New graduate nurses’ (NGNs) transition into the nursing workforce and health care system has been characterized as being stressful and challenging. As a consequence, a high percentage of them leave their first place of employment or the profession entirely within one year of graduation (Cheng, Liou, Tsai, & Chang, 2014). The level of attrition in this cohort of nurses, together with the rate of retirement of late-career nurses compound the global problem of a shortage of nurses. This situation calls for the creation of retention strategies that are responsive to the experiences of NGNs. Although there is an abundance of nursing literature in which this complicated shift from student to registered nurse has been described, less is known about effective strategies that could be implemented during students’ academic programs to prepare them for this difficult transition period. Much of the existing literature has been focused on how to help NGNs achieve the knowledge and competence necessary to feel confident in their ability to provide safe patient care. Not nearly as much emphasis has been placed on how to support NGNs to gain confidence in their ability to shape their experience during this tumultuous period and to develop a sense of career resilience that they could retain throughout their career.

Background

Researchers have acknowledged the many challenges that NGNs face during their transition into professional practice, as well as the lack of resources to help them develop long-term strategies for successful careers in nursing (Shirey, 2009). This transition has been described as a period of “reality shock” (Kramer, 1974, p. 3), “transition shock” (Duchscher, 2009, p.1109), and a process of socialization that includes various challenges such as role stress, role ambiguity, fear, role overload, lack of confidence, and coping with the beginning level of competence as a novice nurse (Duclos-Miller, 2011; Rheuame, Clement, LeBel, & Robichaud, 2011; Romyn et al., 2009; Teoh, Pua, & Chan, 2013; Thomas, Bertram, & Allen, 2012). NGNs have described the difficulty they experience in adjusting to the transition from student to registered nurse and an uncertainty regarding the expectations their
workplace and colleagues have of them (Duchscher, 2009). In her theory of transition shock, Duchscher proposed that NGNs experience fears that they will be judged by their workplace colleagues as incompetent, unable to cope with the demands of their workplace, or able to provide safe care. Duchscher also suggested that NGNs may miss the ready access they had before as students to support and affirmation from nursing faculty and student colleagues, with a resulting sense of isolation. Bowles and Candela (2005) highlighted that up to 91% of NGNs in their study reported that the environments in which they worked were detrimental to providing safe patient care, and that 22% of respondents further contended they left their first nursing position due to such environments. It is not surprising, therefore, that 33%–61% of NGNs change their initial place of employment or plan to leave the profession of nursing within their first year of professional practice (Beecroft, Dore, & Wenten, 2008; Bowles & Candela, 2005).

Undergraduate nursing education’s primary focus has been to foster students’ acquisition of the knowledge, competencies, and skills necessary to providing safe and comprehensive clinical care and to meet the demands of the health care system (Wolff, Regan, Pesut, & Black, 2010). Yet, often lacking these skills has been an accompanying guidance in how to develop the career planning ability necessary to capitalize on opportunities that may enhance their career development (Marsland, 1996; Waddell & Bauer, 2005). New graduate nurses have described a sense of being ill-prepared to establish themselves in their chosen career and have voiced concerns related to their ability to develop a career path or execute their career goals in a challenging health care system (Marsland, 1996; Waddell & Bauer, 2005). In addition, fatigue and lack of confidence in the workplace have been reported as diminishing NGNs’ job satisfaction and performance (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Leiter, Harvie, & Frizzell, 1998). Conversely, their engagement in the workplace has been related to a sense of empowerment, characterized by feelings of energy and commitment to their work (Giallonardo, Wong, & Iwasiw, 2010; Laschinger, Finegan, & Wilk, 2009).

Within the context of the professional practice setting, researchers have examined the efficacy of various strategies that enhance the ability of NGNs to do the work of nursing within the organizational context. Halfer and Graf (2006) emphasized addressing the developmental needs and professional supports necessary for novice nurses. They examined the job satisfaction of nurses during their first 18 months of practice and found that career adjustment extended beyond the acquisition and development of clinical skills. But waiting until new nurses are practicing in their first job before they are offered support in developing their careers may not be the most effective approach for the profession to take, and actually may contribute towards increasing the challenges NGNs face. The best time for them to also acquire the skills, attitudes, and personal tools they will need, not only in their first job, but also throughout their career, is during their academic programs. Nursing educators, therefore, may be similarly well positioned to take on the other crucial responsibility of developing students who can enter the workforce with the potential to adapt to, respond to, and influence changing scopes of practice, changing health care needs, and a dynamic health care system.

To this end, a curriculum-based career planning and development (CPD) program for baccalaureate nursing students, (reported on in more detail in Part 1), was designed to help nursing students develop these essential career competencies. The key emphasis of the CPD program was fostering students’ development of career resilience within and across the years of their nursing program. Career-resilient individuals have been described as competent, confident, and autonomous, with the capacity to adapt to, and capitalize on, ever-changing work environments (Chiaburu, Baker, & Pitaru, 2006; McGillis Hall, Waddell, Donner, & Wheeler, 2004; Taylor & Betz, 1983). This attribute has been identified as one that may enable nurses to create a work environment that is personally meaningful, productive, and satisfying (McGillis Hall et al., 2004).

The CPD program was designed to engage students in CPD workshops within each academic term, beginning in the second year of their nursing program. The workshops were guided by the Donner Wheeler Career Planning and Development Model, adapted for use with students (Waddell, Donner, & Wheeler, 2009), and facilitated by a faculty member career coach. Engaging students in CPD provides them with the opportunity to learn attitudes and skills to self-manage their careers. King (2004) proposed that the ability to self-manage one’s career enhances self-efficacy and career satisfaction. Each CPD workshop began with a career visioning exercise. With that vision in mind, students completed a self-assessment in which they identified their areas of strength in relation to their vision, as well as areas of development that would help them actualize their vision. Students then engaged in an environmental scan to ascertain who and what could help them develop in the areas of interest/need identified in their individual assessment. Then students developed a career plan to guide their development within the specific context of the curriculum theme, focus, and activities unique to their program year. In each intervention session,
marketing strategies were discussed that focused on enhancing participants’ ability to articulate their career vision and specific term goals to faculty, preceptors, peers, and mentors. Included as well was the importance of being intentional in marketing themselves within all professional forums. It was hypothesized that the CPD program would enhance students’ career resilience by providing them with a structure and process whereby they could keep their unique goals in mind and achieve a sense of control and focus in relation to their engagement in their academic program. It was further hypothesized that this level of career resilience would extend throughout their transition to becoming NGNs.

A longitudinal, mixed methods study was conducted to examine: (a) the influence of a CPD program compared to a standard curriculum on the development of career resilience in baccalaureate nursing students up to graduation, and at 12 months post-graduation; (b) the impact of a career education/coaching development program on nursing faculty’s perceived confidence to provide student career coaching and education, and on their own career satisfaction. The results of the overall study’s three components are presented in a series of three papers. Longitudinal data from the student component reported in the first paper (Part 1), indicated that participants who received the CPD intervention throughout their academic program possessed attitudes and competencies illustrative of career resilience, including being internally focused and guided, goal oriented, and confident in their ability to make career decisions. (Waddell et al., Part 1).

The third paper in the series will examine the faculty-related component of the study. This second paper in the series, reports on outcomes for the study’s students after they had assumed their first professional roles as NGNs. Research questions specific to the NGN component of the overall study were: (a) what is the perceived level of career resilience for NGNs, 12 months post-graduation? and (b), for intervention participants, what elements of the CPD program were most relevant to their sense of career resilience?

Methodology

Design

A randomized control trial design was used for this Part 2 of the study. All NGN participants were recruited from the larger number of student participants who had been involved in the overall study during their baccalaureate program. When they were students, the NGNs had consented to participate in the overall study in the second year of their 4-year program. Students were randomly assigned with allocation concealment to one of two groups: (i) a CPD group (intervention), or (ii) a standard curriculum (without the intervention) group (control).

Sample

University email addresses utilized in the overall study, or alternate contact information provided at graduation, were used at 12 months post-graduation to communicate with NGNs who had been in the overall study’s student intervention and control groups. New graduate nurses had been asked to forward any changes in email addresses to the study research assistant (RA) over the course of the 12 months post-graduation. However, the RA did not receive communication from the majority of NGN participants with updated information. Therefore, the smaller sample out of the original 72 participants in the overall study consisted of 9 NGNs, 5 of whom had been in the intervention group and 4 in the control group. All NGNs were employed as registered nurses at the time of data collection.

Procedures

Intervention and control group student participants from the overall study were asked at the time of initial recruitment to participate in a focus group discussion or individual interview (in person or by phone) at 12 months after completion of their program. The RA who led these focus group discussions relied on a semi-structured interview guide consisting of questions related to career resilience. Discussion began by garnering the participants’ general perceptions of their level of career resilience since graduation and then focused on more specific details related to factors contributing to career resilience and to their perceived changes in career resilience as an NGN. The intervention group participants were asked to identify which of the elements in the CPD program they had received as students that they now perceived to be most relevant to their sense of career resilience. After data were collected from all NGN participants, those in the standard curriculum (control group) were offered the CPD intervention with career coaching.
Data analysis

All focus group and individual interviews were audio-taped. The data were transcribed and systematically analyzed by the research team members. Thematic analysis was used wherein the data were searched for recurring themes (Morse & Field, 1995). Initial themes were developed based on the questions that framed the discussions. These questions focused on perceptions and behaviors reflective of the concept of career resilience (e.g., perceived confidence in their ability to take advantage of change; create opportunities to advance their career; and shape their professional practice to make it personally meaningful and productive). The initial themes were refined through an iterative process involving several team members. A co-investigator, as well as two RAs, analyzed the data and then discussed their coding strategies and emergent themes with one another. Following the initial review and identification of codes/themes, the principal investigator completed a blind review to validate data interpretation and identification of themes.

Results

The themes that emerged from the NGN data were categorized according to the two research questions specific to the NGN component of the overall study. For the first question, descriptions of each theme, as well as participants’ observations, are presented, first from the intervention group and then from the control group. The themes arising from the second question pertain only to the intervention group.

What Is the Perceived Level of Career Resilience for NGNs 12 Months Post-Graduation?

Intervention Group

Key themes related to NGNs’ perceived career resilience at 12 months post-graduation included: (a) seeking support within a reciprocal relationship, (b) taking a strategic proactive approach, and (c) actively seeking out opportunities.

Seeking support within a reciprocal relationship
Participants emphasized their ability to effectively build and actively engage in supportive reciprocal working relationships with colleagues, peers, and mentors in their NGN role. They described these relationships as being mutually beneficial and supportive while highlighting the importance of creating opportunities for networking:

I feel that being able to feel some confidence does make it so that I can sort of do things a little bit differently than the other nurses at times... when you have support from your mentor and your manager, you feel that you don’t have to worry so much.

Taking a strategic proactive approach
NGN participants highlighted their ability to assume a proactive and strategic approach in their career choices and decisions. They spoke of their ability to be flexible within their work environments and emphasized the importance of looking ahead to strategically put themselves in a position to be successful in the future.

Participants described thinking about the “bigger picture” and considering opportunities that aligned with their career goals:

I have taken some of what I’ve learned to try to look ahead and see what I want to get in the future, try to make smart choices to be able to remain flexible and work towards what I want to accomplish.

I feel that it’s important to look at the big picture and try not to get discouraged if maybe one week doesn’t go well or if I have a bad shift or something.

Actively seeking out opportunities
Participants also reported actively seeking out opportunities for new learning and professional development, and enthusiastically taking advantage of educational opportunities that supported their career goals. This theme reflected participants’ ability to put their plans into action and seek specific resources and opportunities that would help propel them to meet their career goals:

I think it’s really important to be self-directed in finding educational opportunities and looking to senior nurses and educators and even organizational leadership.

Meeting those people [role models] and knowing that... there’s a job out there that’s... absolutely... my niche and... I know where I’m supposed to be headed. I just need that pinpoint in the future where... that’s where I want to be and now I can just drive towards it.

Control group

The key themes related to perceived career resilience in the NGN control group were: (a) looking to others for support, (b) focusing on career development specific to job requirements, and (c) taking a reactive approach to CPD.
Looking to others for support
Participants spoke about developing supportive relationships with others including preceptors, staff nurses, and faculty. These relationships were described as uni-directional and often involved the participants looking to these individuals for help and direction in relation to what they should do to plan their career. Participants noted the benefits of these relationships and the importance of obtaining feedback from others, which they perceived as helping them develop confidence in their role:

My manager and my advanced practitioner have mentioned that I was functioning very well as a new grad considering I actually went and took the new grad initiative. So... a lot of different feedback... would boost my confidence.

I really value, especially female nurses who have a lot of experience, but who really believe in change and are open to change.... I think that enhances my sense of confidence in our system and then my own activities.

Focusing on career development specific to job requirements
The professional development opportunities that participants described being involved in were directly related to their current position or role. The NGNs used them to enhance or develop skills and competencies instrumental to performing more effectively in the job they held rather than to look ahead to what would be useful for further or new career opportunities:

The Advanced Cardiac Life Support course, ACLS course, is one of the courses I've noticed. It's needed for some of the more critical areas.

And then I mentioned that inventory of skills that my advanced practice nurse had me fill out so that actually provided excellent framework of how I was performing. And I guess maybe next year when we do that skills list, I can revisit and see how I've grown hopefully.

Taking a reactive approach to CPD
Participants described relying on a passive or reactive approach toward participating in career development and professional opportunities that were offered to them. These NGNs only took advantage of opportunities that were easily available to them:

Because [hospital name] is one of those hospitals that does stress continuing education, there's lots of courses available. We actually have a department called Organizational Development that offers free courses every few weeks... so the opportunities are there if I choose to take them.

So I was at [hospital name] on a medical unit [clinical placement]. Right after I finished they offered me a position, so I accepted it.

What elements of the CPD model were most relevant to intervention group participants' sense of career resilience?
These participants were able to identify key elements of the CPD Model that had affected their sense of career resilience, and they reported having continued to utilize facets of the structured CPD process post-graduation. In particular, they highlighted their ongoing reliance on the career vision and self-assessment phases of the CPD Model. Through the self-reflection processes imbedded in all the phases of the CPD Model, NGN participants learned how to perceive challenges in their work environments as positive opportunities for personal and professional growth. Ongoing use of The CPD Model helped them to feel confident and in control of their careers, despite the changes and challenges encountered in their NGN role:

That visioning was absolutely key. Because it constantly changes, which I thought was surprising. Every year I'd come in and slowly I wouldn't have [to] be living in a mud hut, but I would be living in Toronto and going to work in Africa or in a developing country. And it constantly reminded me of where I wanted to go... that was absolutely number one that I took away from the process.

It's [the CPD Model] given me a good framework to understand what's happening with my career. That does give me more confidence when I can understand what's going on a bit better. And when you understand what's going on, you have a bit more control because you kind of adapt to the changes and you can make adjustments.

Discussion
Findings from this study reveal various themes illustrative of the positive impact that the CPD intervention still had on students, and as graduates 12 months after they had completed their 4-year degree program. Despite experiencing a work environment that presented challenges and demanded adaptability and flexibility, they demonstrated attitudes and behavior consistent with an ongoing sense of career resilience. They reported being able to respond to their work environments, adapt to changes within their workplace, and acquire a proactive approach in seeking opportunities to expand their professional skills and competencies. They continued to use elements of the CPD Model to navigate their careers and spoke especially about relying on the career visioning phase of the CPD Model to maintain a focus and emphasis on their career goals and plans. The behaviors and attitudes they reported as NGNs are reflective of personal resources inclusive of the ability to engage in self-
reflection and self-assessment within the context of their desired career and professional practice.

Control group findings suggest that these NGNs described behaviours that were less congruent with career resilience. Specifically, they looked to others for support, were more reactive than those in the intervention group in terms of their primary focus on the “here and now”, and on what they could do or take advantage of in relation to achieving a sense of clinical competence in their current role. NGNs without a strong sense of career resilience may be more vulnerable to the challenges and stress that typify the transition from student to registered nurse.

The differing patterns of engagement that NGNs experienced with supportive colleagues is congruent with those they had identified earlier as student participants in the overall study. Both student and NGN intervention group participants emphasized how important supportive relationships (faculty/colleagues) were in facilitating their CPD activities so that they could achieve their self-defined career goals (Waddell et al., Part 1). In contrast, student and NGN control group participants looked to others (faculty/colleagues) to inform them about their career options and provide them with information or direction. That the nature of these supportive relationships remained different at 12 months post-graduation suggests that intervention group NGNs continued to assume a more active role in planning their career, whereas those in the control group still lacked the skills and attitudes that would enable them to take control of their own planning and development.

The results of this longitudinal follow-up reflect earlier findings from the overall study in that the intervention group NGN participants were able to sustain and adapt the CPD attitudes and skills they had gained as students, as they transitioned to a new environment and new role. The abilities to recognize what they need in a work environment to support their career goals and how they can meaningfully engage in their workplace are congruent with career resilience (McGillis Hall et al., 2004; Waddell et al., Part 1). These findings cannot be generalized beyond the NGN participants, given the small number of participants relative to the overall study sample. The perspectives of these NGNs, however, suggest that academic programs, while fostering students’ development of knowledge and skills essential to clinical practice, can also provide the opportunity for them to build their capacity to shape their unique career goals and develop a sense of career resilience. These findings provide information regarding the potential impact of curriculum-based CPD on NGNs’ perceived career resilience during the transition from student to registered nurse. In addition, the findings inform future directions that researchers can take to examine the sustained impact for NGNs of including CPD in the undergraduate curriculum.

Indisputably, the first year of nursing practice can be significantly distressing for NGNs, resulting in feelings of vulnerability, lack of confidence, and insecurity (Boychuk Duchscher & Cowin, 2006; Rheaume et al., 2011). Laschinger et al. (2009) posited that a successful transition from student to registered nurse requires that individuals develop a beginning level of clinical expertise and a sense of self-efficacy in relation to their professional role. Laschinger (2012) further suggested that, in addition to a supportive work environment, personal resources such self-efficacy and the ability to self-assess and evaluate also had a significant influence on NGNs’ job and career satisfaction and turnover. Results from the current longitudinal study indicate that the academic environment has the potential to be as critical a context as the workplace in which to begin nurturing a sense of self-efficacy in students that they would be ready to apply as they began their experiences as NGNs. The differences in the reported perceptions of career resilience between the intervention and control group NGN participants can also set the direction for ongoing research focused on integrating CPD competencies into nursing curricula, with the goal of enabling students and new graduates to develop a sense of career resilience that could be sustained across the career continuum.

**Limitations**

A limitation to this study (Part 2) involved the much smaller sample size of NGN participants compared to the number of student participants in the overall study. Some NGN participants who relocated, or no longer utilized their university emails or alternate emails provided at graduation, were lost to follow-up because they had not informed the RA about their changed contact information. The high attrition rate for this follow-up study is characteristic of longitudinal studies.

**Implications**

The results of this study should provide insight to inform efforts of practice partners involved in the development of confident and competent NGNs to transition successfully from student to professional nurse. Lack of attention
to the transition experience of NGNs has been shown to be costly for health care organizations when new nurses leave their first job to search for work environments more closely aligned with their values and aspirations (Boychuk Duchscher & Cowin, 2006; Salt, Cummings, & Profetto-McGrath, 2008). Of note, a number of intervention group NGNs from the current study contacted the RAs at 6 months post-graduation to express their feelings of being “abandoned” in terms of receiving career support and ongoing career coaching within their employment setting. These individuals suggested that, given the lack of career-focused support within their practice settings, 12 months post-graduation was too long to wait for an opportunity to continue with the formal CPD support they experienced over the course of their academic program. The implications of this finding are threefold: (a) new graduate nurses who have participated in CPD during their academic program may need follow-up earlier than the 12 months set in this study, (b) retention of study participants may be improved if the follow-up is initiated at 6 months as opposed to 12 months post-graduation, and (c) practice partners may benefit from integrating CPD opportunities into the organizational supports and resources they offer for NGNs at the outset of the first year of professional practice. Having NGNs feel supported and able to adapt to dynamic work environments may lead to increased overall NGN job satisfaction, NGN retention, and commitment to the organization, as well as to more positive patient outcomes.

**Conclusion**

Keeping in mind the high turnover rates of NGNs, there is a strong need for innovative strategies that would help them develop the career resilience skills, competencies, and attitudes that would position them to succeed as highly competent NGNs who could contribute significantly to the provision of quality care within a challenging health care environment. The findings of the NGN component of this study further support including structured and progressive curriculum-based CPD opportunities in academic programs, not only for the positive outcomes that accrue to students, but also because of the crucial benefits such programs extend to NGNs as they make the transition to their first professional nursing role. Study results also suggest that comparable programs in the workplace would continue to foster the development of career resilient NGNs and nurses at later stages of their careers. Supporting nurses to continue to utilize the CPD process and elements of the CPD Model across their career continuum, and as health care environments change, would benefit institutions, the nursing profession, and the stability of the health care system.

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