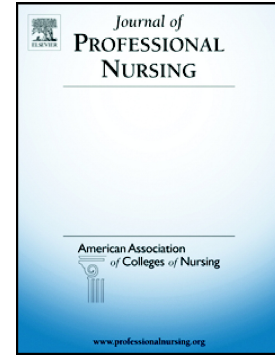


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**Job satisfaction and the factors affecting satisfaction in nurse educators: A
systematic review**

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Abstract

Objectives: The present study seeks to answer the following two questions: Are nurse educators satisfied with their job? What are the factors affecting job satisfaction in nurse educators?

Background: Nurse educators' job satisfaction has a significant role in the efficiency and performance of nursing schools. Identifying the factors affecting job satisfaction in nurse educators is essential to improving their quality of work and ultimately training efficient students and nurses.

Evaluation: The present systematic review searched databases including PubMed, Medline, Cochrane Library, Scopus, Web of Science, Science Direct, ProQuest, Google Scholar and SID for articles published up to April 24, 2018, using keywords including Nurse Teachers, Nurse Faculty, Academic Nurses, Nurse Educators, Dis/Satisfaction, Work, Career, Professional, Practice and Job. Of the total of 971 articles extracted, only 74 remained for the final analysis after the qualitative assessment.

Key Issue: The articles included in the analysis investigated the relationship between job satisfaction and its contributing factors rather than providing an accurate report on job satisfaction. Nonetheless, a number of the articles had reported fairly to very favorable levels of job satisfaction. The factors affecting nurse educators' job satisfaction were categorized into six levels, including personal, organizational, managerial, academic, professional and economic levels.

Conclusion: Although job satisfaction was reported relatively well in the nurse educators, this condition depends on several indices. The lack of positive steps toward job satisfaction in nurse educators leads to destructive behaviors and turnover intentions; meanwhile, it is satisfied educators who can train competent nurses.

Keywords: Nurse educators, nurse teachers, nurse faculty, academic nurses

Introduction

Nurse educators are one of the main subsets of health systems (Baker, Fitzpatrick, & Griffin, 2011). Nursing education is a professional level and emphasis on it enriches nursing sciences. Addressing health educators' needs is increasingly important. Helping nurse educators expand their knowledge and nursing skills is necessary (Chung, 2011). Health education cannot create positive changes in nursing schools without paying attention to the needs and conditions of nurse educators. The WHO is always seeking to improve the competence of nurse educators, such that they can provide high-quality education and educate skilled and efficient nurses who are able to address the health needs of their community (National League for Nursing, 2018).

The WHO introduced the Nurse Educator Core Competency for developing nursing education in 2016; these competencies are in line with the international nursing strategies pursued from 2016 to 2020 and also with the efficient manpower supply strategies pursued until 2030. These core competencies include: (1) Nurse educators should have a proper understanding of contemporary educational theories, the principles and models of curriculum design and the importance of adult learning. (2) Nurse educators must demonstrate their skills and ability to design, implement, monitor and manage curricula based on contemporary educational models in a systematic and well-documented manner. (3) Nurse educators should maintain their current knowledge and skills both in theory and practice based on the best available evidence. (4) Nurse educators should develop their critical research and abilities to conduct research and use these findings to identify and solve educational and clinical problems. (5) Nurse educators should demonstrate effective communication in practice and promote the skills that lead to teamwork, since they increase interdisciplinary collaboration in the health and education system. (6) Nurse educators should demonstrate professionalism (which includes consideration for the legal and ethical values of the profession) in practice, since professionalism is a basis for the development of nursing policies, processors and decision-making. (7) Nurse educators should use different strategies to monitor and evaluate nursing programs, curricula and learners' mastery of the subjects. (8) Nurse educators should demonstrate system management and leadership skills to create, maintain and develop their nursing program and shape the future of nursing education institutions (World Health Organization, 2016).

These core competencies reflect the change in nursing practice and suggest that nursing practice should be consistent with the new changes in place and with scientific evidence. Nursing education is the turning point of these changes. This turning point is activated by nurse educators, and their performance accelerates or delays adaptation to new conditions. (National League for Nursing, 2018).

The advances in medical sciences, the increasing number of nursing students and the high expectations of the health and education system from nurse educators, who need

to master these competencies might mean a certain level of ambiguity in the nurse educators' role (Baker et al., 2011), and this ambiguity can have a negative impact on their job satisfaction (Davies, Spence Laschinger, & Andrusyszyn, 2006). Job dissatisfaction has an impact on the efficiency of nurse educators and adversely affects the education they provide to nursing students and might lead to job turnover and make the health system face a shortage of nurse educators (Emory, Lee, Miller, Kippenbrock, & Rosen, 2017).

According to the American Association of Colleges of Nursing, the main reasons for the vacant job positions in nursing faculties in 2012-13 include the faculty members' aging, retirement requirements, inadequate salaries, insufficient budget for recruitment, eligible candidates not applying for recruitment, heavy workloads in nursing schools, high expectations from nursing faculty members, problems caused by newly-recruited people due to the rapid development of practical programs and the limited Ph.D. admissions for nursing faculty members (Derby-Davis, 2014). The shortage of nurse educators is one of the main reasons for the increased workloads faced by nurse educators. An increased workload leads to a greater job dissatisfaction and makes nursing not attractive to young nurse educators. Nurse educators with a high job satisfaction are more motivated in educating students and foster more efficient nurses (Dwaikat, Nazzal, & Buzeih, 2011). Nurse educators' job satisfaction and its contributing factors help retain a capable academic workforce in nursing schools and identifying these contributing factors is thus necessary for preserving the professional identity of nursing.

Objectives and research questions

The present study seeks to answer the following two questions: Are nurse educators satisfied with their job? What are the factors affecting their job satisfaction?

Methods

Design

The present systematic review was conducted according to the PRISMA statement in the following stages: The formulation of a research question, the selection of relevant terminology and the formulation of search terms by consulting health information scientists, planning the search strategy, agreeing on the inclusion and exclusion criteria, conducting a systematic search in electronic databases, the selection of eligible studies and the quality assessment of the relevant studies for analysis (Moher, Liberati, Tetzlaff, Altman, & Group, 2009).

Search strategy and inclusion criteria

A search was carried out for English and Persian articles published up to April 24, 2018, in databases including PubMed, Medline, Cochrane Library, Scopus, Web of Science, Science Direct, ProQuest, Google Scholar and SID (Table 1), using the keywords presented in Table 2 plus a combination of the terms 'and', 'or' and 'not'.

Table 1 : comprehensive review of the literature

Cochrane library	PubMed & Medline	CINAHL	Science Direct	Web Of Science	Scopus	Proquest	Ovid	Google	SID	Total
0	149	45	24	121	483	93	9	40	7	971

Table 2. Search terms

Faculty, Nursing [MeSH]	Job Satisfaction [MeSH]	exclusion criteria
Faculty, Nursing* [MeSH] Nurse Faculty Faculty of Nursing Nursing Faculty Nurse Teachers Academic Nurse Nurse Educator	Job Satisfaction*[MeSH] Job Dissatisfaction Work Satisfaction Satisfaction,Work Satisfactions,Work Work Satisfactions Satisfaction,Career Satisfactions,Career Career Satisfaction Satisfaction, professional Satisfactions, professional professional Satisfaction Satisfaction, practice Satisfactions, practice practice Satisfaction job* satisf* job* satisfaction	NOT Staff Nurse NOT Nursing, Supervisory * [MeSH] NOT Head Nurse*[MeSH]

Search outcome and exclusion criteria

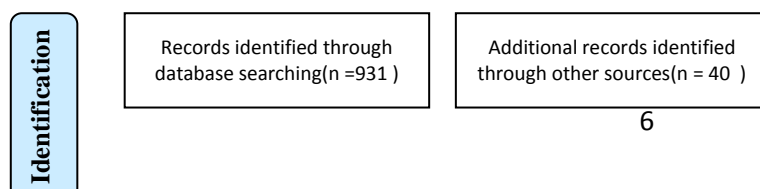
Two researchers assessed the results of the search in the databases. From the total of 971 articles retrieved, 176 were eliminated for being repetitive, and the title and abstract of the remaining 795 articles were assessed and 493 articles, which did not contain the keywords in their titles or abstracts and were not relevant to the subject of 'job satisfaction in nurse educators', were eliminated. The full text of the 302 remaining articles was examined by the two researchers with regard to the inclusion and exclusion criteria (Table 3), and 80 articles were excluded from the study for being irrelevant to job satisfaction in nurse educators, 104 articles for examining job satisfaction not only among nurse educators but also among other faculties, and 44 articles because their

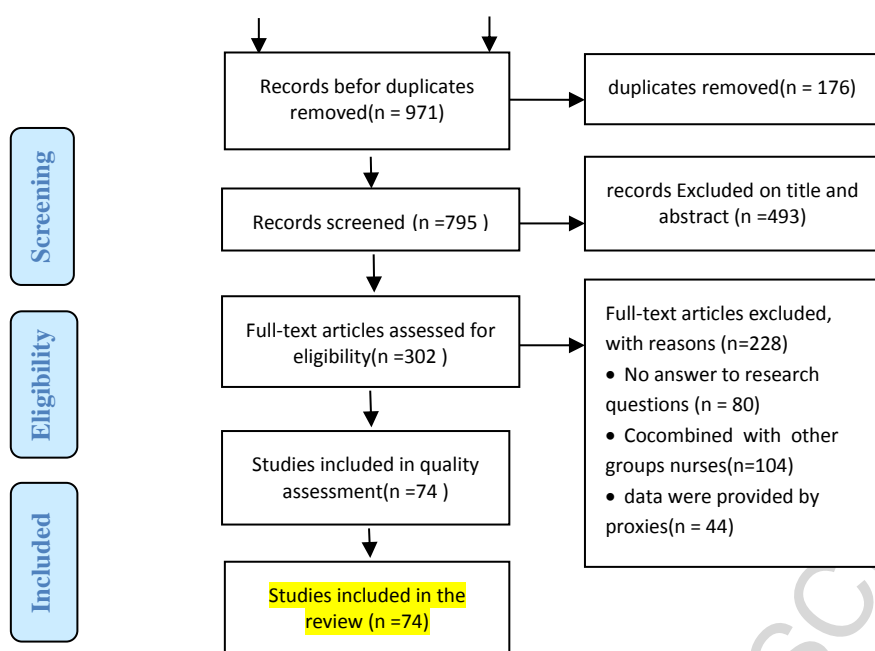
results were being re-published by the authors. The remaining 74 articles were qualitatively assessed, and 74 articles were finally included in the systematic review (Figure 1, Table 3).

Table 3: Inclusion/Exclusion Criteria

	Included	Excluded
Participants	<ul style="list-style-type: none"> • Nurse Educators, Nurse Faculty, Nurse Teachers, Academic Nurses 	staff nurse Nursing, Supervisory Head Nurse Faculty members of other groups such as (doctor, dentist, pharmacist, midwife, etc.)
Design	<ul style="list-style-type: none"> • Randomized controlled trials • Non-randomized controlled trials • Quasi-experimental designs (cross-sectional, cohort, longitudinal, prepost-test) • Qualitative studies • Systematic, narrative reviews • Thesis • Dissertations • BSC Degree Study • Research Briefs 	Poster, presentation, Editorials
Objectives and Outcome	<ul style="list-style-type: none"> • Objectives and outcomes related to job satisfaction in (Nurse Educators, Nurse Faculty, Nurse Teachers, Academic Nurses) 	<ul style="list-style-type: none"> • Main theme, objective and outcomes not related to job satisfaction in (Nurse Educators, Nurse Faculty, Nurse Teachers, Academic Nurses)
Language	<ul style="list-style-type: none"> • English & Persian 	<ul style="list-style-type: none"> • Other languages
Publication	<ul style="list-style-type: none"> • Published • Peer-reviewed (Only for articles and Research Briefs) 	<ul style="list-style-type: none"> • Non-Published • Not peer-reviewed (Only for articles and Research Briefs)
Overlapping	<ul style="list-style-type: none"> • In cases where one or more articles extracted from a researcher's dissertation or thesis were available, the dissertation or thesis was selected. • In cases where the results of a research by one researcher were published several times under different titles, the most recent and comprehensive article by the researcher was used. • The articles whose participants were a combination of nurses and nurse educators but the results were reported separately for each group were included. 	

Figure 1: PRISMA Flow Diagram





Quality assessment

The two researchers separately assessed all the eligible articles, and in cases of differences of opinion, the decision about the quality of the article was made through discussion. The quality assessment of the articles was carried out based on the criteria proposed by (Gifford, Davies, Edwards, Griffin, & Lybanon, 2007), which presents eight items for the assessment of quasi-experimental studies, six items for questionnaire-based studies and eleven items for qualitative studies. Each item was given a score of 2 (excellent), 1 (some limitations), or 0 (several limitations). Quasi-experimental studies scoring between 0 and 6, questionnaire-based studies scoring between 0 and 4, and qualitative studies scoring between 0 and 8 were excluded. The quality assessment of the reports of the systematic review and meta-analysis was carried out according to the 27-item PRISMA checklist, in which item 2 was concerned with the abstract and items 14, 16, 21 and 23 with the meta-analysis reports. Each item in the checklist was rated as "adequate" or "inadequate" (Moher et al., 2009). One systematic review study and one meta-analysis were assessed in the present research and all the items of both studies were rated as "adequate".

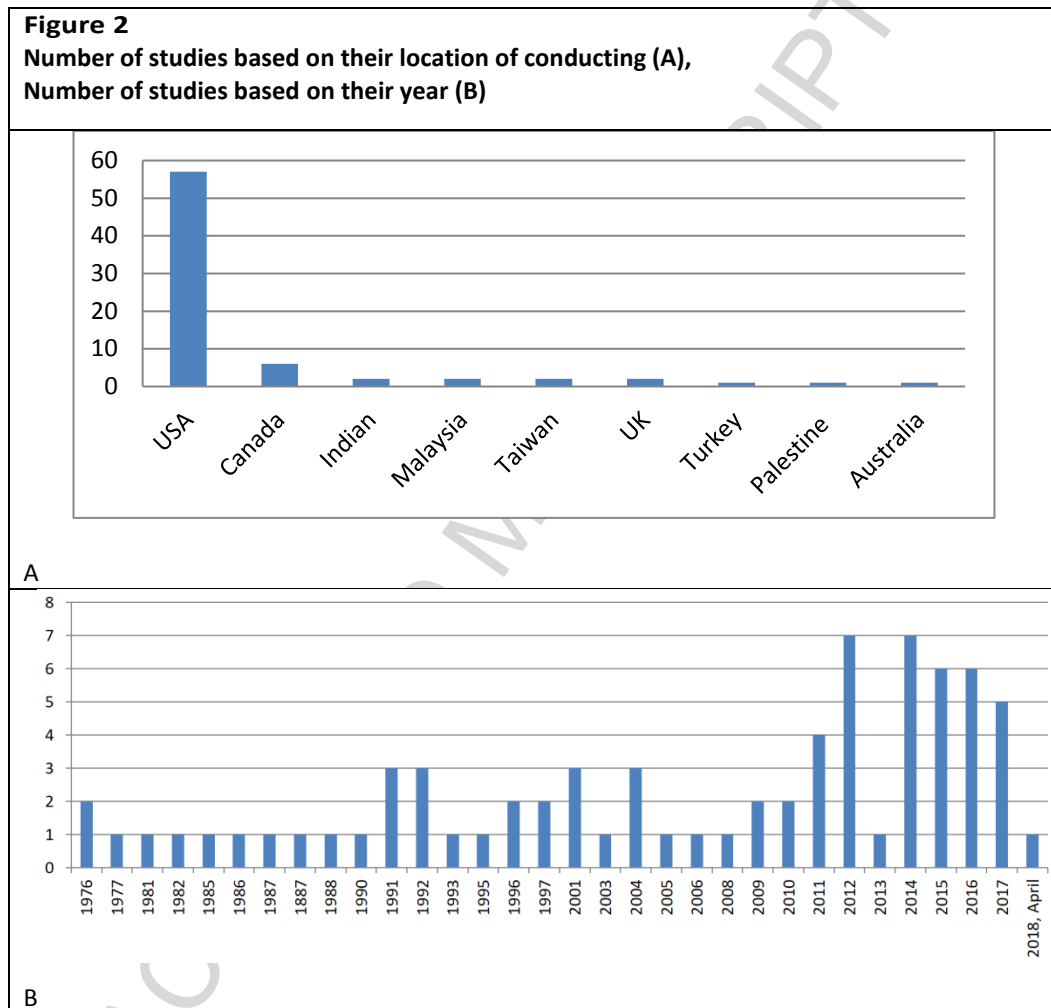
Data analysis

A total of 74 studies were analyzed by the two researchers to identify the common themes. The selected articles were read once to yield a general overview of the data. Then, to understand their content and identify the initial categories, the articles were read several times. The initial categories were formed to express the main elements and so as to answer the questions.

Characteristics of the included studies

A total of 74 studies published between 1976 and 2018 were assessed. From these studies, 37 (50%) were articles, 32 (43%) were dissertations, two (3%) were theses, two (3%) were research briefs and one was a BSc degree study (1%). As shown in

Figure 2, more than half of the studies ($n=57$, 77%) had been conducted in the USA. Five of the studies were qualitative, two were secondary analyses, two were mixed-method studies, one was a literature review, one was a meta-analysis and the rest were quantitative studies (cross-sectional, non-experimental, descriptive and correlational). The minimum and maximum sample size was 9 and 76 in the qualitative studies and 29 and 2479 in the other studies. Details of the articles included in this systematic review are presented at the end of this study. Figure 2 shows the studies based on their year and location of conducting.



Results

Job satisfaction is the subjective perception of one's job and is defined as an organizational behavior based on the individual's role and degree of efficiency in the organization (Snarr & Krochalk, 1996). The factors affecting job satisfaction and motivation incorporate two general theories, including content theories, which deal with the content of creating job satisfaction and motivation, and process theories, which deal with its process (Afam, 2012). Most articles have mentioned Herzberg's theory as the most applicable theory for job satisfaction (Afam, 2012; Beyer, 1981; Derby-Davis, 2014; Embrey, 1991; Lane, Esser, Holte, & McCusker, 2010; Marriner & Craigie, 1977;

Ruel, 2009; Snarr & Krochalk, 1996; Sussman, 2012; Westphal, Marnocha, & Chapin, 2016). The most common job satisfaction assessment tool was the Job Descriptive Index (JDI), which consists of dimensions including Pay, Job in General, Opportunities for Promotion and Managers and Colleagues (Ampadu, 2015; Bailey, 1995; Birx, LaSala, & Wagstaff, 2011; Christian, 1986; Harty, 2008; Moody, 1996; Ruel, 2009; Suzan, 2016).

The validity of the JDI has been verified for assessing job satisfaction in nursing faculty members in an academic setting (Snarr & Krochalk, 1996). The majority of studies, however, recommend the development of a separate job satisfaction assessment tool for nurse educators (Gui, Barriball, & While, 2009).

In response to the first question (Are nurse educators satisfied with their job?), it can be said that previous studies have not specifically discussed job satisfaction or dissatisfaction. Not reporting the exact level of job satisfaction or dissatisfaction can be due to the multiple factors that can affect job satisfaction and which can be difficult to control.

Some studies, however, have reported less-than-moderate (Grandjean, Aiken, & Bonjean, 1976), moderate (Altuntaş, 2014; Chen, Beck, & Amos, 2005; Chin, Beauchamp, & Sellick, 2012), favorable (Baker et al., 2011; Beach, 1997; Bittner, O'connor, & 2012; Derby-Davis, 2014; Harty, 2008; Lane et al., 2010; Staurovsky, 1992), and very high (Jackson, 2016; Johnson, 2001; Puglisi, 2010; Sayers, Salamonson, DiGiacomo, & Davidson, 2015; Westphal et al., 2016) job satisfaction in nurse educators.

To answer the second question (What are the factors affecting their job satisfaction?), the factors affecting job satisfaction in nurse educators can be categorized into six levels, including managerial, organizational, academic, professional, economic and personal (Table 4).

Personal	Organizational
<ul style="list-style-type: none"> • Gender (Dwaikat et al., 2011; Jackson, 2016) • Age (Dwaikat et al., 2011; Jackson, 2016; Lee, Miller, Kippenbrock, Rosen, & Emory, 2017) • Marital status (Jackson, 2016; Valsaraj, 2013) • Work experience (Altuntaş, 2014; Chin et al., 2012) • Employment status (Moody, 1996) • Teaching experience (Dwaikat et al., 2011) • Educational qualification (Altuntaş, 2014; Ampadu, 2015; Dwaikat et al., 2011; Jackson, 2016; Lane et al., 2010; Sayers et al., 2015; Smith-King, 2012) • Teaching level (Altuntaş, 2014) • Place of education and degree-awarding school (Holland, 1992) <p>Organizational commitment (Sussman, 2012) Personal and family policies (Emory et al., 2017) Interest in the profession (Whitehead, 2015) Personal attributes (Self-esteem, ethics, psychological empowerment, ability to provide career coaching) (Disch, Edwardson, & Adwan, 2004; Hood, 1997; Owens, 2017; Smith-King, 2012; Waddell, Spalding, Navarro, & Gaitana, 2015)</p>	<p>Creating a cooperative organizational culture (Beyer, 1981) Attitude toward teamwork (Beyer, 1981; Embrey, 1991) Creating job security and resolving recruitment issues (Moody, 1996) Empowerment (Afam, 2012; Baker et al., 2011; Davies et al., 2006; Gui et al., 2009; Sarmiento, Laschinger, & Iwasiw, 2004) Transparency of roles and responsibilities (Acorn, 1991; Emory et al., 2017; Fain, 1985; Gormley, 2003; Sayers et al., 2015) Organizational changes (Bonjean, Brown, Grandjean, & Macken, 1982; Gui et al., 2009) Organization's characteristics (size and type of the Organization and number of students) (Christian, 1986; Emory et al., 2017; Snarr & Krochalk, 1996) Students' characteristics and academic levels (Moody, 1996; Walker, 2014) Reinforcing the social status of educators (Embrey, 1991) Retirement system (Dwaikat et al., 2011) Organizational support (Gutierrez, Candela, & Carver, 2012) Access to organizational resources (Gui et al., 2009) Healthy work environment (Clark, Sattler, & Barbosa-Leiker, 2016)</p>

Managerial	<p>Leadership styles (Afam, 2012; Chen et al., 2005; Emory et al., 2017; Reese, 2004; Shieh, Mills, & Waltz, 2001)</p> <p>Leader's expectations (Gormley, 2003)</p> <p>Managers' support (Afam, 2012; Derby-Davis, 2014; Gui et al., 2009)</p> <p>Involvement in university affairs (Embrey, 1991)</p> <p>Increasing motivation through managers (Harty, 2008)</p>	Economic	<p>Funding provided to universities (Snarr & Krochalk, 1996)</p> <p>Access to facilities and resources (Davies et al., 2006)</p> <p>Wages and payment (Bailey, 1995; Cowen, 1991; Dougherty, 1995; Dwaikat et al., 2011; Lane et al., 2010; Meservey, 1987; Moody, 1996; Puglisi, 2010; Snarr & Krochalk, 1996; Tang & Ghani, 2012; Wang & Liesveld, 2015; Westphal et al., 2016)</p> <p>Improved welfare (Gui et al., 2009)</p> <p>Career opportunities (academic, clinical) (Meyer, 2014; Noble-Britton, 2014)</p>
Scientific	<p>Scientific improvement and career progress (Altuntaş, 2014; Beach, 1997; Disch et al., 2004; Dougherty, 1995; Harty, 2008; Johnston, 1988)</p> <p>Clinical knowledge and skills (Chin et al., 2012; Grandjean et al., 1976; Suzan, 2016)</p> <p>Access to new scientific resources and information (Disch et al., 2004)</p> <p>Facilities for participation in academic conferences and meetings (Disch et al., 2004)</p> <p>Publishing research papers and articles (Meservey, 1987; Sussman, 2012)</p>	Professional	<p>Work conditions (Awrey, 1990; Bix et al., 2011; Embrey, 1991)</p> <p>Occupational stress (Hunter & Houghton, 1993; Johnston, 1988)</p> <p>Role conflict (Acorn, 1991; Fain, 1985; Gormley, 2003; Johnston, 1988; Ruel, 2009)</p> <p>Role ambiguity (Acorn, 1991; Fain, 1985; Gormley, 2003; Gui et al., 2009; Johnston, 1988; Sayers et al., 2015)</p> <p>Employment status (Christian, 1986; Emory et al., 2017; Snarr & Krochalk, 1996; Thies & Serratt, 2018)</p> <p>Workload (Bittner et al., 2012; Dwaikat et al., 2011; Moody, 1996; Moss, 2014; Owens, 2017; Suozzo, 2015)</p> <p>The nature of the work (Dwaikat et al., 2011)</p> <p>Decision-making capability and having authority (Afam, 2012; Cowen, 1991; Gormley, 2003; Grandjean et al., 1976; Johnson, 2001; Reese, 2004)</p> <p>The work factor (Dwaikat et al., 2011; Lane et al., 2010; Thies & Serratt, 2018)</p> <p>Use of mentors for undergraduate students (Bailey, 1995; Bohlender, 2014; Chatmon, 2016; Gentry, 2017)</p> <p>Executive responsibility (Afam, 2012; Sullivan, 2001)</p> <p>Occupational burnout (Sarmiento et al., 2004; Staurovsky, 1992)</p>

The factors affecting job satisfaction in nurse educators

Personal factors

Age: A study conducted by (Dwaikat et al., 2011) on 64 nurse educators in nursing faculties on the west bank showed that younger people (age group 25-29) have a higher job satisfaction compared to the age group 40 and above. The study by (Jackson, 2016) on 152 nurse educators in Georgia indicated that people at the two ends of the young-elderly continuum, i.e. those with no experience or with a lot of experience, had a greater job satisfaction. A retrospective study by (Lee et al., 2017) on 1350 nurse educators using secondary data and data from the Collaborative on Academic Careers in Higher Education (COACHE) showed no significant relationships between age and job satisfaction among the faculty members, but showed a negative and significant relationship between age and the intention to stay, as younger faculty members are more willing to stay in their current position and less unwilling than older faculty members to leave their job. They further argued that the relationship between age and job satisfaction is affected by work and professional concerns about wage, job stability and workplace conditions, which are particularly important for any age group.

Gender: (Dwaikat et al., 2011) also found a relationship between gender and job satisfaction, as 75% of the men and 67% of the women had job satisfaction and the difference between them was significant. In Embrey's study (1991), men had a higher job satisfaction than women based on the MSQ-20 (Embrey, 1991). (Lee et al., 2017) attributed this difference to the differences in values, goals and expectations of people from their workplace. (Altuntaş, 2014) attributed women's less job satisfaction

to their many family roles, especially their motherhood, because, despite their great work responsibilities, women cannot afford to ignore their role as mothers. Nevertheless, (Jackson, 2016) reported a higher job satisfaction in women and married people.

Work and teaching experience: (Dwaikat et al., 2011) and (Fain, 1985) reported different levels of job satisfaction based on the number of years of teaching at the university. In a study by (Suozzo, 2015) on 774 nurse educators in the USA, job satisfaction scores were fairly the same in all the different levels of work experience. A study by (Chin et al., 2012) on 73 nurse educators in Malaysia showed that nurse educators with less than three years of experience as a registered nurse had lower job satisfaction than those with more experience. One possible explanation is that these individuals may face unfavorable conditions in their classroom due to their less clinical experience. Clinical experience increases professors' confidence in their theory and practice being compatible and can lead to a successful teaching experience in the classroom and thus exerts a positive effect on job satisfaction.

Employment status: In a study on 304 nurse anesthesia faculty members, (Embrey, 1991) found no relationship between employment status and job satisfaction, but the study by (Moody, 1996) on 258 nurse educators in the USA did find a relationship between the length of the annual work contract and job satisfaction. Until they are assured of their job prospects, employment status and future benefits, such as insurance and retirement, the employees of an organization will be constantly anxious, and this anxiety deteriorates their performance and productivity and directly affects their job satisfaction.

Personal attributes: A study by (Hood, 1997) tested and explained the Intrapersonal Resources Productivity Satisfaction Model (IRPSM) in the context of the relationship between hardiness, sense of coherence, perceived stress and job satisfaction and used the Neuman Systems Model to provide a conceptual framework for the study. The results showed that hardiness and sense of coherence predicted 19% of the variance in job satisfaction. After hardiness and sense of coherence were eliminated from the regression analysis, perceived stress was revealed as a job satisfaction reducing factor. Perceived stress and scholarly productivity predicted 12.7% of the variance in job satisfaction. The findings of the study support the buffering effects of hardiness and sense of coherence, which are consistent with Neuman's conceptualization of the lines of resistance and the lines of defense.

Managerial factors

In a study on 116 full-time nursing faculty members about the effects of management on job satisfaction, (Afam, 2012) argued that job satisfaction is higher in schools where the authorities encourage autonomy in their faculty members. In a study on job satisfaction and nurse educators' understanding of leadership style in Taiwan, (Chen et al., 2005) reported a higher job satisfaction in faculty members guided by a transactional rather than transformational leadership style. (Derby-Davis, 2014) investigated the effect of motivational and hygiene factors in Herzberg's theory on job satisfaction and turnover intention in 134 nurse educators in Florida and emphasized the role of managers in supporting a motivational job culture in health education organizations and argued that managers' disregard for the employees' job satisfaction reduces the sense of responsibility in the faculty members and ultimately leads to turnover intentions.

Organizational factors

Organization's characteristics: (Moody, 1996) found no relationship between job satisfaction and variables including the school's student population and its number of full-time faculty members. The results also showed that the faculty members of public institutions have a generally higher satisfaction compared to those working at private institutions. The faculty members of nursing education institutions that receive tuition fees and have a larger student population had a higher job satisfaction.

(Awrey, 1990) examined the types of organizational models currently in place in schools of nursing in academic health centers and explored their relationship with productivity and job satisfaction and showed that faculty members in unification sites were more dynamic and had higher job satisfaction than those in collaborative and separatist sites.

Interactions: (Beyer, 1981) investigated the relationships between 224 full-time nurse educators and their colleagues in Texas and found that the interactions between nurse educators are unfavorable and contribute to job dissatisfaction. (Sarmiento et al., 2004) examined a theoretical model specifying relationships among structural empowerment, burnout and work satisfaction among 89 nurse educators in Canada and argued that the teamwork established among nurse educators has a major role in their job satisfaction. (Beyer, 1981) proposed that the active involvement of educators in the decisions made by the managers has an effective role in improving the interaction among professors and strengthening team activities.

Psychological empowerment: Psychological empowerment is an important factor involved in improving job satisfaction and there is a positive relationship between psychological empowerment and job satisfaction. To improve job satisfaction in organizations, managers should seek to understand the pathology of employees' behaviors and plan psychological empowerment programs through preventive behaviors such as the ongoing survey of employees (Baker et al., 2011; Davies et al., 2006).

Students' characteristics and academic level: In a study by (Moody, 1996), the students' academic level affected their job satisfaction, and teaching nursing at the Ph.D. level generated a higher job satisfaction. (Walker, 2014) investigated the effect of classroom violence on job satisfaction, workload and retention in nursing faculty members and found that 51.3% of the educators considered classroom violence a reason for dissatisfaction and ultimately turnover. (Leech, 2017) described the behavior and reaction of the male instructors against the violence projected by nursing students as different from those of the female educators. Unlike female instructors, male instructors build a more friendly and informal relationship with violent students in order to prevent the male nursing students from leaving this professional. Male instructors do not react emotionally to the violent behaviors of male nursing students. In this study, the violence projected by nursing students did not affect the job satisfaction expressed by the professors or their turnover likelihood. The researcher recommended further investigation of the violent behavior projected by nursing students at the beginning of the program or before the beginning of classes and proposed the use of rational methods for anger prevention and behavioral control, such as listening to the students, paying attention to and respecting them and reminding them of professional ethics.

Academic factors

Promotion opportunities: (Davies et al., 2006) used Kanter's Structural Theory of Organizational Behavior to examine the relationships between clinical educators' perceptions of empowerment, job tension and job satisfaction. They found that job satisfaction has a strong positive relationship with support, access to information and resources and promotion opportunities. (Ampadu, 2015) examined the effect of the Ph.D. degree on job satisfaction in Boston and argued that encouraging students to study for a nursing Ph.D. improves their job satisfaction.

Publications and research: Research is the top academic priority in many progressive universities in the United States. In some universities, research is considered a capital and resource. The diversity of research topics and competition among higher education institutions is a strategy for generating knowledge and improving the academic ranking of universities; in general, higher education institutions base their rewards, promotions and scholarships on the candidate's number of publications. These conditions increase the workload of faculty members, and occasionally, their research role makes them fail at their primary role of teaching. The workload imposed on educators, from the time of research proposal approval to the publication of the article, has negative effects on their job satisfaction (Sussman, 2012). (Meservey, 1987) showed that faculty members with a Ph.D. who have published more papers are more active in research and have a greater job satisfaction.

Educational qualifications: (Altuntaş, 2014) reported a lower job satisfaction in research assistants, assistant professors and instructors with less than ten years of work experience and instructors working on their Ph.D. theses or doing contract work. (Dwaikat et al., 2011) and (Fain, 1985), however, reported a positive relationship between job satisfaction and academic level and ranking in educators who were not studying. In Ampadu's study (2015), faculty members at the Ph.D. level had a higher job satisfaction, a greater rate of retention as faculty members and a greater willingness to work in academic settings (Ampadu, 2015). Nonetheless, in Jackson's study (2016), job satisfaction was higher in instructors with a master's degree (Jackson, 2016).

Professional factors

Work-related factors: In the study by (Embrey, 1991), the number of beds in teaching hospitals and the number of work hours per week had no effects on job satisfaction in faculty members. (Dwaikat et al., 2011) found a positive relationship between job satisfaction and variables including work conditions, having executive responsibilities, holding a managerial position, wages and salary, retirement system and job performance. In the study by (Puglisi, 2010), people with a high level of job satisfaction were ones who benefited from a variety of job opportunities in their work.

Role conflict and role ambiguity: In Fain's study (1985), job satisfaction was negatively correlated with role conflict and role ambiguity; however, only role ambiguity showed a significant relationship with all the dimensions of job satisfaction. Fain argued that although moderate work diversity positively affects job satisfaction, greater diversity causes ambiguity and stress; moreover, low diversity leads to monotony and fatigue and ultimately to job dissatisfaction. Other tasks may interfere with the teaching duties. Plus, mere teaching may become boring, and balance and dynamism in duties appear to be important. This dynamism is achieved by

appropriately combining education and research and engaging the students in research affairs to an appropriate degree (Fain, 1985)

Mentoring: In mentoring, an experienced person (the mentor) supports a less experienced person (the mentee). This dynamic process affects job satisfaction (Chatmon, 2016; Suzan, 2016). In the study by (Bohlender, 2014), 93.5% of people with mentoring experience had high levels of job satisfaction and wished to remain in their position, and 6.5% reported an unwillingness to stay in their current position in the next year; 77.4% wished to stay in their current position for the next five years, and 22.6% had no desire to stay for another five years.

The nature of the work: (Suozzo, 2015) argued that, irrespective of the number of work years and work experience, working in excess of 60 hours per week (even only one time) as a faculty member reduces the mean job satisfaction.

Economic factors

Wages and salary: In studies conducted by (Moody, 1996) and (Tang & Ghani, 2012), university professors with a high level of job satisfaction had a higher pay and salary and had taken advantage of more promotion opportunities in their work. (Plawecki & Plawecki, 1976) and (Marriner & Craigie, 1977) proposed geographical location and salary as the factors affecting job satisfaction, choice and turnover. In a study conducted by (Lane et al., 2010), faculty members with a low job satisfaction believed that the pay for their work was not commensurate with their qualifications and work experience or was not comparable to what others received. According to Herzberg's theory, salary and benefits are external factors affecting job satisfaction. This index alone does not lead to job satisfaction and merely prevents dissatisfaction; however, although payment alone may not be a strong factor involved in job satisfaction, equity in payment is highly important. If wages are not fairly standardized according to a job classification plan, the payment policy can turn into a constant cause of dissatisfaction (Lane et al., 2010; Tang & Ghani, 2012).

Discussion

Job satisfaction is an attitudinal issue that expresses the employees' feelings and attitudes toward their work life, and job dissatisfaction reflects the problems of the occupational or personal status of the employees. The present review study showed that most previous studies have not specifically referred to the percentage of nurse educators' job satisfaction or dissatisfaction and have only presented the statistical results of the research. Multiple indices and varying degrees of satisfaction in each of them is the main reason for not providing a detailed report of satisfaction or dissatisfaction. Most studies on job satisfaction have reported a relatively to highly favorable rate.

The factors that affect the job satisfaction of nurse educators are a little clearer. Studies have reported the rates of satisfaction or dissatisfaction more clearly divided by the contributing factors. The factors that have been mainly evaluated in studies have been based on the factors relating to a particular theory and, in some cases, a combination of these factors and the researcher's intended factors. In some cases, the researcher has

defined and evaluated new factors. In some studies, demographic variables have been studied alone or along with other job satisfaction factors.

Based on the findings of this study, the relationship between salary and job satisfaction or dissatisfaction is of great importance. In Herzberg's theory, which has been used extensively in these studies, salary and benefits are considered external (hygiene) factors that affect job satisfaction –that is, they are factors that merely prevent dissatisfaction. (Bittner et al., 2012), (Harty, 2008) and (Puglisi, 2010), however, found the most important factor for dissatisfaction to be salaries and payments, which is consistent with Herzberg's theory. The results obtained by (Puglisi, 2010) showed that salaries and payment are a source of dissatisfaction in 60.8% of nurse educators.)**Chung, 2011; Johnston, 1988; Meservey, 1987; Moody, 1996; Staurovsky, 1992; Tang & Ghani, 2012**(also noted the direct relationship between job satisfaction and salary and payment. **(Westphal et al., 2016)** showed that while nurse educators had a high job satisfaction, they were not very satisfied with their salary. In the study by **(Jackson, 2016)**, the least satisfaction pertained to salary. Salary was one of the most important factors contributing to job satisfaction in the study by **(Cowen, 1991)**. In studies by (Beach, 1997) and (Sullivan, 2001), nurse educators' perceived satisfaction or dissatisfaction with their salary and payment was neutral. (Grandjean et al., 1976) reported that salary and payment were less important for the respondents.

It appears that the higher importance of the hygiene (external) factors compared to the motivational (internal) factors in nurse educators' job satisfaction is not consistent with Herzberg's theory, because hygiene factors do not act to create satisfaction, but only to prevent dissatisfaction. In the present review study, internal (motivational) factors such as promotion indices played an important role in the satisfaction of nurse educators according to this theory **(Altuntaş, 2014; Johnston, 1988)**; meanwhile, (Harty, 2008) found that promotion indices are a cause of dissatisfaction.

Although, in some studies, the conditions for promotion and progress have moderately influenced job satisfaction, studies show that, after salary and payment, this factor is one of the most important ones affecting job dissatisfaction in nurse educators. It appears that when promotion is the cause of dissatisfaction, the possibility of getting promoted, good career prospects and the feasibility of a long-term plan for accomplishing goals decline (Harty, 2008). Another issue involved in the promotion of faculty members is their access to research opportunities and sabbatical leaves, which are crucial to their job satisfaction **(Ampadu, 2015; Davies et al., 2006)**.

According to the results of the present study, satisfaction with organizational and managerial factors was at a moderate level. Organizational support, communication in the workplace, participatory activities, teamwork, organizational culture and leadership styles were indices that were rated as moderate. According to **(Clark et al., 2016)**, organizational and managerial factors contribute to a healthy work environment. Fostering a healthy work environment increases job satisfaction and reflects a high level of employee participation and productivity, which are essential for all organizations. An academic work environment that is consistent with the perspectives, missions, values and strategic plan of the organization reflects the organization's commitment to

creating a healthy work environment that contributes to the faculty members' job satisfaction. Such healthy work environment ensures that nurses are trained in a healthy atmosphere.

Age, gender and marital status have often been studied as the underlying variables of job satisfaction. Some studies have found the relationship of job satisfaction with age, gender and marital status significant and others have discarded any such relationship. In some of these studies, the lack of a significant relationship between job satisfaction and age, gender and marital status is merely a statistical finding that should be further examined. For instance, in the study by (Jackson, 2016), people at the two ends of the young-elderly continuum, i.e. those with no experience or with a lot of experience, had a greater job satisfaction. (Lee et al., 2017) reported no such relationship and (Dwaikat et al., 2011) reported an inverse relationship between job satisfaction and age. According to (Jackson, 2016) and (Valsaraj, 2013), married faculty members had a greater job satisfaction; however, most studies have reported no relationships between marital status and job satisfaction.

(Altuntaş, 2014; Ampadu, 2015; Dwaikat et al., 2011; Fain, 1985) proposed higher levels of education as a factor contributing to job satisfaction. (Jackson, 2016), however, reported a higher job satisfaction in educators with a master's degree. (Altuntaş, 2014; Dwaikat et al., 2011; Embrey, 1991; Lee et al., 2017) reported higher job satisfaction in men compared to women, while (Jackson, 2016) reported the contrary.

Another factor affecting job satisfaction in nurse educators is the students' characteristics and their relationship with them. Although some of the university professors, especially the female professors, reported violence among nursing students, which is most often observed in the male students, as a factor causing job dissatisfaction (Walker, 2014), (Leech, 2017) reported that male nursing students' violence had no effect on job satisfaction in the male professors and attributed this finding to the more logical and less emotional behavior of male professors. Several factors, such as the school policies, professors' rules, the staff's politics and the irrational behavior of some of the students, can lead to nursing student incivility. Incivility in nursing students is a complex issue that has recently been aggravated by the presence of male students in the nursing profession. If no action is taken to prevent this behavior, it can cause unfavorable work conditions for nursing faculty members, especially female professors. Moreover, it can create poor work conditions in the clinic, which weaken patient care and increase health care costs. With the arrival of male students to the nursing profession, it may be helpful to use the male professors or counselors to communicate with these students and prevent incivility. Spending more time to understand the male students might be helpful as well. More studies are required on students' violence and academic level and their effect on job satisfaction in professors.

According to **(Barrett, Goldenberg, & Faux, 1992)**, nurse educators find their relationship with the students as the most enjoyable aspect of their work, but a large and irrational workload leaves them no time for engaging in this relationship. This issue is very important, because spending time with the students helps put various aspects of the role of nursing into practice and this opportunity has a positive effect on the

students' learning and leads to a greater sense of empowerment and job satisfaction among professors.

According to Herzberg, factors that lead to job satisfaction are different from those leading to job dissatisfaction. This theory is concerned with both hygiene or external factors and motivational or internal factors. According to **(Woodworth, 2016)**, there is a significant relationship between hygiene factors and job satisfaction. **(Marriner & Craigie, 1977)** showed that, from the perspective of nurse educators, internal factors (responsibility, achievement, autonomy and academic freedom) are more important than external factors (faculty club, lounge and dining room) for job satisfaction. **(Plawecki & Plawecki, 1976)** identified internal factors more important than external factors for job satisfaction. **(Derby-Davis, 2014; Woodworth, 2016)**, however, argued that internal and external factors are equally important for job satisfaction. According to studies, job satisfaction can be increased through both motivational (internal) and hygiene (external) factors. Although these factors can separately cause job satisfaction or prevent job dissatisfaction, increasing job satisfaction in nurse educators is tied to the improvement of their economic status and salary; facilitating their participation in decision-making is another factors with a similar degree of effectiveness in job satisfaction as salary and payment and it reflects the attention of nurse educators to participatory management and to human relationships in management. Providing welfare facilities with the goal of scientific advancement, improving work conditions, establishing justice and selecting managers based on meritocracy and paying attention to the scientific quality of nursing schools are other factors that help increase job satisfaction in nursing faculty members.

A remarkable point that has been addressed in a significant number of studies is the relationship between job satisfaction and retention. **(Gutierrez et al., 2012)** considered the turnover and lack of job satisfaction in nursing faculty members as the reasons for the shortage of faculty members, which can lead to the inability of nursing schools to educate enough nursing graduates. In general, paying attention to the improvement of the quality of education, the promotion of research, the role of faculty members and their responsibilities in the training of future nurses is of great importance. It is therefore crucial for the managers and policymakers to address the needs of faculty members and their issues. The consequences of job dissatisfaction reduce the quality of the higher education system and lead to depression in the faculty members. One of the main goals of many of the reviewed studies has thus been to identify the factors affecting job satisfaction in faculty members in order to improve the quality of work and prevent turnover.

Conclusion

(Gui et al., 2009) conducted a study with a global perspective in the United States, Canada, United Kingdom, mainland China, Taiwan and Turkey and reviewed job satisfaction in nursing faculty members. According to their results, the components of job satisfaction were similar in this group, despite their cultural differences (colleagues,

the work itself, the work conditions, work hours, remuneration and promotion, professional development, monitoring and supervision).

In a meta-analysis by **(Gormley, 2003)**, the factors affecting job satisfaction included professional independence, conflict of roles, role ambiguity, leadership expectations, organizational atmosphere, leadership behaviors and organization characteristics. **(Emory et al., 2017)** introduced six occupational factors (individual family policies, colleagues, occupation process clarity and transparency, organizational leadership style, faculty participation in organization's policy-making and interaction between different parts of the department) as factors with a positive effect on job satisfaction and intention to stay.

The articles reviewed in this analysis investigated the relationship between job satisfaction and its contributing factors rather than providing an accurate report of the degree of job satisfaction. A number of the articles had reported relatively to highly favorable levels of job satisfaction. The factors affecting the nurse educators' job satisfaction were categorized into six levels, including personal, organizational, managerial, academic, professional and economic levels. Managers can play an important role in promoting job satisfaction in nurse educators if they have adequate knowledge of the discussed factors.

Recommendations

To improve job satisfaction in nurse educators, managers and authorities are recommended to use preventive behaviors such as continuous surveys with nurse educators and organizing meetings with them, so as to determine their behavioral pathology.

School directors and presidents should issue annual orders for conducting studies on this subject and thus continuously monitor their educators' job satisfaction.

A health certificate should be issued for nurse educators in nursing schools.

The establishment of a Continuing Education Office to facilitate nurse educators' attendance of scientific courses and acquaintance with new global scientific achievements is also recommended.

More attention should be paid to the need for teamwork in nursing schools so as to improve communication, divide the burden of research, and at the same time, remove its contradiction with student education through increased communication with the students and incorporating research into education.

One of the specific recommendations of this article for future studies is the development of new indices of job satisfaction for nurse educators and the design of standard tools as well as the use of other research methods in order to achieve more accurate results.

It is necessary to analyze the results of studies on job satisfaction in nurse educators from different cultural, social, economic and political perspectives at any point in time, because job dissatisfaction may sometimes be due to hasty and non-scientific decisions in the academic setting.

Limitations and strengths

The search for articles was carried out several times with different keywords. A librarian and information scientist assisted in finding the MeSh keywords and terms. It is worth noting that the search for gray literature was limited to Persian, while all the articles included in the systematic review after quality assessment based on Gifford's (2007) criteria and the PRISMA checklist (Moher et al., 2009) were in English. The quality assessment of systematic review reports and meta-analyses with the PRISMA checklist is conducted using different scoring methods and there are still no definitive scoring systems for such reports. In the present study, the abstract and text of the articles were separately assessed to comply with Moher's instructions.

Ethical approval

No ethical approval was required for this study and the full text of the articles used had been purchased by the National Ministry of Health and was available to the researchers through Semnan University of Medical Sciences.

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Highlights

There is a positive correlation between job satisfaction and promotion opportunities.

Professors with a high level of job satisfaction had a higher pay and salary.

Job satisfaction was negatively correlated with role conflict and role ambiguity.

Job satisfaction is positively correlated with psychological empowerment.

Job satisfaction depending on the number of years of teaching at the university.

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