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Resilience in Nurses: An Integrative Review

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Resilience in Nurses: An Integrative Review

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Resilience in Nurses: An Integrative Review

Abstract

Aim: To describe nursing research that has been conducted to understand the phenomenon of resilience in nurses.

Background: Resilience is the ability to bounce back or cope successfully despite adverse circumstances. **Nurses deal with modern-day problems that affect their abilities to remain resilient. Nursing administrators/managers need to look for solutions not only to recruit nurses, but to become knowledgeable about how to support and retain nurses.**

Evaluation: A comprehensive search was undertaken for nursing research conducted between 1990 and 2011. Key search terms were *nurse, resilience, resiliency, and resilient*. Whittemore and Knafl's integrative approach was used to conduct the methodological review.

Key Issues: Challenging workplaces, psychological emptiness, diminishing inner balance, and a sense of dissonance are contributing factors for resilience. Examples of intrapersonal characteristics include hope, self-efficacy, and coping. Cognitive reframing, toughening up, grounding connections, work-life balance, and reconciliation are resilience building strategies.

Conclusion: This review provides information about the concept of resilience. Becoming aware of contributing factors to the need for resilience and successful strategies to build resilience can help in **recruiting and** retaining nurses.

Implications for Nursing Management: Understanding the concept of resilience can assist in providing support and developing programs to help nurses become and stay resilient.

Key words: integrative review, nurse, resilience, resiliency, resilient

Abstract Word Count: 200

Resilience in Nurses: An Integrative Review

Resilience is the ability of individuals to bounce back or to cope successfully despite adverse circumstances (Rutter 2008). Resilience has been referred to as a personality trait (Campbell-Sills, Cohan, & Stein 2006, Fredrickson, Tugade, Waugh, & Larkin 2003) and a dynamic process (Luthar 2006). Resilience is used to describe when a person recovers easily and quickly from setbacks that occur during his or her life (Zautra, Hall, & Murray 2010). A common theme in the varied definitions of resilience is strength and people who are described as resilient are said to be able to persist in overcoming challenging obstacles.

Nursing administrators/managers are faced with the challenges to recruit and retain nurses within their healthcare organizations. In today's world, the shortage of nurses is a global issue. The shortage is based on two factors: a decreased supply and an increase demand for nurses (Oulton 2006). The World Health Organization (WHO) estimates a global deficit of 2.4 million doctors, nurses, and midwives in 57 countries with nurses representing the largest percentage of the deficit (2006). The nursing shortage and costs for nursing turnover affects developed and developing countries. In 2010, the national hospital average turnover rate in the United States (US) was 14.6% with an average turnover rate for bedside nurses at 13.8% (Nursing Solutions Inc. 2011). Costs of nurse turnover are estimated from \$22,000 to over \$64,000 in the US per nurse (Stone et al. 2003, Waldman et al. 2004, Jones 2005, OBrien-Pallas et al. 2006). In Canada, nurse turnover rates in hospitals average 20% with an estimated cost of approximately \$25,000 and a projected deficit of 60,000 nurses by the year 2022 (Tomblin-Murphy et al. 2009). Oulton (2006) reported statistics gathered from The International Council of Nurses in 2003 indicating that Europe, Germany, and the Netherlands had a deficit of 13,000 nurses, Switzerland estimated a shortage of 3,000 nurses, and France had an exodus of about

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5 18,000 nurses from public hospitals each year. In Jamaica, approximately 8% of nurses and 20%
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7 of specialty nurses leave annually (Lowell, Findlay, & Stewart 2004). In developing countries
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9 such as Ghana, Zimbabwe, Malawi, and Uganda the shortage is at a critical level in part to
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11 migration of nurses within those countries who are seeking better working conditions (Buchan &
12
13 Dovlo 2004, Dugger 2004). Because of the nursing shortage and vacancies of nurses, nursing
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15 administrators/managers deal with budget issues related to costs for advertisement and
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17 recruitment, hiring, orientation and training, paying of agency nurses, and overtime. In addition,
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19 research supports that nurse staffing levels and nurse turnover affect patient outcomes and
20
21 quality of patient care (Aiken et al. 2002, Lankshear et al. 2005, Kane et al. 2007).
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26 A group not generally considered a vulnerable population in the health disparities literature is
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28 nurses; yet the high degree of job stress of new graduates and experienced nurses in today's
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30 healthcare climate has resulted in high turnover with concurrent expenses related to recruiting
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32 and orienting replacements (Casey et al. 2004, O'Brien-Pallas et al 2006, Nursing Solutions Inc.
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34 2011). There are a variety of occupational challenges affecting nurses including making mistakes
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36 due to understaffing, poor support, high acuity, and long hours (Rogers et al. 2004, Dunton et al.
37
38 2007, Kane et al. 2007). The organizational culture for many nurses includes violence in the
39
40 workplace from patients and families, disruptive behaviors (abuse, bullying, and horizontal
41
42 violence) from healthcare colleagues, and sexual harassment that may impact patient outcomes
43
44 (Roche et al. 2010, Roberts, DeMarco, & Griffin 2009). For example, nurses have felt under
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46 pressure from administration to be gap-fillers and they have routinely pitched in to help out when
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48 needed to ensure patient safety. As nurses became more educated, they learned to speak up and
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50 demand more support from administrators to meet the demands of their jobs. The old doctor-
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52 nurse game has been replaced with a more collegial atmosphere in hospitals (Schmalenberg &
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5 Kramer 2009) and new human resource policies have been implemented to protect workers.
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7 However, nurses still face more modern problems such as nursing shortages, higher patient
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9 acuity, proliferation of new technology, regulatory requirements, physical and psychological
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11 demands, and ethical dilemmas. Despite economic hardships, challenges in the workplace, and
12
13 modern issues, nurses continue to serve the public and do extraordinary work with few resources,
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15 but the stress of the job creates challenges for retention of nurses. If experienced nurses have
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17 difficulty coping with today's pressures, new graduates are even more at risk for burnout.
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19 Nursing administrators/managers need to look for solutions not only to recruit nurses to their
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21 healthcare organizations but more importantly to become knowledgeable about how to support
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23 and retain nurses once they are employed.
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28 In this paper, the authors provide current knowledge on the concept of resilience in hopes
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30 of suggesting strategies for nursing administrators/managers to strengthen the nursing workforce.
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32 Though concept analyses on resilience (Olsson et al. 2003, Shin et al. 2009) and literature
33
34 reviews (Mackay 2003, Agaibi & Wilson 2005) about other populations have been conducted,
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36 there is minimal attention to applying the concept to transition to practice and retention of
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38 experienced nurses. Therefore, this integrative review examined the phenomenon of resilience in
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40 the nursing profession. Findings may guide nursing administrators/managers in developing new
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42 programs and support systems to help new graduates and retain experienced nurses.
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44 Additionally, findings may direct future research in delineating the concept of resilience in
45
46 nursing practice where effective strategies to build resilience in nurses can be developed.
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52 **Prior Conceptual Work**

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54 Several concept analyses (Dyer & McGuinness 1996, Earvolino-Ramirez 2007, Gillespie
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56 et al. 2007a) on resilience have been published as nursing scholars have realized the relevance of
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5 the concept to clinical practice. Dyer and McGuinness (1996) identified rebounding and carrying
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7 on, a sense of self, determination, and a prosocial attitude as critical attributes of resilient
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9 individuals. Ten years later, Earvoline-Ramirez (2007) identified similar attributes such as
10
11 rebounding/reintegration, high expectancy/self-determination, positive relationships/social
12
13 support, flexibility, sense of humor, and self-esteem/self-efficacy. Additionally, Gillespie,
14
15 Chaboyer, and Wallis (2007a) identified self-efficacy, hope, and coping as defining attributes of
16
17 resilience. Antecedents of resilience have been identified as adversity (Dyer & McGuinness
18
19 1996, Earvolino-Ramirez 2007, Gillespie et al. 2007a), physically and/or psychologically
20
21 traumatic situation (Gillespie et al., 2007a), intellectual capacity to interpret adversity both
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23 cognitively and socially (Gillespie et al., 2007a), having a realistic world view (Gillespie et al.,
24
25 2007a), and the presence of a caring individual in the person's life at some point in time (Dyer &
26
27 McGuinness, 1996). Effective coping (Eatvoline-Ramirez, 2007, Dyer & McGuinness, 1996),
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29 mastery or personal control (Eatvoline-Ramirez, 2007, Gillespie et al., 2007, Dyer &
30
31 McGuinness, 1996), positive adaptation or adjustment (Eatvoline-Ramirez, 2007, Gillespie et al.,
32
33 2007a), and personal growth (Gillespie et al., 2007a) were identified as consequences of
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35 resilience.
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43 **Scope of the Review**

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45 The authors conducted an integrative review of published literature related to resilience in
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47 nurses. A methodological review using an integrative approach based on Whittemore and Knafl
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49 (2005) was used to search the literature for studies focused on the concept. This approach
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51 permitted inclusion of studies using a variety of research designs, specifically, experimental and
52
53 non-experimental research to more fully understand the concept of resilience in nursing.
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57 Whittemore and Knafl's (2005) integrative approach framework consists of five stages (problem
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5 identification, literature search, data evaluation, data analysis, and presentation) to enhance the
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7 rigor of the process when conducting an integrative review. Empirical literature on resilience in
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9 nursing was summarized and analyzed based on this integrative framework to draw an overall
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11 conclusion about what is known about the phenomenon of resilience in professional nursing
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13 practice.
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15 16 17 **Problem Identification Stage**

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19 The problem identification stage involves delineating a clear picture of the problem that
20
21 the review is addressing and outlining the purpose of the review (Whittemore & Knalf 2005).
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23 The focus of this integrative review was to provide information on what nursing populations
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25 have been studied, identify contributing factors to the need for resilience, discover characteristics
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27 of nurses that promote resilience, and ascertain strategies that help build resilience in nurses.
28
29 Therefore the following research questions guided this review:
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- 32
33 1. What nursing populations have been studied regarding resilience and are they
34
35 representative of diverse populations of nurses?
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- 38 2. What factors contribute to the need for resilience in the nursing profession?
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- 40 3. What intrapersonal characteristics are associated with resilience behavior in nurses?
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- 42 4. What strategies do nurses participate in to build personal resilience in the nursing
43
44 profession?
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47 Additionally, the intent was to gain knowledge that will help nurses and nursing
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49 administrators/managers learn how to enhance and improve resilience while working in the
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51 profession of nursing. Conducting such an integrative review synthesizes current nursing
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53 research in the area of resilience in nursing practice and identifies gaps in the literature to focus
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55 future research.
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Data Search Stage

The second stage of the review process is the literature search stage which details the strategies used to obtain the relevant literature on the topic of interest (Whittemore & Knalf 2005). The data search (collection) stage was conducted during 2011 and finalized the first two weeks of January 2012 to be sure that articles published at the end of 2011 were included. During this stage, searches were conducted using the following electronic databases: a) Cumulative Index to Nursing and Allied Health Literature (CINAHL), b) Medline, c) EBSCO host, and d) Proquest. Key search terms were *nurse, resilience, resiliency, and resilient*. Publications were included if a) the topic addressed resilience in nursing, b) participants in the studies were nurses, c) the design was either qualitative or quantitative, d) language was English, and e) date of publication was between January 1990 and December 2011. The rationale for focusing on literature after January 1990 and forward was to review the literature that best represented the modern day issues nurses face such as nursing shortages, higher patient acuity, proliferation of new technology, regulatory requirements, physical and psychological demands, and ethical dilemmas. Publications were excluded if a) they were not published (e. g., dissertations and theses), b) they were written in other languages, c) participants were non nurses or from other health disciplines, and d) they were not empirical research studies (discussion and review papers).

A total of 462 articles were identified in the initial search using the search terms. Each abstract was reviewed to determine if the publication met the inclusion criteria. The majority of research publications were completed on populations other than nurses resulting in 455 articles being eliminated. Seven abstracts (Simoni et al. 2004, Ablett & Jones 2007, Gillespie et al. 2007b, Hodges et al. 2008, Gillespie et al. 2009, Glass 2009, Kornhaber & Wilson 2011) met the

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4 inclusion criteria and the studies were retrieved and reviewed. Ancestry review of the reference
5 lists was conducted to search for additional publications meeting the inclusion criteria. No other
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7 publications were identified from the ancestry review. Figure 1 details the data search
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9 (collection) process.
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12 **Insert Figure 1 about Here**

13 **Data Evaluation Stage**

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16 The data evaluation stage entails evaluating the quality of the primary sources using a
17 methodological approach which consists of using quality criteria appraisal tools in the evaluation
18 process (Whittemore & Knalf 2005). For this review, the first author initially worked
19 independently to review the titles and abstracts then proceeded to an extensive reading of each
20 publication to ensure that the content focused on resilience in nursing. Publications meeting the
21 inclusion criteria were then thoroughly reviewed in depth. The seven articles were then evaluated
22 for quality using either a quantitative or qualitative critical appraisal tool (Law et al. 1998, Law
23 et al. 2007). Review criteria for quantitative studies included study purpose, design, sample size,
24 outcomes, interventions, results, conclusions, and implications. Review criteria for qualitative
25 studies included study purpose, qualitative design, sampling framework, data collection methods,
26 and data analysis. To increase reliability of the review, the articles and completed forms were
27 reviewed by the other two authors **independently**. **Then**, all three authors met **together** on several
28 occasions to review the critical appraisal forms and participated in the critique and
29 summarization of each article. When ambiguities occurred regarding the critical appraisal
30 review, all three authors discussed the concerns until an agreement was reached.
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35 Additionally, each study was ranked on the level of evidence using a 7-level scale ranging
36 from Level 1 (systematic review or meta-analysis of randomized controlled trials [RCT]), or
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5 evidence-based clinical practice guidelines based on systematic reviews of RCTs) to Level VII
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7 (opinion of authorities and/or reports of expert committees) (Melnyk & Fineout-Overholt, 2005).

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9 All 7 articles were ranked at a Level VI (single descriptive/qualitative/physiologic study).

10
11 Despite some methodological limitations (addressed in the limitation section) and the low level
12
13 of evidence, all 7 articles (Simoni et al. 2004, Ablett & Jones 2007, Gillespie et al. 2007b,
14
15 Hodges et al. 2008, Gillespie et al. 2009, Glass 2009, Kornhaber & Wilson 2011) were included
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17 in the review due to the paucity of research in this area.
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21 Of the 7 studies, 3 were quantitative (Simoni et al. 2004, Gillespie et al. 2007b, 2009) and 4
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23 were qualitative (Ablett & Jones 2007, Glass 2009, Hodges et al. 2009, Kornhaber, & Wilson
24
25 2011]. The quantitative studies included two predictive research designs and one correlation,
26
27 cross sectional research design. The qualitative studies included three phenomenology research
28
29 designs and one ethnography research design. Four of the studies originated from Australia
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31 (Gillespie et al. 2007b, 2009, Glass 2009, Kornhaber & Wilson 2011), two from the United
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33 States (Simoni et al. 2004, Hodges et al. 2008), and one from the United Kingdom (Ablett &
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35 Jones 2007).
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40 **Data Analysis Stage**

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42 During the data analysis review, data from the primary sources are organized,
43
44 categorized, and summarized into an integrated conclusion about the research problem under
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46 study (Whittemore & Knalf 2005). In this review, a matrix was developed that outlined a) the
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48 population being studied, b) contributing factors for the need of resilience, c) characteristics of
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50 nurses that promote resilience, and d) strategies that help build resilience in nurses. Content from
51
52 the articles were then extracted populating the matrix. Results were then integrated and analyzed
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54 using a constant comparative method to organize and categorize the data.
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Review Presentation Stage

The final stage in the integrative review process is the data presentation. Researchers provide the readers with explicit details from each of the primary sources to exhibit evidence in support of the final conclusions from the review (Whittemore & Knalf 2005). In this review, studies were synthesized under the following subheadings: author, date of publication, country, study design, sample population, and findings (Table 1). Synthesizing the information from each study provided a final summarization of the findings about what is known about resilience in professional nursing.

Insert Table 1 about Here

Results

Research Populations

Demographic characteristics including gender, age, and ethnicity/race varied among the studies. In the majority of the studies, 90% of the participants were female (Ablett & Jones 2007, Gillespie et al. 2007b, Hodges et al. 2008, Gillespie et al. 2009, Glass 2009). Two studies had a 100% sample of female participants (Simoni et al 2004, Kornhaber & Wilson, 2011). Only a small representation of male nurses was included in the 7 studies. One study reported the age range (25-58) of participants along with the mean age (38.4) (Kornhaber & Wilson, 2011) .In two studies, only the age range of participants (23 to 60 years) were reported (Hodges et al. 2008, Glass 2009). Two studies only reported the mean age (46.1 and 35.4, respectively) of the participants (Simoni et al. 2004, Gillespie et al. 2009), and two studies did not report the ages at all (Ablett & Jones 2007, Gillespie et al. 2007b). Only two studies reported the ethnicity/race of the participants which were majority Caucasian (Simoni et al. 2004, Hodges et al. 2008). The

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4 other five studies did not report ethnicity/race of their study participants (Ablett & Jones 2007,
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6 Gillespie et al. 2007b, 2009, Glass 2009, Kornhaber & Wilson 2011].
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9 Practice settings where the participants were recruited varied greatly among the studies.
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11 Three included participants from hospitals (Simoni et al. 2004, Hodges et al. 2008, Kornhaber &
12
13 Wilson 2011]. Gillespie et al. (2007b, 2009) enrolled participants who were members of the
14
15 Australian College of Operating Room [OR] Nurses. Nurses working in a hospice setting were
16
17 the informants in the Ablett and Jones (2007) study. One study recruited participants working in
18
19 academia (Glass 2009).
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23 **Contributing Factors**

24
25 Challenging workplaces, psychological emptiness, diminishing inner balance, and a sense
26
27 of dissonance in the workplace are key contributing factors that affect resilience in professional
28
29 nursing practice (Hodges et al. 2008, Glass 2009, Kornbacher & Wilson 2011). Challenging
30
31 workplaces that are constantly changing and very demanding on nurses affect their ability to be
32
33 resilient in academic and healthcare environments. Organizational goals that are not congruent
34
35 with nurses' professional or personal goals cause conflict within themselves when practicing.
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39
40 Psychological emptiness results from frustrations that happened in the workplace. These
41
42 events left nurses feeling "stripped down" and unable to reconcile their beliefs and emotions.
43
44 Nurses viewing their workplaces as not caring about them personally or not valuing their
45
46 opinions were eventually depleted of their psychological reserves (Glass 2009).
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49 Diminished inner balance was demonstrated when nurses were unable to balance the
50
51 demands of work with their outside lives (Glass 2009). Nurses who were not able to put work
52
53 and personal life demands in perspective were more susceptible to "burnout" in their profession.
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5 Dissonance in the workplace results in feelings of anxiety and ambiguity for new
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7 graduates. New graduate nurses struggle with the difference between their academic preparation
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9 and the real world of nursing practice. The practice gaps between the academic setting and actual
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11 nursing practice within a healthcare organization resulted in new graduate nurses becoming
12
13 frustrated with their work environment (Hodges et al. 2008).
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16 **Personal/Intrapersonal Characteristics**

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19 Inconsistency exists whether personal characteristics of nurses such as age, experience,
20
21 education, and years of employment contribute to the resilience in nurses. In a study conducted
22
23 by Gillespie et al. (2007b) age, experience, education and years of employment did not
24
25 contribute to resilience at statistically significant levels. In a later study however, Gillespie et al.
26
27 (2009) found modest statistically significant associations between age and years of experience
28
29 and resilience in OR nurses. In a regression analysis only years of OR experience predicted
30
31 resilience, but explained a small 3.1% of the variance. The authors concluded that resilience is
32
33 not necessarily dependent on nurses' age, experience, and education. Rather, resilience appears
34
35 to be predicted by other attributes.
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40 Intrapersonal characteristics related to resilience in nurses included hope, self-efficacy,
41
42 coping, control, competence, flexibility, adaptability, hardiness, sense of coherence, skill
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44 recognition and non-deficiency focusing (Simoni et al. 2004, Ablett & Jones 2007, Gillespie et
45
46 al. 2007b, Hodges et al. 2008). Hardiness and a sense of coherence were found to be effective in
47
48 hospice nurses in their ability to be resilient in a palliative care environment (Ablett & Jones
49
50 2007). Hospice nurses buffered the stressful effects of working in palliative care by having an
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52 active voice, relying on past personal experiences, having attitudes of making a difference, being
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4 aware of their spirituality, maintaining commitment towards their work, developing personal
5 attitudes about life and death, and being able to set personal and professional boundaries.
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10 Hope, self-efficacy, coping, control, and competence explained 60% of the variance in
11 resilience of OR nurses (Gillespie et al. 2007b). The strongest explanatory variables were hope,
12 self-efficacy, and coping with hope contributing the strongest variance. Furthermore, flexibility,
13 adaptability, and having emotional intelligence were found to be important components in
14 resilience (Glass 2009). Nurses who were hopeful and optimistic were able to combat or
15 minimize the challenges in organizations and maintain their resilience.
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24 Additionally, new graduate nurses who were focused, goal oriented, and capable of
25 solving problems were found to demonstrate resilient behavior (Hodges et al. 2008). Nurses who
26 held beliefs that they were effective in caring for patients (skill recognition) and did not visualize
27 their own failure (deficiency focusing) were more psychologically empowered. These beliefs
28 enabled them to endure the stresses within their workplace (Simoni 2004).
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35 **Strategies for Building Resilience**

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37 Strategies used by nurses to build resilience included cognitive reframing, toughening up,
38 emotional toughness and emotional detachment, grounding connections and work-life balance,
39 critical reflection, and reconciliation (Ablett & Jones 2007, Gillespie et al. 2007b, 2009,
40 Kornhaber & Wilson 2011). Nurses used cognitive reframing to review and retrace their internal
41 and external environments enabling them to promote psychological flexibility and adaptability.
42 Cognitive reframing provided nurses with the ability to re-vision or re-create their work
43 environment into a more effective workplace (Hodges et al. 2008, Glass 2009).
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54 Kornbacher and Wilson (2011) found that burns unit nurses were toughened up just by
55 the repeated exposure of caring for patients with burns. Dealing with the physical changes and
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5 disfigurement on a daily basis enabled the nurses to approach their work through “hardened”
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7 lenses to protect themselves emotionally.
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10 Emotional toughness and emotional detachment were identified as strategies that allowed
11 nurses to perform nursing care in challenging and stressful patient care situations. Emotional
12 detachment allowed nurses to perform painful, uncomfortable patient procedures that were
13 necessary in patients’ recovery process. Developing an emotional toughness enabled the nurses
14 to perform their duties and remain somewhat emotionally detached from their patients but also
15 focusing on the positive rather than negative aspects of providing nursing care (Kornbacher &
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17 Wilson 2011).
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26 Grounding connections with family, friends, and colleagues is another approach nurses
27 used to cope with their work environments. Re-connecting to people with whom nurses had close
28 relationships allowed them to focus on their belief and value systems which contributed to their
29 ability to put workplace challenges and stresses into perspective. Maintaining work-life balance
30 was essential for nurses to build and maintain a sense of resilience (Ablett & Jones 2007, Glass
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32 2009).
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40 According to findings by Hodges et al. (2008) new graduate nurses engaged in critical
41 reflection to assimilate their nursing education within the real world of nursing practice. Critical
42 reflection provided a method for them to problem-solve and adapt to the realities of professional
43 nursing practice (Hodges et al. 2008).
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49 Additionally, reconciliation allowed nurses to reaffirm their commitment to the
50 profession of nursing. Reconciliation provided a mechanism for nurses to find meaning in their
51 work that is congruent with their beliefs and value systems (Hodges et al. 2008).
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Limitations

There were several methodological limitations to the studies. Some studies did not provide detailed information about the sample characteristics and samples were not representative of diverse populations. The majority of participants in the studies were female with minimum representation from males. Only two studies reported ethnicity/race. The majority of participants were Caucasian female. Age of the participants were reported as ranges in two studies, mean age in two studies, and age of participants were not reported at all in two studies. The limited information describing the sample populations does not provide researchers with a clear picture of what populations have been included in the studies.

Additionally, a variety of practice settings were represented limiting the generalizability of the findings from the studies. Practice settings included hospitals agencies, a professional organization of OR nurses, a hospice agency, and an academic setting. As each of these settings bring unique work environments to nurses, nurses may face different challenges resulting in different dimensions of resilient behaviors or strategies to remain resilient within that setting.

Research designs of the seven studies were primarily surveys or qualitative interviews. Strong validity and reliability of each of the instruments and scales was reported in the survey studies. Because of the variability in the research questions and hypotheses (factors in development of resilience, description of resilience, or levels of resilience that predict a sense of empowerment), the ability to infer specific methods for building personal resilience is limited. However, the scales that were used in two studies (Gillespie et al. 2007b, 2009) provide additional instrument validation and evidence of their usefulness for future research in measuring resilience in nurses.

Discussion

Development of resilient behavior by nurses in response to an overwhelming workplace has been associated with increased quality of life, better health, and effective use of adaptive coping strategies (Gillespie et al. 2007b, Glass 2009). Yet ongoing demands, challenges, frustrations, and anxieties that impact nurses each day are often so overpowering that burnout frequently results. Nursing administrators/managers need strategies that can be implemented to support and build resiliency in nurses. Table 2 provides an outline of strategies to support and build resiliency within the nursing workforce at the individual, group, and organizational level.

Insert Table 2 about Here

Intrapersonal characteristics such as hardiness, self-efficacy, or a sense of hope were identified as factors that were components of resilience. A general feeling of optimism and hopeful outlook were common characteristics of the more resilient nurses. Nurses who were able to recognize and identify their own situational concerns, reframe, adapt, and look forward to a time when the current situation might be altered were typically associated with higher levels of resilience. Additionally, nurses who buffered their current situation by considering the future and using coping mechanisms to aid in “moving through” (Hodges et al. 2008) were described as those who exhibited greater resilience.

There was evidence that developing and strengthening personal (individual) resilience was a key factor in coping with a stressful work environment in nursing. Learned behaviors that contribute to personal resilience were suggested as direction for nursing education and in the workplace. Collegial support was a significant factor identified in the review. Human interactive aspects and connections was a major factor that contributed to the personal development of resilience. Whether through reflective journaling (Hodges et al. 2008), grounding connections

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4 with others and balance (Ablett & Jones 2007, Glass 2009), or professional networking
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6 relationships and collaboration (Gillespie et al. 2007b, 2009) the central factor is the supportive
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8 relationship.
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11 In addition, other individual strategies that nurses can employ to build resilience include
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13 maintaining a positive attitude by engaging in humor, laughter, positive thinking techniques,
14
15 visualization techniques, and positive reaffirmations (Jackson, Firtko & Edenborough 2007).
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17 Engaging in extracurricular activities such as exercise, volunteerism, and social network groups
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19 provides an avenue for stress reduction and refocusing on personal fulfillment and goals
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21 (Brannan, de Chesnay, & Hart, 2011). Seeking out trusted mentors to provide guidance,
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23 motivation, emotional support, and role modeling can assist nurses in exploring career goals,
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25 networking opportunities, and resources (McCloughen, O'Brien, & Jackson 2009, Ferguson
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27 2011, Fowler 2011).
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33 While finding ways to improve resilience in nurses is important, nursing
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35 administrators/managers can greatly impact resilience in nurses by fostering a positive
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37 organizational culture in the workplace. Vulnerability of nurses may be directly related to an
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39 adverse environment encountered in their workplace. Stress and burnout continue to be factors in
40
41 the rate of nursing position turnover in hospital environments (Baernholdt & Mark 2009). Nurses
42
43 routinely work in high stress and often complex areas doing their work with people who are
44
45 suffering – a difficult situation under the best of circumstances. A lack of support and resources,
46
47 high patient acuity, lack of autonomy, and complexity of the unit contribute even further to an
48
49 overwhelming and potentially adverse environment (Baernholdt & Mark 2009), and may lead to
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51 emotional exhaustion and burnout driving nurses to leave the profession (American Association
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53 of Colleges of Nursing, 2010). Further evidence of burnout is associated with negative health
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4 outcomes such as psychological distress, somatic complaints, and alcohol and drug abuse
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6 (Vahey, Aiken, Sloane, Clarke, & Vargas 2004). Furthermore, disruptive behaviors including
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8 bullying, abuse, and horizontal violence causes physical and psychological harm to nurses
9
10 resulting in a cycle that leads to ongoing oppressed group behaviors (Roberts et al. 2009).
11
12 Additionally, outcomes of patient satisfaction surveys, conducted by most healthcare institutions,
13
14 depend heavily on patient satisfaction with nursing care. Vahey et al (2004) noted that the
15
16 environments that contribute to nurse burnout may be the same ones that lead to lower patient
17
18 satisfaction scores. Ultimately the responsibility for hospital success may be perceived by some
19
20 nurses to rest squarely on the shoulders of their profession—yet another stressor for the nurse. In
21
22 many environments, nurse salaries or bonuses are tied directly to the patient satisfaction scores
23
24 affecting the economic aspects of a nurse. Study findings by the Institute of Medicine (2004)
25
26 noted that many factors directly related to the practice environment impact nurses' level of job
27
28 satisfaction, decisions about leaving the practice, and ultimately quality of patient care.
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35 Nursing administrators/managers can support a healthy work environment by
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37 implementing the American Association of Critical-Care Nurses (AACN) Healthy Work
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39 Environment Standards (AACN 2005) within their organizations which promotes excellence in
40
41 nursing care. The standards focus on skilled communication, true collaboration, effective
42
43 decision making, appropriate staffing, meaningful recognition, and authentic leadership. The first
44
45 step for nursing administrators/managers is to conduct an assessment of their organization's
46
47 current work environment using the AACN's Healthy Work Environment Assessment tool to
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49 identify issues within the work environment and develop an implementation plan to address the
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51 issues.
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5 While support for each other is critical for nurses, support from managers affects success
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7 or failure. Although internal resilience can be learned, it is not solely the responsibility of the
8
9 individual nurse. Nurses often leave the healthcare system due to burnout and work related
10
11 adversity. Those who remain may also affect patient care outcomes because of their inability to
12
13 cope with the organizational situations. The organization also has a responsibility to provide
14
15 support and respect the autonomy of these highly trained professionals. It seems logical that if
16
17 organizational culture includes values that promote resilience, then new and experienced nurses
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19 will commit to the organization and contribute to the overall quality of care. This is, after all,
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21 what the Magnet hospitals have achieved.
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26 In particular, new nursing graduates face a multitude of challenges in adaptation to the
27
28 work setting. Casey et al. (2004) reported that graduate nurses' role adjustment was most
29
30 difficult between 6 and 12 months after hire and that the majority did not have the confidence
31
32 and competence to assume a safe level of patient care. Sources of their concerns include
33
34 difficulty in work/personal life balance and dissatisfaction with the work environment, including
35
36 career development, salary, schedules, patient care issues, lack of power to make effective
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38 changes, and incivility in the workplace. Laschinger, Finegan, and Wilk (2009) found that lower
39
40 levels of burnout (emotional exhaustion) are associated with workplace conditions that foster
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42 support of nursing practice and civil working relationships, and promoted a sense of
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44 empowerment. Hodges et al. (2008) noted that the leap of the new nurse from education into
45
46 practice often triggered the acute awareness of where they did or did not fit, and fostered the
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48 reconciliation between what they had been taught and the unexpected realities of the practice
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50 setting. Yet their coming to terms with this dissonance, particularly under a supportive
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4 workplace, was also the beginning point of growth of resilient behavior, self -efficacy, and
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6 professional savvy.
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10 A strategy many nursing administrators/managers support is the implementation of nurse
11 residency programs for new graduate nurses (Bratt & Felzer 2011, Krugman et al. 2006, Romyn
12 et al. 2009). Nurse residency programs have been successful in assisting new graduate nurses to
13 transition to practice within the nursing work arena, increasing new graduate retention rates,
14 promoting job satisfaction, and protecting patients by enhancing patient safety and quality care
15 through a structured orientation and support system (Bratt & Felzer 2011, Krugman et al. 2006,
16 Romyn et al. 2009). In support of the nurse residency model, the National Council of State
17 Boards of Nursing (NCSBN) advocates for healthcare organizations to adopt a transition to
18 practice regulatory model that endorses completion of a transition program during the first year
19 of practice (NCSBN 2009). In addition, the Commission of Collegiate Nursing Education (2008)
20 has developed standards and an accreditation process for post-baccalaureate nurse residency
21 programs.
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38 One example of a successful nurse residency program is the University HealthSystem
39 Consortium (UHC) and the American Association of Colleges of Nursing (AACN) residency
40 program. The UHC and the AACN (2007) collaborated and developed this year-long residency
41 program based on an evidence-based curriculum. Currently, there are 81 practice sites
42 participating in the UHC/AACN residency program. Research supports positive outcomes for
43 nurses enrolled in the UHC/AACN residency program such as improved clinical skills and
44 abilities; increased ability to organize and prioritize patient care; effective communication skills
45 with healthcare providers, patients, and families; and decreased turnover rates (Maxwell 2011,
46 Pine & Tart 2007, Williams, Goode, Krsek, Bednash, & Lynn 2007).
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5 Workplace characteristics such as autonomy, control over the practice environment, and
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7 collaborative working relationships have been empirically linked to a perception of structural
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9 empowerment in nurses. Nursing administrators/managers have been front runners in
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11 implementing shared governance structures within healthcare organizations. Key components in
12
13 a successful shared governance model include autonomy, independence in practice,
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15 accountability, participation, empowerment, collaboration, and shared decision making (Anthony
16
17 2004). Organizations that promote decision-making authority at the workforce level empower
18
19 their nurses to be more responsible which promotes 'ownership' of their jobs. Healthcare
20
21 organizations that empower their nurses are promoting a supportive work environment that
22
23 builds trust within the work environment. Organizational culture that has trust embedded in the
24
25 foundation has been shown to affect nurses' job satisfaction, organizational commitment, role
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27 clarity, and empowerment (Laschinger et al. 2000, Laschinger et al. 2001, Ray & Marion 2002).
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29 Nurses working in organizations where trust is paramount may experience the work environment
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31 as more supportive.
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38 An example of this type of supportive work environment is Magnet hospitals who have
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40 received recognition from the American Nurses Credentialing Center (ANCC), a part of the
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42 American Nurses Association. Magnet recognition attests to the quality of the nursing care
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44 provided by the hospital and indicates nursing involvement in decision making about care
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46 delivery. Magnet hospitals are characterized by their ability to provide a supportive,
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48 collaborative, interdisciplinary environment that promotes the professional practice of nursing.
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50 These hospitals foster decentralized decision-making by nurses; autonomy in nursing practice;
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52 control of and over nursing practice; collaborative management and physician relationships with
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54 nurses; access to information, support, and resources; and opportunities for growth and
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5 development. Although all healthcare agencies may not aspire to this credentialing process, the
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7 values and workplace characteristics that are evident in the Magnet hospitals are those that are
8
9 most likely to provide the trust and support needed to promote resilience in nurses.
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11 Additional strategies that nursing administrators/managers can implement to build
12
13 resilience in nurses include formal and informal debriefing sessions for nurses involved in
14
15 traumatic/stressful patient and family situations, mentorship programs for new graduate and
16
17 newly hired nurses, and personal resilience workshops for nurses. Nurses care for patients with a
18
19 variety of diagnoses and outcomes that may produce powerful emotional responses on the part of
20
21 the nurse. Providing an avenue for nurses to debrief from these types of situations may be a
22
23 cathartic process to relieve stress, anxiety, and built up emotions.
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28 Personal resilience workshops for nurses have also been effective in helping nurses
29
30 manage the challenges within the work environment (McDonald, Jackson, Wilkes, & Vickers
31
32 2010). McDonald et al. (2010) developed a work-based education program to strengthen
33
34 personal resilience in nurses. The program focused on topics such as developing mentoring
35
36 relationships, building hardiness, maintaining a positive attitude, intellectual flexibility,
37
38 emotional intelligence, and reflection within a participatory learning group format. Nurses
39
40 reported positive outcomes from the program such as enhanced self-confidence, self-awareness,
41
42 communication, and conflict resolution skills, In addition, nurses were able to build and
43
44 strengthen relationships with their peers and develop a support network within their organization.
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49 At the organization level several strategies are applicable to support and build resilience
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51 within the organization's workforce. Employee Assistance programs (EAP) provide help to
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53 employees dealing with personal issues and problems that might affect their work performance,
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55 health, or well-being. Organizations provide EAP services free or at a reduced cost to their
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4 employees. Professional development programs that target resiliency building behaviors in
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6 employees is beneficial in enhancing and providing employees with tools and skills to deal with
7
8 the daily stresses and frustrations of the work environment. These programs might include topics
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10 such as interdisciplinary effective communication, coping strategies, effective
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12 teambuilding/teamwork, emotional intelligence, conflict management and resolution, and stress
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14 reduction.
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19 Disruptive behaviors (bullying, horizontal violence, abuse) within healthcare
20
21 organizations result in physical and psychological harm to nurses. Negative consequences such
22
23 as fear, loss of self-esteem, anxiety, depression, demoralization, and feeling vulnerable can result
24
25 when nurses are victims of disruptive behaviors (Hutchinson, Vickers, Jackson, & Wilkes 2006).
26
27 The impact of disruptive behaviors for organizations includes decrease quality in patient care,
28
29 workforce job dissatisfaction, and poor morale (Yamada 2008). In addition, disruptive behaviors
30
31 within an organization can lead to problems with retention and recruitment of nurses (Jackson,
32
33 Clare, & Mannix 2002). Disruptive behaviors can have huge financial costs to organizations
34
35 related to loss of productivity and employee commitment with estimates ranging from \$30,000 to
36
37 \$100,000 per victim (Simons 2008). Implementation and enforcement of a Zero Tolerance policy
38
39 for disruptive behaviors is essential to present a united front in promoting a safe and healthy
40
41 work environment for nurses.
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46 47 **Conclusions**

48
49 This integrative review provides vital information to nursing administrators/managers
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51 about the concept of resilience within the work environment. Becoming aware of contributing
52
53 factors to the need for resilience, intrapersonal characteristics that foster resilient behavior, and
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55 successful strategies to build resilience in nurses can help in **recruiting and** retaining nurses
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4 within the workforce. It is important for nursing administrators/managers to understand why
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6
7 some nurses are resilient in the workplace and others are not in order to provide support, foster a
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10 positive organizational work culture, and develop programs to help nurses become and stay
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12 resilient within today's healthcare environment.
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Table 1. Summary of Findings from Research Studies

Author/year/country	Design	Sample Population	Findings (excerpts from articles)
Ablett & Jones (2007) (UK)	Qualitative, Phenomenology	10 nurses (9 female and 1 male) Race: not reported Age: not reported Education: not reported Years of Practice: not reported Setting: Palliative care nurses working in Hospice	<ul style="list-style-type: none"> • 10 themes related to the concepts of hardiness and sense of coherence <ul style="list-style-type: none"> ○ an active choice ○ past personal experiences ○ personal attitude to caregiving ○ awareness of spirituality ○ personal attitudes to work ○ aspects of job satisfaction ○ aspects of job stress ○ personal attitude to life and death ○ ways of coping ○ personal/professional issues and boundaries • The findings illustrate the interpersonal factors

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Table 1. Summary of Findings from Research Studies

Author/year/country	Design	Sample Population	Findings (excerpts from articles)
Gillespie et al. (2007b) (Australia)	Quantitative, Correlational-cross sectional Instrument: Connor-Davidson Resilience Scale: 25 items rated on a 5-point Likert response format (0 = not all true to 4 = true nearly all the time)	772 nurses (91.6% female) Race: not reported Age: not reported Education: Hospital certificate: 71.6% Associate: 2.8% Degree: 40.3% Master's: 7.8% Doctorate: 0.3% Years of Practice: not reported Setting: Australian College of	that may enable hospice workers to remain resilient and effectively buffer or moderate the stressful effects of working in palliative care. • Hope, self-efficacy, coping, control, and competence explained 60% of the variance in resilience. • Hope was the strongest unique contributor to resilience • Age, experience, education, and years of employment were not statistically significant in explaining resilience in OR nurses

Table 1. Summary of Findings from Research Studies

Author/year/country	Design	Sample Population	Findings (excerpts from articles)
		Operating Room Nurses (ACORN)	
Gillespie et al. (2009) (Australia)	Quantitative, Predictive Instrument: Connor- Davidson Resilience Scale: 25 items rated on a 5- point Likert response format (0 = not all true to 4 = true nearly all the time)	735 nurses (94% female) Race: not reported Age: Mean: 46.1 Education: Hospital certificate: 73.4% Diploma: 3.0% Degree: 42.8% Postgraduate certificate: 52.8% Postgraduate diploma: 20.6 Master's: 8.2% Doctorate: 0.3% Years of Practice: Average years of OR experience: 17.8 years	<ul style="list-style-type: none"> • Modest statistically significant associations between age and years of OR experience and resilience • No relationship between education and resilience • Year of OR experience only predicted 3.1% of the variance in resilience • Large proportion of variance in resilience remains unexplained, suggestive that other variables are associated with resilience

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Table 1. Summary of Findings from Research Studies

Author/year/country	Design	Sample Population	Findings (excerpts from articles)
Glass (2009) (Australia)	Qualitative, Ethnography	Setting: Nurses who were members of the Australian College of operating Room Nurses (ACORN)	
		20 nurses (18 females and 2 males)	• Challenging workplaces, psychological emptiness, and diminishing inner balance are contributing factors for the need of resilience and restoration of inner healing
		Race: not reported	
		Age: (ranged between 32-60 years)	
		Education:	
		PhD qualified: 12	• Flexibility, adaptability, and emotional intelligence were identified as components of resilience
		PhD submission within 12 months: 3	
		Planning to enroll in PhD: 2	
		No intention of enrolling in PhD: 3	• Cognitive reframing and grounding are strategies to sustaining resilience in the workplace
		Years of Practice (in academic setting):	
Fewer than 5 years: 2	• Hope, optimism, and resilience united are a powerful healing force to combat and/or minimize		
5 to 10 years: 2			

Table 1. Summary of Findings from Research Studies

Author/year/country	Design	Sample Population	Findings (excerpts from articles)
		More than 10 years: 15	workplace challenges
		Setting: Schools of nursing in public universities	
Hodges et al. (2008) (USA)	Qualitative, Phenomenology	11 nurses (10 female and 1 male) Race: Caucasian: 9 African American: 2 Age: 23-31 Education: Baccalaureate: 100% Years of Practice: 12 to 18 months Setting: Southeastern city in US Practice areas: Labor & delivery, mother-baby, emergency department, neonatal intensive care, medical adult	<ul style="list-style-type: none"> • Three themes and subthemes for developing professional resilience in practice: <ul style="list-style-type: none"> ○ Learning the Milieu <ul style="list-style-type: none"> ▪ Learning the culture (people, formal, and informal rules ▪ Learning RN skill sets (techniques, time mgt, and pace) ○ Discerning Fit <ul style="list-style-type: none"> ▪ Sensing discrepancies ▪ Reconciliation of one's identity

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Table 1. Summary of Findings from Research Studies

Author/year/country	Design	Sample Population	Findings (excerpts from articles)
Kornhaber & Wilson (2011) (Australia)	Qualitative, Phenomenology	7 nurses (100% female) Race: not reported Age: 25-58, Mean 38.4 Education: Baccalaureate: 5 Hospital Qualified: 2 Years of Practice (in burns nursing): 3 – 23 years, Mean: 11.4	as a professional nurse <ul style="list-style-type: none"> ○ Moving Through <ul style="list-style-type: none"> ▪ Turning point ▪ Street smarts • Critical reflection and reconciliation were strategies used for resilience • Six categories identified <ul style="list-style-type: none"> ○ Toughening up ○ Natural selection ○ Emotional toughness ○ Coping with the challenges ○ Regrouping and recharging ○ Emotional detachment

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Table 1. Summary of Findings from Research Studies

Author/year/country	Design	Sample Population	Findings (excerpts from articles)
Simoni et al. (2004) (USA)	Quantitative, Predictive Instrument: Stress Resiliency Profile: 18- items rated on a 7-point Likert response format (1 = strongly disagree to 7 = strongly agree)	Setting: Large, acute care, public hospital	<ul style="list-style-type: none"> 24% of the variance of psychological empowerment was explained by the interpretative styles of stress resiliency, skill recognition (20% of variance) and deficiency focusing (4% of variance). Nurses who believe they are effective in caring for patients (skill recognition) and who did not visualize their own failure (deficiency focusing) were more psychologically empowered which provided resilience to endure the stresses within their workplace
		Practice Area: Burns unit	
		142 nurses (100% female)	
		Race: 99.3% Caucasian	
		Age: Mean: 35.4	
		Education:	
		Baccalaureate: 47.7%	
		Associate: 40.9%	
		Diploma: 12%	
		Years of Practice:	
Fewer than 5 years: 42%			
5 to 10 years: 23%			
More than 10 years: 35%			

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Table 1. Summary of Findings from Research Studies

Author/year/country	Design	Sample Population	Findings (excerpts from articles)
		Setting: 2 hospitals in Mid-Atlantic state; 4 nursing units - medical- surgical, intensive care step- down, pediatrics, skilled nursing	

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Table 2: Strategies to Build Resilience in Nurses at the Individual, Group, and Organization Level

Individual Level Strategies

- Engage in cognitive reframing to promote psychological flexibility and adaptability in the work environment
- Develop emotional insight to identify risk and protective factors that facilitates emotional toughness within the environment
- Ground connections with family, friends, and colleagues
- Maintain work-life balance to foster career and personnel goals
- Use critical reflection to problem-solve and build resolutions to help guide in future situations
- Engage in reconciliation to reaffirm professional commitment and find meaning and congruency between work life and personal beliefs and value system
- Maintain a positive attitude through humor, laughter, positive thinking techniques, visualizations and positive affirmations
- Engage in extracurricular activities such as exercise, volunteerism, and social network groups
- Seek out a trusted mentor to provide professional and personal guidance

Group Level Strategies (Nursing)

- Analyze the organization's current work environment by conducting an assessment using the AACN's Healthy Work Environment Assessment
- Implement AACN's Healthy Work Environment standards
- Conduct a Magnet Recognition Readiness assessment
- Achieve Magnet Recognition Status
- Establish a model of Shared Governance within the healthcare organization at the organizational and unit level
- Implement New Graduate Nurse Residency programs such as the University HealthSystem Consortium (UHC) and American Association of Colleges of Nursing (AACN) Nurse Residency program
- Implement Mentorship programs for new graduate and newly hired nurses
- Establish a mechanism for formal and informal debriefing sessions for nurses involved in traumatic/stressful patient and family situations
- Personal resilience workshops for nurses

Organization Level Strategies

- Implement Employee Assistance programs
 - Provide professional development programs such as:
 - Interdisciplinary effective communication
 - Coping strategies
 - Effective team building/teamwork
 - Emotional intelligence
 - Conflict management and resolution
 - Stress reduction workshops
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Implement and enforce a Zero Tolerance policy for disruptive behaviors (bullying/horizontal violence)

Promote personal health incentives:

Smoking cessation classes

Workout/gym facilities

Free health screenings

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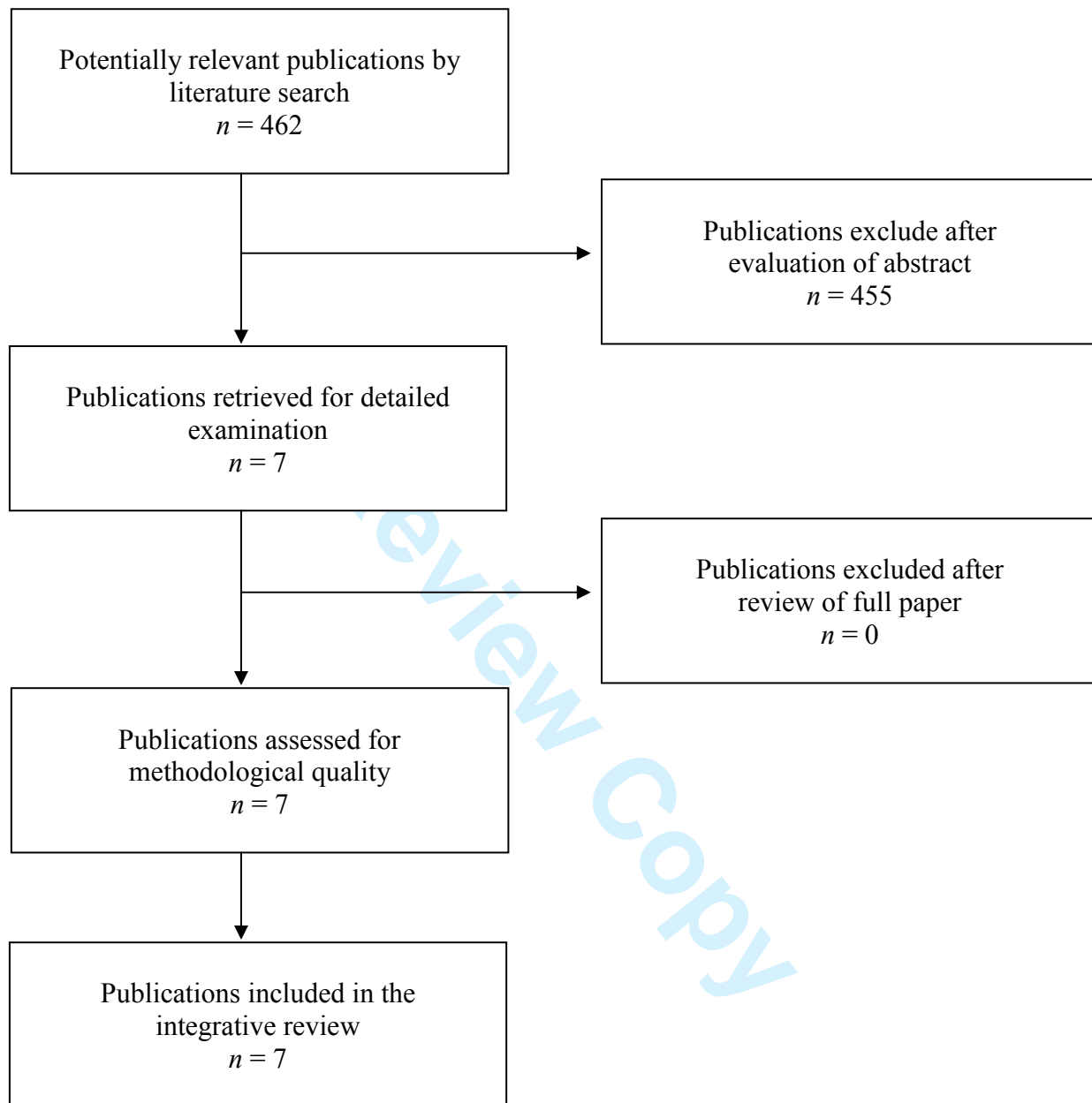


Figure 1. Data search (collection) process.