of overall clinical experiences.<br>o Underdeveloped psychomotor clinical skills.<br>o Not enough hospital-based acute care experiences although this is what students want and is where most new graduates will work.<br>o Not realistic to practice (e.g., shift work/length, patient load).<br>▪ Many faculty lack recent experience and credibility in clinical practice resulting in curricula 'out of touch' with the realities of practice and widening of the theory-practice gap.<br>o Implementing clinical curricula left to part-time faculty/clinical instructors/preceptors who may not be formally prepared to teach, are often unfamiliar with the curriculum and its philosophies, are not properly evaluated on teaching methods or for upholding and furthering program philosophies, and are undervalued and must be explicitly supported and developed.<br>▪ NCS should be addressed at clinical practica in debriefing/discussion sessions. Nurse-focused outcomes should be addressed concurrently with patient-focused outcomes<br>▪ BN programs must demand that clinical learning environments are positive, respectful to NSs' learning; abuse must not be tolerated.<br>▪ Increased use of simulation technology.<br>▪ More clinical instructor-NS interactions; must recruit more clinical instructors and adjust the instructor to student ratio. |

| | |
|---|---|
| Faculty in baccalaureate programs are highly stressed | ▪ Baccalaureate faculty stress needs to be systematically addressed.<br>o Related to workload, faculty shortage, and inadequate number of full-time faculty positions for non-tenure track faculty.<br>o Faculty are role models for students; often negative role models due to ineffective stress management. |
| NSs' are stressed | ▪ NSs must be supported with the stresses of their NE.<br>▪ Need open, two-way dialogue between faculty and NSs. |
| Collaborative NCSP | ▪ NE collaborations with local healthcare organizations and local, provincial, and national governments.<br>▪ Collaborations are more effective than either party can be on its own<br>▪ BNE may have to initiate/lead in collaborations. |
| The value of nursing | ▪ For true strides to be made in NCS, there must be systemic change in how nursing is viewed and valued in society and the health care system |
| Proposed foci for future curricula | ▪ Retain current foci – critical thinking, professionalism, leadership theory, self-awareness and reflection, and empowerment.<br>▪ Increase focus on other NCS/NCSP-applicable areas: nurse-focused self-care, interpersonal communication, team/group theory, change theory, ethics, conflict prevention/management, assertiveness/self-advocacy, human resources issues, union/labour law, structure/function of health care system, political action, professional advocacy, nurse abuse/violence prevention, career planning and development, home-work balance, and technology/informatics.<br>▪ Interdisciplinary education (viz., nursing and medical students) can potentially build healthy and mutually respectful relationships in the nurses and physicians of tomorrow; leading to systemic changes within both disciplines, and patient-centred and egalitarian changes to physician-centred organizational structures and processes.<br>▪ NE has limited ability to impact some areas of NCS; must be aware of its limitations and focus on that which it can most affect.<br>▪ Stress is highly personal and graduates will react to it in individual ways. There is no single 'right way' to teach NCSP and there is no guarantee that graduates will use what they have been taught. Thus, the role of NE is to provide graduates with the tools for NCSP and the right mindset to be able to address NCS positively. |
| Proposed emphases in future curricula by mode/sub-mode of NCSP | ▪ Primary NCSP:<br>o Increasing awareness of potential stressors.<br>o Promoting positive nurse-potential stressor interactions.<br>▪ Secondary NCSP:<br>o Problem-directed responses targeted at solving the actual problem should be given the priority over emotion-based coping responses, seen as primarily palliative and merely symptom management.<br>o Coping responses are broadly applicable to NCS and should be high priority as it is impossible to address every potential stressor. |

*Note.* NCSP = nursing career stress prevention; NCS = nursing career stress; NE = nursing education; NS=nursing student.