

# Effects of Job Satisfaction and Organizational Commitment on Nurse Retention: A Systematic Review

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## Abstract

**Introduction:** Nurse turnover is a problem linked to low job satisfaction and organizational commitment; therefore, appropriate nurse retention strategy from nursing managers and human resource is needed. This study aims to explain the effects of job satisfaction and organizational commitment on nurse retention.

**Methods:** This systematic review uses registration protocol from The Joanna Briggs Institute Guideline as a guide in the quality assessment of the summarized studies. Studies using the PICOS Framework were sourced from the following databases: Scopus, ScienceDirect, PubMed, EBSCOhost, JSTOR, SAGE, and ProQuest, published between 2010-2020, the study design was limited to cross-sectional, quasi-experiment, and randomized control trials. The feasibility study assessment used the Joanna Briggs Institute Critical Appraisal; the search keywords were adjusted according to the Medical Subject Headings and Boolean operators. The selection results are displayed in the PRISMA flow chart.

**Results:** The initial search of the entire database found 8059 articles, then several duplication screenings of titles 30 articles were extracted. A feasibility assessment was carried out so that the remaining 25 articles were divided into two themes, namely job satisfaction and organizational commitment, each of which can affect nurse retention. According to this study, organizational commitment has a broader dimension of job satisfaction.

**Conclusion:** Job satisfaction and organizational commitment have an influence on nurse retention; both are of concern for nurse managers to create effective nurse retention strategy.

## Keywords

job satisfaction; nurse retention; organizational commitment

## INTRODUCTION

Nurse retention is a global challenge that can affect health and economic policies, especially in managing the needs of health workers, particularly nurses (Palmer, 2014). Hospital failure in retaining nurses will cause

nurse turnover (Duffield & Roche, 2011). The prevalence of nurse turnover around the world is between 15% to 44% (Duffield, Roche, Homer, Buchan, & Dimitrelis, 2014). The turnover rate in developed countries varies widely, such as nurses in Korea over the past 10 years, showing an average turnover of around 15-20% (Sung, Seo, & Kim, 2012), nurse

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turnover in Australia is around 15.1%, whereas in New Zealand it is around 44.3% (North et al., 2013), and in the United States alone it was 17.2% (NSI Nursing Solutions, 2019), and Canada 19.9% (O'Brien-Pallas, Murphy, Shamian, Li, & Hayes, 2010). Worldwide, the average nurse turnover is around 15% to 36% per year (Stone et al., 2007). The high prevalence of nurses turnover causes hospital financial losses; from one nurse who resigns, the costs incurred are on average about half the nurse's own salary for a year (North et al., 2013). There are many losses caused by nurse turnover that require human resources to carry out nurse retention strategies (Twigg & McCullough, 2014). Job satisfaction is a key factor in the intention to leave nursing (Cowin, 2002). Job satisfaction should be measured periodically to anticipate nurse turnover (Cowin, Johnson, Craven, & Marsh, 2008). Not only job satisfaction, but also organizational commitment is a predictor for nurses' intention to stay in their current job (Liou, 2008). Preventing nurse turnover can be done by increasing organizational commitment (Ahn, Lee, Kim, & Jeong, 2015). There are various studies that explain strategies that hospitals can use to retain nurses, especially those that focus on job satisfaction and organizational commitment (Ingersoll, Olsan, Drew-Cates, DeVinney, & Davies, 2002; Nei, Snyder, & Litwiller, 2015). Various studies suggest that

job satisfaction and organizational commitment have a relationship that can be a predictor for nurse retention (Lu, Barriball, Zhang, & While, 2012; Wagner, 2007). However, from various earlier studies the relationship between job satisfaction and organizational commitment with nurse retention is still a matter of debate, because the relationship between the variables cannot be summarized into an article. Based on this problem, it is necessary to know how the influence of job satisfaction and organizational commitment on nurse retention is reviewed from various appropriate articles.

## MATERIALS AND METHODS

Literature search was conducted during May to June 2020, based on Scopus, ScienceDirect, PubMed, EBSCOhost, JSTOR, SAGE, and ProQuest databases for previous studies published between 2010 - 2020. Determination of keywords was based on Medical Subject Heading (MeSH) using Boolean operator and phrase searching for 'Job Satisfaction' OR 'Work Satisfaction' OR 'Satisfaction' AND 'Organizational Commitment' OR 'Job Commitment' OR 'Commitment' AND 'Nurse Retention' OR 'Nurse Turnover' OR 'Intention To Stay' OR 'Intention to Leave'. Then all articles were selected by using the PICOS framework

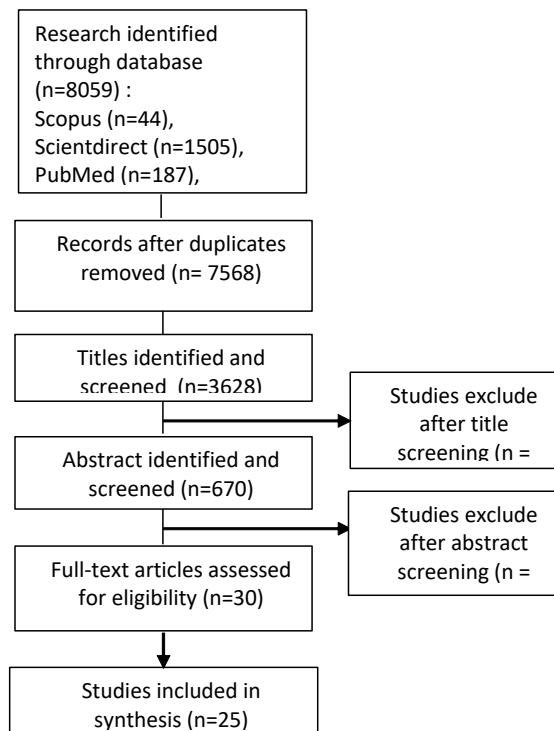


Figure 1. Flow Diagram of search studies with PRISMA

Table 1. Study Assessment Results for Systematic Review using the JBI critical appraisal tools

| Authors   | Questions of JBI Critical Appraisal |   |   |   |   |   |   |   |   |    |    | Result |
|---|-------------------------------------|---|---|---|---|---|---|---|---|----|----|--------|
|   | 1                                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |        |
| (Kim & Hwang, 2011)*                                      | √                                   | √ | √ | √ | X | X | √ | √ |   |    |    | 75%    |
| (Kim & Yoon, 2018)**                                      | √                                   | X | √ | √ | √ | √ | √ | √ | √ |    |    | 88.88% |
| (Ahmad & Oranye, 2010)*                                   | √                                   | √ | √ | √ | √ | √ | √ | √ |   |    |    | 100%   |
| (Ahn et al., 2015)*                                       | √                                   | √ | √ | √ | √ | √ | √ | √ |   |    |    | 100%   |
| (Rai, 2012)*  | √                                   | √ | √ | √ | √ | √ | √ | √ |   |    |    | 100%   |
| (Veličković et al., 2014)*                                | √                                   | √ | √ | √ | √ | √ | √ | √ |   |    |    | 100%   |
| (Yurumezoglu & Kocaman, 2012)**                           | √                                   | √ | √ | X | √ | √ | X | √ | √ |    |    | 77.78% |
| (Park & Ahn, 2015)*                                       | X                                   | √ | √ | √ | X | X | √ | √ |   |    |    | 62.5%  |
| (Hashish, 2015)*  | X                                   | √ | √ | √ | X | X | √ | √ |   |    |    | 62.5%  |
| (De Gieter, Hofmans, & Pepermans, 2011)*                  | X                                   | √ | √ | √ | X | X | √ | √ |   |    |    | 62.5%  |
| (Cowden & Cummings, 2015)*                                | √                                   | √ | √ | √ | √ | √ | √ | √ |   |    |    | 100%   |
| (Oh & Chung, 2011)*                                       | X                                   | √ | √ | √ | √ | X | √ | √ |   |    |    | 75%    |
| (Galletta, Portoghese, Carta, D'Aloja, & Campagna, 2016)* | X                                   | √ | √ | √ | X | X | √ | √ |   |    |    | 62.5%  |
| (Choi, 2014)**  | √                                   | √ | √ | √ | X | √ | √ | √ | √ |    |    | 88.89% |
| (Gregory, 2011)*  | √                                   | √ | √ | √ | √ | √ | √ | √ |   |    |    | 100%   |
| (Osuji, Uzoka, Aladi, & El-Hussein, 2014)*                | X                                   | √ | √ | √ | X | X | √ | √ |   |    |    | 62.5%  |
| (Chang et al., 2015)*                                     | √                                   | √ | √ | √ | √ | X | √ | √ |   |    |    | 87.5%  |
| (Huang, You, & Tsai, 2012)*                               | √                                   | √ | √ | √ | √ | √ | √ | √ |   |    |    | 100%   |
| (Han & Sook, 2011)*                                       | X                                   | √ | √ | √ | X | X | √ | √ |   |    |    | 62.5%  |
| (Han, Han, An, & Lim, 2015)*                              | X                                   | √ | √ | √ | X | X | √ | √ |   |    |    | 62.5%  |
| (Weng et al., 2010)*                                      | √                                   | √ | √ | √ | √ | √ | √ | √ |   |    |    | 100%   |
| (Moneke & Umeh, 2013)*                                    | √                                   | √ | √ | √ | √ | X | √ | √ |   |    |    | 87.5%  |
| (Douglas & Alasmari, 2012)*                               | √                                   | √ | √ | √ | √ | √ | √ | √ |   |    |    | 100%   |
| (Al Sabei et al., 2020)*                                  | √                                   | √ | √ | √ | √ | X | √ | √ |   |    |    | 87.5%  |
| (Sasso et al., 2019)*                                     | X                                   | √ | √ | √ | √ | X | √ | √ |   |    |    | 75%    |

\*: Cross-sectional; \*\*: Quasi-experimental

Table 2. Source of Job Satisfaction and Organizational Commitment

| Source of Job Satisfaction   | Source of Job Organizational Commitment   |
|--|---|
| Individual factors (age, married, education, length of work, position (Ahmad & Oranye, 2010; Ahn et al., 2015) | Individual Characteristics (age, education) (Ahn et al., 2015; Osuji et al., 2014; Oh & Chung, 2011; Veličković et al., 2014) |
| Burnout (Al Sabei et al., 2020)  | Job Satisfaction (Han & Sook, 2011; Osuji et al., 2014; Rai, 2012)  |
| Work unit (Ahn et al., 2015)   | Work unit (Ahn et al., 2015; Rai, 2012)   |
| Salary (Douglas & Alasmari, 2012; Ahn et al., 2015)  | Salary (Ahn et al., 2015)   |
| Work nurse environment (Al Sabei et al., 2020 ; Hashish, 2015; Veličković et al., 2014)                        | Mentorship (Lee & Jung, 2013; Weng et al., 2010),   |
| Leadership/Supervisor (Moneke & Umeh, 2013; Osuji et al., 2014; Veličković et al., 2014)                       | Supervisor/ Characteristics manager (Osuji et al., 2014)  |
| Career promotion (Douglas & Alasmari, 2012)  | Career development (Osuji et al., 2014; Rai, 2012)  |
| Interaction ) (Douglas & Alasmari, 2012; Galletta et al., 2016)  | Interaction/ social support (Rai, 2012)   |
| Patient's condition (Veličković et al., 2014)  | Work environment (Kim & Hwang, 2011; Rai, 2012)   |
| Empowerment (Ahmad & Oranye, 2010)   | Workload (Rai, 2012; Veličković et al., 2014)   |
| Workload (Al Sabei et al., 2020; Osuji et al., 2014)   |   |

adjusted to the inclusion and exclusion criteria. PICOS framework namely: Population: Nurses working in hospitals; Intervention: Studies examining interventions for nurse retention based on job satisfaction and organizational commitment; Comparators: Comparative

intervention groups used are other interventions (without involving job satisfaction and organizational commitment) and groups that were only observed without intervention; Outcome: Explain the effects of job satisfaction and organizational commitment

Table 3. Source of Nurse Retention

| Nurse Retention Factors  | Source   |
|--|--|
| Manager Characteristics<br>- Supervisor support, leadership style  | (Cowden & Cummings, 2015; Gregory, 2011; Yurumezoglu & Kocaman, 2012)  |
| Organizational Characteristics<br>- Career development, number of employees, Salary, working hours arrangement | (Chang et al., 2015; Cowden & Cummings, 2015; Osuji et al., 2014; Weng et al., 2010)   |
| Job Characteristics<br>- Autonomy, working groups  | (Cowden & Cummings, 2015; Galletta et al., 2016)   |
| Nurse Characteristics<br>- Age, education, position, length of work  | (Ahn et al., 2015; Cowden & Cummings, 2015; Kim & Hwang, 2011)   |
| Job satisfaction   | (Al Sabei et al., 2020; Douglas & Alasmari, 2012; Gregory, 2011; Han & Sook, 2011; Sasso et al., 2019; Veličković et al., 2014; Weng et al., 2010)       |
| Organizational Commitment  | (Chang et al., 2015; Galletta et al., 2016; Gregory, 2011; Han & Sook, 2011; Han et al., 2015; Kim & Hwang, 2011; Osuji et al., 2014; Weng et al., 2010) |

on nurse retention, Study/Design: Cross-sectional, quasi-experiment, randomized control trials. The determination and compilation of the registration protocol used is based on the center for review and dissemination and the Joanna Briggs Institute Guideline and PRISMA Checklist. Critical appraisal to assess studies that meet the requirements was conducted by researchers, if the research score of at least 50% meets the critical appraisal criteria with a cut-off point agreed upon by the researcher, the study is included in the inclusion criteria (www.joannabriggs.org, 2017b, 2017a, 2017c). The process of selecting a study by reading the entire article and selecting an inappropriate article will be discarded and recorded in the selection strategy using a PRISMA flow chart.

## RESULTS

Based on the results of literature searches through publications in Scopus, ScienceDirect, PubMed, EBSCOhost, JSTOR, SAGE, and ProQuest databases, using keywords of MeSH, the researcher obtained 8059 articles. The search results obtained were then checked for duplication and found 491 similar articles so that they were excluded and 7568 were left. Furthermore, identification and screening of titles was carried out based on themes or inclusion and exclusion criteria resulting in 3940 articles being excluded, leaving a remaining 3628 articles. Then identification and screening was carried out on the abstract and it was found that 2958 did not match the inclusion criteria so that 670 articles remained.

Furthermore, when the full text was screened, it was found that 640 articles were not in accordance with the inclusion and exclusion criteria so that there were 30 articles left. Finally, a feasibility study was conducted using the Joanna Briggs Critical appraisal criteria, then the remaining 25 articles were carried out by a systematic review, as shown in Figure 1. The initial determination of the study design criteria included cross-sectional, quasi-experiment, and RCTs, but when 30 articles were assessed on the feasibility study using the JBI critical appraisal tools, none of the studies with RCTs design fulfilled this, because the value of the feasibility study was less than 50%, so that it could not be included in a systematic review; therefore, of the 25 articles that were conducted in a systematic review, there were no articles that had an RCT study design.

The study quality of each article which was determined as the source of systematic review was determined based on the quality analysis of The JBI Critical Appraisal Tools, so that 25 articles were obtained in accordance with the systematic review. Using study design criteria or type of research focused on original research as many as 22 articles were cross-sectional design and three articles use quasi-experimental design. When assessing the quality of studies using the JBI Critical Appraisal, articles that use RCTs study design had a score of no more than 50%; in addition, many articles did not meet the PICOS criteria, so that they could not be included in the systematic review. In accordance with the PICOS criteria conducted, the study design was focused on cross-sectional, quasi-

experimental, and RC's, so that other study designs were not included in this review. Even though the search was carried out using filtration and limitation, study design that did not include the PICOS criteria researchers still appeared. Therefore, the researcher excluded all articles not in accordance with the study design set by the researcher. Study quality assessment was conducted using the JBI Critical Appraisal tools which contained a checklist of several question points and each study design had a difference in the number of question points; in the cross-sectional study design it numbered eight checklist questions (www.joannabriggs.org, 2017a), Quasi-experimental numbered 9 checklist questions (www.joannabriggs.org, 2017b), while RCTs numbered 13 checklist questions (www.joannabriggs.org, 2017c). If the study assessment score was more than 50%, then the article was eligible to be included for this systematic review.

The number of respondents in the systematic review this time totaled 14616 nurses, the age of respondents in this study varied from age less than 23 years to over 41 years, with levels of education ranging from high school level, health schools, nursing academies, to undergraduate, and postgraduate studies. Work experience ranged from less than 17 months to more than 11 years. The highest gender in all studies was women, the respondent's place of work was public and private hospitals, and work units varied. Based on the results of the study search above, it can be grouped according to the specified theme, namely the effect of job satisfaction on nurse retention and organizational commitment on nurse retention.

This systematic review, job satisfaction and organizational commitment have the same factors, both of which can be influenced by individual characteristics such as age, marriage, education level, and length of work. Besides salary, environment, supervisor, career promotion, interaction, and work units are the same factors, but job satisfaction is one of the factors that can increase organizational commitment. Therefore, to improve organizational commitment it is necessary to increase job satisfaction (Han & Sook, 2011; Osuji et al., 2014; Rai, 2012).

Cowden and Cummings (2015) classify intention factors to stay needed in nurse retention strategies, into four characteristics; 1) Characteristics of managers, 2) Characteristics of organizations, 3) Characteristics of work, 4) Characteristics of individual nurses. All of these factors form a cognitive and affective response to work which ultimately influences the nurse's intention to stay. Other factors that can affect nurse retention are job satisfaction and organizational commitment, both of which are the main predictors of nurse turnover intention (De Gieter et al., 2011). The identification of factors that influence nurse retention is used as a consideration for carrying out nurse retention strategies. Nurses are retained if they do not have the intention to leave the job at this time (Cowden & Cummings, 2015).

## DISCUSSIONS

Identification of factors of job satisfaction in systematic review is a strategy to form job satisfaction to increase nurse retention, because there are many studies that explain the direct relationship between job satisfaction with nurse retention or intention to stay to reduce nurse turnover (Lu et al., 2012). Job satisfaction is a predictor of intention to leave nursing; the higher the job satisfaction of nurses, the lower the intention to leave (Yurumezoglu & Kocaman, 2012). Patient satisfaction and quality services are the result of the formation of nurse retention; to create nurse retention it is necessary to increase job satisfaction (Newman, Maylor, & Chansarkar, 2002). Job satisfaction also needs to be improved, especially in spaces with high nurse turnover potential such as critical care ward. So that there is no increase in intention to leave, it is necessary to increase job satisfaction (Jiang et al., 2017). One of the causes of nurse turnover is low nurse job satisfaction, triggering nurses to look for other work alternatives or moving workplaces to obtain satisfaction and comfort at work (Dotson, 2014; Efendi et al., 2018; Kovner, Brewer, Fatehi, & Jun, 2014; North et al., 2013; Osuji et al., 2014). Job satisfaction becomes a factor that can motivate performance thereby reducing absenteeism and turnover rates (Mosadeghrad & Ferdosi, 2013). Job satisfaction is the most

widely explained cause of nurse turnover in the literature (Nei et al., 2015). Based on various studies that have been carried out, one of the predictors that must be measured to find out the cause of nurse turnover is job satisfaction; therefore, in the implications of managing the resources of nurses, job satisfaction must be considered. Various strategies and reinforcement are needed to increase nurse job satisfaction in order to influence nurse intention or turnover (Ahmad & Oranye, 2010; Cicolini, Comparcini, & Simonetti, 2014; Oh & Chung, 2011). In contrast to job satisfaction, organizational commitment has more complex predictors because it contains three dimensions, each of which has a positive and negative relationship to nurse retention (Veličković et al., 2014). But, in general, organizational commitment is a predictor for one's enduring intentions at work today (Liou, 2008). Studies conducted by Chang et al. (2015) detail the effect of three dimensions of organizational commitment on nurse retention, namely continuance commitment has a positive effect on nurse retention, but affective commitment and normative commitment do not significantly influence nurse retention. From the research, the continuance commitment is found to be a major predictor of nurse retention. Meanwhile, according to Yuromezoglu and Kocaman (2012), affective and continuance commitment is not significant to nurse retention, but normative commitment has a significant effect on nurse retention. According to Kim and Hwang (2011), affective commitment has a great influence on nurse retention so that it becomes an indicator of one's intention to survive. Research conducted by Osuji et al. (2014) explains that organizational commitment is not significant to nurse turnover intentions; nurses will move to their new jobs if the opportunity arises regardless of their commitment to the current workplace, while study conducted by Ahn et al. (2015) shows that, to prevent nurse turnover, it is necessary to increase organizational commitment, because this is the main factor influencing nurse turnover. Strengthening affective commitment is needed to increase nurse retention (Kim & Hwang, 2011). Although there are differences in the results of studies of the effect of organizational

commitment and nurse retention, most show that organizational commitment influences nurse retention, and is a predictor for nurse turnover.

The difference in the effects of organizational commitment dimensions on nurse retention is strongly influenced by many things, because organizational commitment is more complex than job satisfaction. According to Mowday, Steers, and Porter (1979) organizational commitment includes the identification of employee stressors and their attachment to achieving organizational goals, while job satisfaction only focuses on what is obtained for what is done. The complexity of organizational commitment is also supported by the many factors that influence it, ranging from job characteristics, individual characteristics, and work experience (Steers, 1977), so that the effect also on nurse retention is quite different. Differences in personal characteristics cause different effects, so forming organizational commitment related to nurse retention must be seen from the other side, for example, nurses who work in critical areas in a high level of emergency and patient dependence triggers the workload, but if a nurse has an interest in emergencies then, the nurse will persist despite high workloads.

## CONCLUSION

Based on various literature summaries it shows that job satisfaction significantly influences nurse retention and organizational commitment also affects nurse retention. However, organizational commitment has a more complex dimension; therefore, is a stronger predictor than job satisfaction on nurse retention. Both need to be considered in determining the right strategy for nurse retention. The role of the nursing manager and human resource manager is very much needed; evidence-based skills and experience of the nursing manager are needed to determine the nurse's retention strategy.

Future studies should be more focused on measuring job satisfaction and organizational commitment with in-depth interviews, and conducting systematic reviews of various nurse retention strategies.

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## Conflict of Interest

All the authors have no conflict of interest related to the study.

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