

Nursing Student Resilience: A Concept Clarification

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Teresa Maggard Stephens, PhD, MSN, RN, Assistant Professor of Nursing, King University, Bristol, TN E-mail: tese@btes.tv **PURPOSE.** The purpose of this article is to clarify the concept of resilience for the nursing student population.

METHODS. A selective review of the literature was conducted, with 26 sources found to be cogent to this concept clarification, including four recently published concept analyses. The Norris method of concept clarification is used to analyze and clarify the concept of resilience to enhance its practical application. The phenomenon is described according to its antecedents, attributes, and consequences, along with a proposed operational definition and conceptual model.

PRACTICE IMPLICATIONS. The clarification of the concept will assist nurse researchers and nurse educators in developing interventions and educational strategies aimed at fostering resilience in nursing students.

Introduction

Resilience is a popular topic within the literature among a variety of disciplines. Within nursing, we most often focus on the human applications of the concept, but it is also discussed within other contexts, such as ecology and microbiology. Resilience has been broadly defined and generally applied to create much confusion and ambiguity. As with many concepts, resilience has evolved over time and is now commonly clarified according to context and population. It is proposed as a concept that could prove useful in helping nursing students confidently face challenges and successfully move forward. The Norris method of concept clarification is used to analyze and clarify the concept of resilience for the nursing student population, utilizing four recently published concept analyses and relevant supplemental references. The phenomenon of resilience will be described according to its antecedents, attributes, and consequences. An operational definition and conceptual model will be presented.

Resilience has been recognized as an important concept for the nursing profession, including nursing education, and has been the topic of many publications. While many advocate the development or enhancement of resilience, there is much variation in the definitions and descriptions of the concept,

creating difficulties for researchers. The concept needs to be clarified for the nursing student population to adequately plan interventions, and to identify strategies to transform the nursing education process to better meet the needs of students. The Norris method of concept clarification (Lorenz, 2007; Norris, 1982) is well suited to address this need. The intent of the Norris method is to increase the levels of abstraction through the collection and analysis of empirical data to advance and develop descriptions of a phenomenon to relate to a unique purpose and perspective for nursing practice (Lorenz, 2007; Norris, 1982). This method is used in this article to clarify the concept of resilience to enhance its practical application in nursing education as a tool to improve the educational experiences of nursing students.

Definitions of Resilience

Despite the confusion and ambiguity in describing the concept of resilience, several common elements are seen within the definitions. Many refer to a state of recovery, or a return to a previous state after a time of stressful transition or an adverse event (Atkinson, Martin, & Rankin, 2009; Dyer & McGuinness, 1996; Garmezy, 1991; Rutter, 1985). According to the Oxford English Dictionary (2012, online), resilience originates

from the Latin word resilia, meaning the "action of rebounding." Atkinson et al. (2009) describe resilience as the "capacity to recover from extremes of trauma, deprivation, threat, or stress" (p. 137). Gillespie, Chaboyer, and Wallis (2007) use similar terms in their description of the concept but further describe resilience as "an ongoing process of struggling with hardship and not giving up" (p. 133). Many authors are in agreement that resilience can be developed or enhanced at any time during a person's life, which differs from past interpretations of resilience as a personality trait (Ahern, 2006; Earvolino-Ramirez, 2007; Gillespie et al., 2007; Hodges, Keeley, & Grier, 2005; Jackson, Firtko, & Edenborough, 2007; Rutter, 2007). Previous publications commonly used the term invulnerable to describe resilience (Rutter, 1985) until Rutter (2006) defined resilience as "an interactive concept that is concerned with the combination of serious risk experiences and a relatively positive psychological outcome despite these experiences" (p. 2). He explains that the focus of the definition is the individualized responses to similar adversities.

McAllister and Lowe (2011) describe a resilient individual as someone who has not only survived adversity, but has also learned from the experience with resulting personal growth. In the book, The Resilient Nurse (McAllister & Lowe, 2011), the authors propose that resilience is an essential skill needed by nurses to find meaning in their experiences and to better moderate their reactions to stressors faced in the work environment. Citing numerous sources of stress for young nursing students, McAllister and Lowe note the importance of understanding and appropriately responding to stress. They define resilience as "a process of adapting to adversity that can be developed and learned" (p. 6). Ahern (2006) explains the importance of clarifying the concept because of the variation in risks and protective factors at different stages of development. While resilience has most often been associated with periods of transition, disaster, or adversity, Ahern (2006) has noted the need to explore the concept in healthy, well-adjusted adolescents. In her doctoral dissertation, Ahern (2007) explored the concept of resilience in adolescent community college students. She explains that these individuals experience various forms of stressors, often related to normal developmental changes and transitions, which place them at risk for adverse outcomes due to immature coping abilities. Those identified as resilient were found to possess various protective factors/resources that served to buffer or minimize the effects of stress.

Rew and Horner (2003) describe these protective resources as being present throughout an individual's life, and include competence, positive coping styles, a sense of humor, and connectedness with caring adults. Ahern (2006) notes that protective factors will vary at different stages of development, which further supports the need for a context-specific clarification of the concept. She proposes that interventions designed to increase resilience, through enhancement of protective factors, may serve to better prepare students for future adversity, as well as to avoid negative outcomes from current stressors.

Significance of Resilience in Nursing Students

Nurse educators are in optimal positions to assist students in the development of resilience to better cope with the challenges and adversities that they may face in the academic and clinical settings. Many researchers have suggested the development of resilience-enhancing interventions as an effective tool to better prepare nursing students for future challenges (Ahern, 2006, 2007; Hodges, Keeley, & Troyan, 2008; Jackson et al., 2007; McAllister & Lowe, 2011; McAllister & McKinnon, 2009). In addition to the typical life changes that most undergraduate college students face, nursing students must adapt and cope with the challenges that are specific to their chosen vocation. Patient care places them in many "first" situations that may cause anxiety or discomfort, including the intimate care of both male and female patients, death and dying, diverse lifestyles, exposure to communicable diseases, etc. In addition to these experiences, many students will experience stress related to cognitive dissonance and the phenomenon of horizontal/vertical violence early in their clinical experiences (Thomas & Burk, 2009). These experiences have been linked to high attrition rates for both nursing students and new graduates (Deary, Watson, & Hogston, 2003). The recent adversities, such as natural disasters, 9/11, school shootings, and bullyingrelated suicides, have shown the need to foster resilience in our students to better prepare them for future change and life challenges.

Older adolescents and young adults enrolled in baccalaureate nursing programs are particularly vulnerable to the negative effects of stress due to their immature coping abilities and lack of experience in dealing with conflict issues. Many are unprepared to deal with the emotional and physical demands of a healthcare profession. As a result, many will adopt

negative coping and adaptive responses, or succumb to negative influences. Resilience is proposed as a means to better prepare our students to face challenges and adversity, and not only survive but also thrive to face additional life events and challenges with hope and optimism for future successful outcomes, improved well-being, and career longevity.

Method

A selective review of the literature was conducted using the Cumulative Index to Nursing and Allied Health Literature, Health Reference Center, Health and Wellness Resource Center, Medline, PsycAR-TICLES, PsycInfo, and PubMed databases. Key terms used to identify relevant studies and resources include resilience, protective factors, coping strategies, attrition, retention, dropout, nursing students, horizontal violence, vertical violence, support, concept, concept analysis, and concept clarification. These terms were searched individually and in various combinations. Inclusion criteria consisted of (a) English-language publication, (b) peer-reviewed journals, dissertations, and books, (c) research and/or conceptual studies, and (d) recent publication (with exceptions made for seminal material). Seventy sources were initially reviewed, and 26 were chosen for inclusion. The references chosen were found to be cogent to the purposes of this article and to include recent and/or significant contributions to the study of nursing student resilience.

The Norris Method of Concept Clarification

The Norris method of concept clarification (Lorenz, 2007; Norris, 1982) is used as the guiding framework for this analysis. This method is useful in advancing and developing descriptions of phenomenon to relate to a unique purpose and perspective for nursing practice. A body of knowledge in nursing can further be developed through questions and hypotheses developed from these advanced descriptions.

Lackey (2000) notes that the method historically used by nurses to clarify a concept was focused on a literature review of a specific concept, and then presented as a summary of that review. Norris felt these methods were inadequate, and argued that new methods were needed to produce operational definitions and conceptual models to assist in the development of testable hypotheses. She noted that nursing

research could be expedited and the development of a body of knowledge could be enhanced by focusing on three proposed actions: (a) concepts be studied to clarify their components and roles in specific situations, (b) current methodologies for concept clarification be refined and new methodologies be developed, and (c) nurses become familiar with various modes of synthesis. Norris' five-step method of concept clarification will be used following the steps described below:

- 1. After identifying the concept of interest, observe and describe the phenomenon repeatedly, and if possible describe the phenomenon from the point of view of other disciplines.
- 2. Systematize the observations and descriptions.
- 3. Derive an operational definition of the concept under study.
- 4. Produce a model of the concept that includes all its component parts.
- 5. Formulate hypotheses (Lackey, 2000, p. 196; Norris, 1982).

Describing the Phenomenon

Four recently published concept analyses were used to describe the phenomenon of resilience (Ahern, 2006; Atkinson et al., 2009; Earvolino-Ramirez, 2007; Gillespie et al., 2007). These concept analyses were chosen because of their recent nature, their application to nursing, and the thoroughness of their reviews. The phenomenon of resilience will be described according to its antecedents, attributes, and consequences.

Antecedents

The following antecedents describe things or events that must occur prior to the development of resilience. I appreciate the detailed descriptions of antecedents provided by Gillespie et al. (2007) and find their descriptions beneficial in applying the concept to nursing students. They identify four antecedents: (a) adversity or trauma, (b) the situation is interpreted as traumatic (either physically or psychologically), (c) there is cognitive ability to interpret adversity, and (d) there is a realistic worldview. Earvolino-Ramirez (2007) identifies adversity as the primary antecedent to resilience, and describes "change, challenge, and disruption" as aspects of adversity that are noted prior to the resilience process occurring (p. 78). Ahern

(2006) describes the presence of a risk or risks that trigger a protective mechanism. Atkinson et al. (2009) also speaks of periods of adversity or stress as antecedents to resilience. Based on the literature reviewed, adversity and stress are the most commonly cited antecedents for resilience. The intellectual capacity to interpret adversity and stress can be assumed to be present in undergraduate nursing students due to their ability to meet the admission requirements of an institute of higher learning (e.g., high school graduate, standardized test scores, etc.). Recognizing that each individual interprets situations differently allows us to view stress and adversity in a broader sense. An individualized interpretation of adversity allows us to include perceived stress or life changes as antecedents to resilience. Undergraduate nursing students often experience many of these simultaneously, in addition to the added stressors of academia. While they may voice their distress or complain of feeling "stressed," many may not be able to identify specific experiences of adversity. The cumulative effects, however, may lead to feelings of frustration and result in student attrition or other negative outcomes. Students who persevere often find additional stressors when starting their clinical courses. Many are unprepared for the scheduling of clinical hours and the emotional and physical toll created by the demands of patient care, as well as the often-negative interactions with healthcare professionals and/or nursing faculty.

Based on these descriptions, a definition for the clarified concept includes the presence of perceived stress and/or adversity. By using the adjective *perceived*, the concept allows for individualized interpretation of the degree and magnitude of the stress and adversity. Depending on past experiences and current coping/adaptive abilities, different students perceive stressors at different levels of intensity.

Attributes

Protective factors are often described as the specific attributes or situations that are necessary for the process of resilience to occur (Dyer & McGuinness, 1996). These protective factors are characteristics commonly seen in individuals who have been identified as resilient. Commonly identified protective factors include positive emotions, humor, self-efficacy, knowledge of health behaviors and risks, flexibility, competence, strong social support system, faith, optimism/hope, connectedness with caring adults, effective coping, self-knowledge, and perseverance. It

is important to realize that protective factors, while possibly important in predicting resilience, are individualized and are dependent upon context and situation (Johnson & Wiechelt, 2004). However, there is sufficient evidence in the literature to confirm the importance of their presence when desiring to develop or enhance resilience. If resilience is a process of development that can be learned, students can be taught to identify and utilize the protective factors that they already possess, and to develop or enhance others they need.

Gillespie et al. (2007) combine attributes identified through literature synthesis into three main categories: (a) self-efficacy, (b) hope, and (c) coping. Earvolino-Ramirez (2007) proposes that attributes can be categorized as (a) rebounding/reintegration, (b) high expectancy/self-determination, (c) positive relationships/social support, (d) flexibility, (e) sense of humor, and (f) self-esteem/self-efficacy. Ahern (2006) has focused much of her research in resilience on adolescents, and describes protective factors as individualized and varying according to stages of development and contexts. She has developed a model of adolescent resilience that incorporates many of the same attributes into the categories of (a) personal characteristics, (b) family and social support, and (c) community resources.

Atkinson et al. (2009) write about various researchers' opinions regarding the attributes of resilience and the ongoing debate of whether resilience is a personality trait or an acquired skill. I propose that it is a combination of both. There are some inherent traits (e.g., intelligence) that certainly contribute to the development of resilience. Others, like positive emotions and knowledge of health behaviors and risks, can be learned or enhanced.

While there are various opinions on the language used in identifying specific protective factors, we can confidently identify the following categories of attributes of resilience for the adolescent nursing student: (a) personal characteristics (self-efficacy, humor, competence, positive emotions, etc.), and (b) social support. These two categories include both internal and external factors, and can be further individualized based on person and context.

Consequences

Gillespie et al. (2007) describe four consequences of resilience: (a) integration physically and/or psychologically in context, (b) the development of personal control in context, (c) psychological adjustment, and (d) personal growth in the wake of disruption. Other consequences or results of the development of resilience include effective coping, positive adaptation, self-esteem, longevity, physical and mental health status, career success, self-transcendence, confidence, mastery, quality sense of life, and sense of well-being (Ahern, 2006; Atkinson et al., 2009; Earvolino-Ramirez, 2007). These consequences illustrate the reason for the popularity of the study of resilience and the value seen in the ability to aid in its development. Clarification of the concept in the context of nursing students would include aspects related to enhanced coping/adaptive abilities and well-being.

Systematizing the Observations

According to the Norris method (Lorenz, 2007; Norris, 1982), the observations are systematized through synthesizing the information obtained from various sources that describe the phenomenon—in this case, the synthesis of the literature reviewed. After thorough evaluation of multiple sources, I have two conclusions regarding resilience in nursing students.

- 1. All nursing students are vulnerable to episodes of perceived adversity and stress.
- 2. There are certain protective factors (both individual and sociocultural) that can be identified, enhanced, and/or developed in nursing students to assist them in the development and enhancement of resilience.

Lessard, Fortin, Marcotte, Potvin, and Royer (2009) report the importance and benefits of students having a supportive social support system. These researchers conducted a narrative study of 60 former high school students, ages 19-22 years, who were identified as being resilient. Participants were selected from a larger, longitudinal Canadian study spanning the years 1996–2007. Participants in the parent study were contacted twice a year for 5 years to answer questionnaires and participate in interviews. One hundred thirteen students identified as being at risk for dropping out of school (based on personal, family, and/or school risk factors) who received a high school diploma were identified as resilient. All 113 students were contacted by the researchers and were invited to tell their story, with 60 volunteering to participate. Students were asked to describe (a) the challenges they faced in their lives, and (b) what made them stay in school. Findings revealed the significance of the interplay between risks and protective factors for students. Many students in this study did not have a positive support system from their own parents, and found support from other family members, friends, teachers, coaches, or other supportive adults. The ability to identify and seek out sources of support is an important consideration for the adolescent nursing student. This finding could be useful for future resilience intervention studies. The presence of positive emotions and self-efficacy is demonstrated by a student's belief in his/her own abilities. Even when confronted with failure, students hope for a better future outcome and believe that they can ultimately succeed. The students in Lessard et al.'s study demonstrated an ability to problem-solve, and to seek and obtain help when needed. In addition to seeking help, self-efficacy includes the ability to avoid negative influences and to learn from previous mistakes. While these were not nursing students, findings are useful to nursing education research due to the similarities in age and context.

We can assume that all nursing students are vulnerable to unexpected adversities, and many of these students will perceive certain commonly experienced events as stressful or adverse. The experiences of the resilient students identified in Lessard et al.'s study illustrate the importance of certain protective factors found to confirm trends in previous literature, including personal characteristics, social support, and positive emotions. These findings support those of Martin and Marsh (2006), who found that students demonstrated self-efficacy by their conscious decisions regarding their friends, their behaviors, and their activities. They were goal-oriented and driven to succeed by dreams of their future and persistence to continue despite adversity.

Developing an Operational Definition

Norris' view of an operational definition differs from many others. She describes an operational definition as one that answers at least one question, "How will I know the concept when I see it in operation?" (Lackey, 2000; Norris, 1982, p. 16). Other researchers emphasize the importance of *measurement*, which is not a part of her method. It has been difficult to find an operational definition of resilience in the literature due to the lack of agreement on certain aspects of the

phenomenon. Previously, the most commonly cited definitions referred to the ability to "bounce back." More recently, most literature infers a pattern of growth or improvement in a situation following an adverse event. Regardless of the attributes ascribed to the concept, some authors suggest that resilience occurs because of the adversity, not in spite of the adversity (Gillespie et al., 2007). In other words, growth or progression occurs as a result of a traumatic event and may not have occurred if adversity was not present. Personal growth, as a result of adversity, is a common thread seen throughout much of the literature devoted to resilience. This contributes to my proposal that an operational definition includes personal growth and/or enhanced well-being as a consequence of the concept.

There is continued debate as to whether or not resilience is a personality trait or a skill that can be taught/learned. Based on the work of Wijk and Waters (2008), using the salutogenic approach with naval specialists, general coping, self-awareness, and enhanced well-being can be created. Antonovsky first described salutogenesis based on three assumptions: (a) all people fall somewhere between total terminal illness and total wellness as opposed to totally diseased or totally healthy, (b) stressors may have salutary consequences as opposed to the assumption that stressors are inherently bad, and (c) there is a concentration on the salutary factors, not risk factors. Antonovsky describes a sense of coherence (SoC) as a key element in his salutogenic model. This SoC is based on the belief that all people are continuously exposed to stressors. SoC is a general way of appraising the world, both cognitively and emotionally, which is associated with effective coping, health-enhancing behaviors, and better social adjustment. He proposes that SoC is a lasting outlook on life, not a particular coping style. Its development assists individuals in selecting appropriate strategies to deal with their stressors.

Wijk and Waters (2008) utilized the salutogenic model in an interview process to bring awareness of potential strengths and weaknesses to the naval officers being interviewed. The results indicate that this approach led to self-awareness and the development of skills to appraise life situations and challenges, and the development of appropriate coping skills. The authors suggest that the results can be successfully generalized to other groups. These findings lend support to the proposition that resilience can be developed, nurtured, and/or enhanced in nursing students

through purposeful interventions and educational efforts to enhance protective factors.

Based on the literature reviewed and a synthesis of the information, I propose the following operational definition:

Nursing student resilience is an individualized process of development that occurs through the use of personal protective factors to successfully navigate perceived stress and adversities. Cumulative successes lead to enhanced coping/adaptive abilities and well-being.

Nursing Student Resilience Model

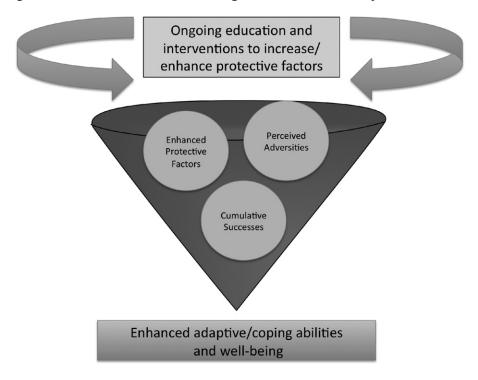
According to Lackey (2000), models "help give meaning to the data by increasing the generalization about the concept and distinguishing the relationships among the categories, patterns, and hierarchies that have been derived. A well-constructed model should enhance communication of the results of the concept clarification" (p. 204). The proposed model of nursing student resilience depicts the concept as a process that combines perceived adversities with the use of individual protective factors to effectively cope and/or adapt (Figure 1). The individual protective factors are enhanced or developed through an ongoing process of education and learning, as well as resilienceenhancing interventions designed for this purpose. The accumulation of successes results in enhanced coping/adaptive abilities and well-being.

Developing a Hypothesis

According to the Norris method of concept clarification, hypotheses are developed from the operational definition and model. Ultimately, the hypotheses will be empirically tested, and then accepted or rejected. The operational definition and model will be revised based on the results of these tests, and more hypotheses will be developed. This process will continue until the phenomenon is accurately described to the researcher's satisfaction (Lackey, 2000; Norris, 1982). The following hypothesis has been developed based on the operational definition and model described in this article.

As nursing students learn to identify, enhance, and/or develop their protective factors, they will be better equipped to effectively manage perceived

Figure 1. Nursing Student Resilience Model. Represents the Process of Development of Enhanced Coping/Adaptive Abilities and Well-Being as a Result of Cumulative Successes From Utilizing Protective Factors When Facing Perceived Adversity/Stress



adversity and stress. The cumulative successes of these events will lead to increased resilience demonstrated by enhanced coping/adaptive abilities and well-being.

Nursing Implications

Individuals working with nursing students (faculty, preceptors, mentors, counselors, etc.) can assist students in critically examining and reflecting upon challenges, stressors, and perceived adversities. Students can be encouraged to identify the protective factors used with each event, examine these for effectiveness, and identify alternatives that may be used for future events. These may be protective factors that need to be enhanced or developed (e.g., social support systems). By assisting students in the examination and reflection of these events, students will be able to realize the effectiveness of using these protective factors and have the potential to be more cognizant of their availability in future situations. Students can be encouraged to ask, "What protective factors did I use in this situation?" "Were they effective?" "What protective factors could I enhance or develop to help with similar future events?" "What did I learn from this event?" Educators can assist students in realizing past successes, as well as in developing hope and optimism for future success. Students, in turn, will realize the value of protective factors and be more equipped to assist patients, peers, and family members in recognizing their own resources.

The ability to increase resilience in nursing students has the potential for multiple nursing implications. For the individual student, the ability to increase his/her own personal resilience can lead to a happier, more successful college experience. Beyond nursing school, students will be able to utilize these identified protective factors and learned skills to assist them in coping with future adversities/challenges. By teaching nursing students to be conscious of their own protective factors, and by creating a culture that encourages the development and nurturance of resilience, we have the potential to increase both student and faculty satisfaction, increase student retention, and contribute to students' future success as nursing professionals.

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There are also implications for the nursing profession. Nursing education is poised for many future challenges as we work to take a leadership role in the transformation of America's health care. We need to produce strong, capable leaders who are able to withstand the challenges of an often-tumultuous health-care environment. A proactive approach to teaching our students how to increase their own resilience will ultimately aid in the progression of our profession. Students will be better equipped to assume their professional roles, with hope, optimism, and confidence that they will succeed despite challenges and obstacles.

Conclusion

The Norris method of concept clarification was used to advance the description of the phenomenon of resilience for the nursing student population. The proposed definition and model needs to be tested and refined to assist in future resilience research efforts for this population. As students face new challenges and change, it is hoped that they can use the learned skills to successfully survive and thrive as both nursing students and future professionals. The development of resilience through an intentional, focused learning effort can also assist them in helping others who are facing adversity. As resilient individuals who have overcome challenges, these students can learn to view perceived adversity as opportunities for learning and growth, and will hopefully avoid negative outcomes.

There are many possibilities for nursing education to implement strategies to increase resilience in students, but these require the faculty to have a deeper understanding of the concept. This concept clarification may be useful in developing teaching/learning strategies within a nursing curriculum to address the particular needs of a group of students. Educators may choose to enlist students to self-identify their own protective factors and those they wish to enhance and/or develop. The faculty may be beneficial in assisting with these efforts, thus potentially increasing a source of social support and/or social connectedness with a caring adult. Students may also be recruited to participate in studies designed to increase resilience and/or to gain deeper understanding of students' perceptions of their own path to resilience. Ideally, a resilience-focused curriculum will integrate these concepts throughout the program to increase student and faculty awareness of the needs to enhance protective factors for our clients and ourselves. As we experience success in dealing with stress and adversity, we are better equipped to assist others in identifying their own protective factors to better navigate life challenges.

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References

- Ahern, N. R. (2006). Adolescent resilience: An evolutionary concept analysis. *Journal of Pediatric Nursing*, 21(3), 175–185.
- Ahern, N. R. (2007). *Resiliency in adolescent college students* (Doctoral dissertation). University of Michigan, Ann Arbor, MI.
- Atkinson, P. A., Martin, C. R., & Rankin, J. (2009). Resilience revisited. *Journal of Psychiatric and Mental Health Nursing*, 16, 137–145.
- Deary, I., Watson, R., & Hogston, R. (2003). A longitudinal cohort study of burnout and attrition in nursing students. *Journal of Advanced Nursing*, 43(1), 71–81.
- Dyer, J. G., & McGuinness, T. M. (1996). Resilience: Analysis of the concept. *Archives of Psychiatric Nursing*, 10(5), 276–282.
- Earvolino-Ramirez, M. (2007). Resilience: A concept analysis. *Nursing Forum*, 42(2), 73–82.
- Garmezy, N. (1991). Resilience in children's adaptation to negative life events and stressed environments. *Pediatric Annals*, 20, 459–466.
- Gillespie, B. M., Chaboyer, W., & Wallis, M. (2007). Development of a theoretically derived model of resilience through concept analysis. *Contemporary Nurse*, 25(1–2), 124–135.
- Hodges, H. F., Keeley, A. C., & Grier, E. C. (2005). Professional resilience, practice longevity, and Parse's theory for baccalaureate education. *Journal of Nursing Education*, 44(12), 548–554.
- Hodges, H. F., Keeley, A. C., & Troyan, P. J. (2008). Professional resilience in baccalaureate-prepared acute care nurses: First steps. *Nursing Education Perspectives*, 29(2), 80–89.
- Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of Advanced Nursing*, 60(1), 1–9.
- Johnson, J. L., & Wiechelt, S. A. (2004). Introduction to the special issue on resilience. *Substance Use and Misuse*, *39*, 657–670.
- Lackey, N. R. (2000). Concept clarification: Using the Norris method in clinical research. In B. L. Rodgers & K. A. Knafl (Eds.), *Concept development in nursing: Foundations, techniques, and applications* (pp. 193–208). Philadelphia: Saunders.
- Lessard, A., Fortin, L., Marcotte, D., Potvin, P., & Royer, E. (2009). Why did they not drop out? Narratives from resilient students. *Prevention Researcher*, *16*(3), 21–24.
- Lorenz, S. G. (2007). Protection: Clarifying the concept for use in nursing practice. *Holistic Nursing Practice*, *21*(3), 115–123.

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- Martin, A., & Marsh, H. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, 43(3), 267–281.
- McAllister, M., & Lowe, J. B. (2011). *The resilient nurse: Empowering your practice*. New York: Springer.
- McAllister, M., & McKinnon, J. (2009). The importance of teaching and learning resilience in the health disciplines: A critical review of the literature. *Nurse Education Today*, 29, 371–379.
- Norris, C. M. (1982). *Concept clarification in nursing*. Rockville, MD: Aspen.
- Oxford English Dictionary. (2012). *Resilience*. Retrieved from http://www.oed.com/view/Entry/163619?redirected From=resilience
- Rew, L., & Horner, S. D. (2003). Youth resilience framework for reducing health-risk behaviors in adolescents. *Journal of Pediatric Nursing*, *18*(6), 379–388.

- Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry*, 147, 598–611.
- Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals New York Academy of Sciences*, 1094, 1–12. doi:10.1196/annals.1376.002
- Rutter, M. (2007). Resilience, competence and coping. *Child Abuse and Neglect*, *37*, 205–209.
- Thomas, S., & Burk, R. (2009). Junior nursing students' experiences of vertical violence during clinical rotations. *Nursing Outlook*, *57*(4), 226–231.
- Wijk, C. H., & Waters, A. H. (2008). Positive psychology made practical: A case study with naval specialists. *Military Medicine*, 173, 488–492.