

Professional Self-Concept Model on Working Productivity of Clinical Nurses

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Abstract

Introduction: The nurses' professional self-concept is concerned with how individuals perceive themselves as professionals and in nursing is about what nurses feel about themselves as nurses. The purpose of this study is to develop a professional self-concept model on the productivity of the nurse's work. **Methods:** An explanatory design with cross-sectional approach. Samples were 311 nurses in inpatient room with simple random sampling. Data analysis using Partial Least. Organizational aspects (0.4397). **Results:** Characteristics of the work (0.1978) and the organizational environment (0.5391) were affects the nurses' professional self-concept. The self-concept of professional nurses affects work productivity (0.4953). **Conclusion:** Organizational characteristics, work characteristics, and organizational environment have a relationship with professional self-concept of nurses. Furthermore, the self-concept of professional nurses has a relationship and can enhance nurse work productivity. Professional self-concept nurses form a professional identity in nurses who increase nurse productivity at work.

Keywords: Professional self-concept, Working productivity, Nurse, Organizational.

Introduction

Data from several hospitals in Indonesia regarding the efficiency of hospital quality services still do not meet the standards of the Health Ministry of Indonesia [1, 2]. The satisfaction of several hospitals in Indonesia, such as the Jambi Raden Mattaher Hospital was 72%, and Dr. M. Djamil Padang hospital was 79.28%.

In addition, Skaggs, Daniels, Hodge, and DeCamp research [3] at Boyolali Hidayah Hospital, getting the results of patients feeling less satisfied with the responsiveness of doctors and nurses and patients not feeling satisfied with the attitude of doctors and nurses in listening to patient complaints. The concept of productivity is defined as the relationship between output and input [4]. In addition, the Asia Productivity Organization

(APO) defines productivity as a combination of efficiency, which means doing something right and effectively [5]. Nurse productivity is influenced by education, training, the intensity of other physical and multifactor capital [6]. Factors that influence nurse productivity consist of organizational factors, work factors, and individual factors and organizational environment.

Nurse organizational environmental factors related to nurse working conditions, patient care, nurse-physician collaboration, and nurse management at the unit and hospital level are very influential on nurse performance with mediated nurses' work characteristics factors [7, 9].

In addition, an effective leadership style and work climate have a prominent role in providing quality nursing care [10, 11]. The research conducted by Mudallal et al.[12] shows working conditions in terms of type and type of hospital, competent hospital management, organizational environment, supervision level, and rotation shift as factors that significantly influence the quality of nursing care [12, 13].

Individual factors related to knowledge, skills, and abilities and psychological nurses have a positive correlation between nursing performance [12, 14]. Psychological nurses related to the professional self-concept of nurses reflect the emotions and opinions of workers about their performance and feelings towards themselves [15, 17] mention the problem of nurses in self-concept, namely the lack of nurse communication with the community and the absence of nurses in the media.

The negative self-concept of nurses is partly caused by nurses themselves [18, 19]. This is also in line with the research [20] mentioning the barriers of nurses in communicating, namely role conflict. Hospital authorities focus more on doctors as determinants in decision making and lead to limited or indirect nurse action affecting nurse autonomy capacity [21]. This can have an impact on stereotype in nurses [16, 22].

Nurses need to enhance the various roles and opportunities of basic and advanced nursing practices offered to provide more visibility to the part of nursing so that people can recognize the role of nurses [23, 24]. Clinical nurses have an essential position to improve the quality of nursing services with continuous changes in the nurse environment [25]. Research conducted by Cowin [26] revealed that professional status has a strong relationship with nurses' self-concept.

This is also supported by research conducted Randle [27] showing that organizational and cultural climates have a strong influence on professional self-concepts [17]. The purpose of this study was to do a nurse professional self-concept modeling research on the work productivity of nurse in the inpatient hospital.

Methods

Design

This study uses a quantitative approach with an explanatory research design survey to explore new things and find out the causal relationship between variables. It was followed by description research to develop knowledge of the research topic and explain the research findings. The time approach in this study used a cross-sectional approach.

Measurements

The populations in this study were nurses in the inpatient room of Dr. Soetomo Hospital, Sanglah Denpasar Hospital, Dr. Wahidin Sudirohusodo Makassar Hospital, and Dr. M. Djamil Padang Hospital. The samples in this study were 311 respondents through simple random sampling. Inclusion criteria were a nurse with work experience of at least one year. Independent variables were organizational characteristics, professional self-concepts, work characteristics, and organizational environment. The dependent variable was nurse work productivity.

Instruments

Organizational characteristics questionnaires are prepared based on Kopelman's theory [28]. Organizational characteristics questionnaire consists of the reward system, goal setting, and MBO, selection, training, and development, leadership and organizational structure. The value range is 18 - 60. The categories of organizational characteristics are divided into 3 (low, sufficient and good). Professional self-concept questionnaires adopt from Angel, Craven, and Denson [29].

Professional self-concept questionnaires consist of care, knowledge, staff relations, and leadership. The value ranges from 14 to 60. Professional self-concept categories are divided into 3 (low, sufficient and good). Work characteristics questionnaires are compiled based on Kopelman's theory [28].

Organizational characteristics questionnaire consists of physical performance, feedback, work design, and work schedule. Value range 23-115. Work characteristics categories are divided into 3 (low, sufficient and good). The environmental characteristics questionnaire of the organization was adopted from the PES-NWI questionnaire [30]. The questionnaire dimensions of organizational environmental characteristics consist of nurse participation in the hospital, nursing field for care quality, nurse manager's ability,

nurse leadership and support, staffing and resource skills, and nurse-doctor relations. The value range 31 - 155. The organizational environment category will be divided into 3 (low, sufficient, and good).

The nurse's productivity questionnaire adopted a questionnaire from WPAI-GA [31]. 6 statements represent the productivity of nurses at work. WPAI results are expressed as a percentage decrease in value, with higher numbers indicating more significant reductions and less productivity, i.e. worse outcomes

Administration and Research Procedure

The study was conducted in four hospitals, namely Dr. Soetomo Hospital, Sanglah Denpasar Hospital, Dr. Wahidin Sudirohusodo Makassar Hospital, and Dr. M. Djamil Padang Hospital. The study was conducted on November 2017 - August 2018. Before performing the data collection, this study was declared ethically feasible by the Health Research Ethics Commission (KEPK) of the Faculty of Nursing, Airlangga University (No. 648-KEPK), Dr. Soetomo (0194 / KEPK / IV / 2018), and the Medical Faculty of Udayana University (No. 376/UN/14.2/KEP2018). The process of data

collection is done by gathering all respondents (nurses) then giving explanations related to the research and providing research questionnaires. The researcher used two enumerators in the data collection at Dr. M. Djamil Padang Hospital and Dr. Wahidin Sudirohusodo Makassar Hospital.

Analysis

In this study, an analysis of each variable was conducted, namely, organizational characteristics variables, work characteristics, individual characteristics, organizational environment, professional self-concept, and nurse productivity. Inferential analysis uses Partial Least Square (PLS) with a significance level of $p\text{-value} = 0.05$ ($\alpha = 5\%$).

Result

Organizational characteristics, work characteristics, and organizational environment are not factoring that directly influence nurse work productivity variables. The results of the study show that there is a unidirectional relationship and it can be interpreted that the higher the professional self-concept of nurses, the higher the work productivity of nurses (Table 1).

Table 1: Nurse's professional self-concept towards the work productivity of the implementing nurse in the inpatient room based on the inner model

Relations between variables	Original Sample	Sample Mean	Std. Dev	T Statistics	Information
Organizational characteristics → Nurse's professional self-concept	0.4397	0.4425	0.0503	8.7348	Significant
Organizational characteristics → Work productivity	0.0391	0.0761	0.0545	0.7161	Not significant
Work characteristics → Nurse's professional self-concept	0.1978	0.2062	0.0703	2.8146	Significant
Work characteristics → Work Productivity	0.0207	0.0744	0.0534	0.3882	Not significant
Nurse's professional self-concept → Work Productivity	0.4953	0.4956	0.0533	9.2890	Significant
Organizational environment → Characteristics of the organization	0.6007	0.6034	0.0442	13.5906	Significant
Organizational environment → Work characteristics	0.6802	0.6794	0.0399	17.0127	Significant
Organizational environment → Nurse's professional self-concept	0.1404	0.1325	0.0688	2.0414	Significant
Organizational Environment → Work Productivity	0.0785	0.0958	0.0616	1.2741	Not significant
→: Path Coefficient = A positive sign on the Coefficient Path value indicates a unidirectional relationship, and it can be interpreted that the higher the nurse's professional self-concept, the higher the work productivity of the nurse. Significant value > 1.96					

The organizational environment for professional self-concepts was through organizational characteristics and work characteristics. The path coefficient of the organization's environment towards professional self-concept of nurses directly through organizational characteristics and work characteristics is 0.1404. While the

path coefficient between the organizational environment and the professional self-concept with through organizational aspects (organizational environment → organizational characteristics (0.2641) / work characteristics (0.1345) → professional self-concept of nurses). It can be interpreted that the fast way to improve the professional self-

concept of nurses is through an organizational environment mediated by organizational characteristics ($0.2641 > 0.1404$) and work characteristics ($0.1345 < 0.1404$). The total effect results were obtained from the organizational environment towards nurses' professional self-concepts through organizational

characteristics (0.045) and work characteristics (0.2749). So, it can be interpreted that the organizational environment can improve the professional self-concept of nurses through organizational characteristics by 40.5% and work characteristics by (27.5%) (Figure 1).

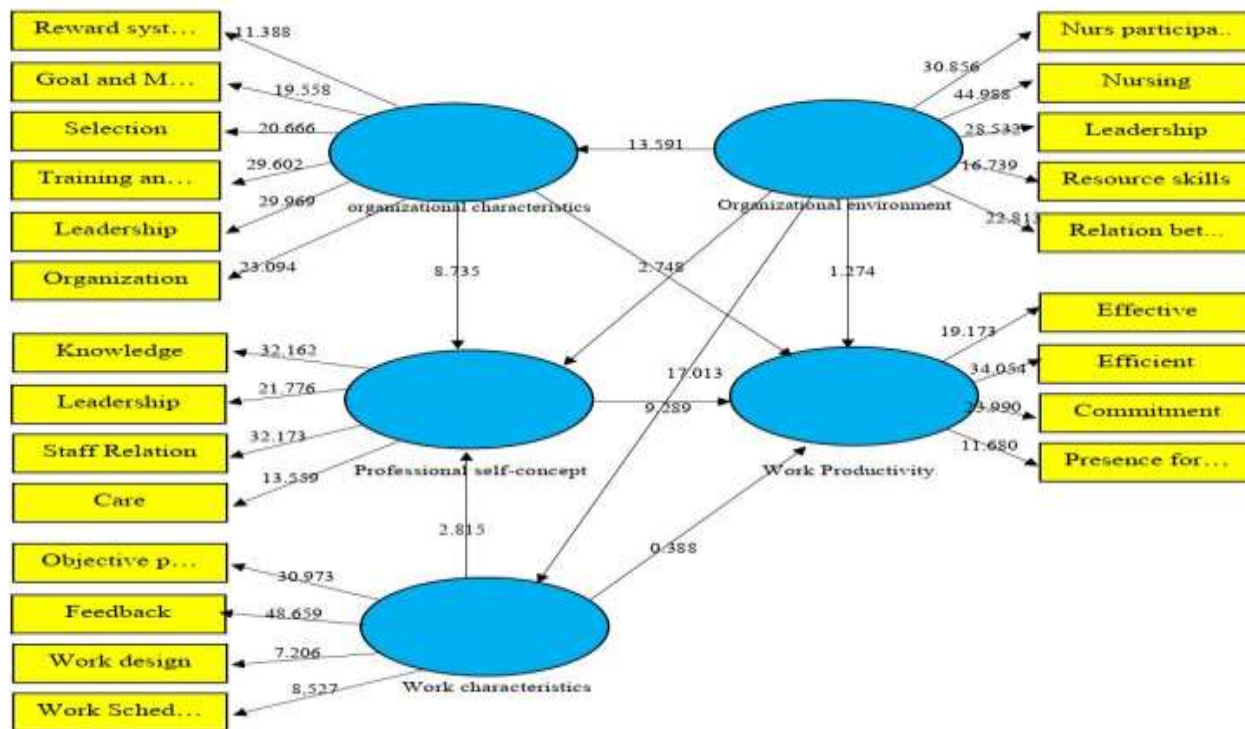


Figure.1: The PLS test results in the inner model stage on organizational characteristics variables were consisting of reward systems, goal setting and MBO, selection, training and development, organization structure, and professional. Professional self-concept variable nurses consisting of knowledge, leadership, staff relations, and care. Work characteristics variables that consist of objective performance, feedback, work design, and work schedule. Organizational environment variables which consist of nurse participation, nursing, leadership, resource skills, and the relationship between nurses and doctors. Work productivity variables consisting of effective, efficient, commitment and presence for patients

Organizational characteristics influence the professional self-concept of nurses with parameter coefficients of 0.4397 and $t = 8.7040 > 1.96$. Organizational characteristics influence work productivity with a parameter coefficient of 0.2568 and $t = 3.1442 > 1.96$. The self-concept of professional nurses' influences work productivity with a parameter coefficient of 0.4953 and a value of $t = 9.0782 > 1.96$. Work characteristics influence the professional self-concept of nurses with a parameter coefficient of 0.1978 and $t = 3.0289 > 1.96$. Work characteristics do not affect work productivity with a parameter coefficient of 0.1187 and $t = 1.282 < 1.96$. The

organizational environment influences the characteristics of the organization with a parameter coefficient of 0.6007 and a value of $t = 14.1260 > 1.96$. The organizational environment influences the professional self-concept of nurses with a parameter coefficient of 0.5391 and a value of $t = 11.6359 > 1.96$. The organizational environment changes the characteristics of the work with the parameter coefficient of 0.6802 and the value of $t = 18.0057 > 1.96$. The organizational environment has an effect on Work Productivity with a parameter coefficient value of 0.3831 and $t = 4.9333 > 1.96$ (Table 2).

Table 2" Nurse's professional self-concept towards the work productivity of the nursing nurses in the inpatient room is based on the t-test

Relations between variables	Original Sample	Sample Mean	Std. Dev	T Statistics	Information
Organizational characteristics → Nurse's	0.4397	0.4425	0.0503	8.7348	Significant

Relations between variables	Original Sample	Sample Mean	Std. Dev	T Statistics	Information
professional self-concept					
Organizational characteristics → Work productivity	0.2568	0.2629	0.0813	3.1599	Significant
Work characteristics → Nurse's professional self-concept	0.1978	0.2062	0.0705	2.8069	Significant
Work characteristics → Work Productivity	0.1187	0.1200	0.0983	1.2072	Not significant
Nurse's professional self-concept → Work Productivity	0.4953	0.4956	0.0533	9.2890	Significant
Organizational environment → Characteristics of the organization	0.6007	0.6034	0.0442	13.5906	Significant
Organizational environment → Work characteristics	0.6802	0.6794	0.0399	17.0127	Significant
Organizational environment → Nurse's professional self-concept	0.5391	0.5369	0.0479	11.2548	Significant
Organizational Environment → Work Productivity	0.3831	0.3844	0.0754	5.0813	Significant
→: Path Coefficient = A positive sign on the Coefficient Path value indicates a unidirectional relationship, and it can be interpreted that the higher the nurse's professional self-concept, the higher the work productivity of the nurse. Significant value > 1.96					

Discussion

Relationship between Organizational Characteristics and the Professional Self-concept of Implementing Nurses

Management practice in organizations consists of reward systems, goal settings, selection, training and development, leadership, and organization structure. Management practice affects individuals effectively and cognitively. This is in line with this study that these factors can shape organizational characteristics or in Kopelman's theory, referred to as organizational management practices. Organizational characteristics do not directly influence productivity but nurses' professional self-concept, professional self-concept of nurses, which then affects productivity [32]. Organizational characteristics provide a direct and indirect influence on productivity.

The relationship between setting up reward systems, goal setting, selection, training and development, leadership and organization structures influences the individual perceptions of nurses, which in turn affect nurses' professional self-concepts, which in turn affect nurse work productivity. Which in turn, affects organizational productivity. Factors of knowledge sharing culture, nursing management systems, innovative leadership styles, reward systems for

performance outcomes, and excellent organizational learning can improve nursing performance results, and that can also contribute to improving both productivity and competitiveness of health care organizations. Organizational learning is related to the hospital's vision and hospital organization structure, besides that, leadership and reward systems are factors that improve the performance of nurses. This is in line with the results of this study, the goal setting and MBO factors, reward system, leadership, and organizational structure are the forming factors of organizational characteristics that can influence the productivity of nurses [33].

Diverse individual characteristics allow forming different professional self-concepts. This is in line with the research conducted [34], finding the results of employees in the organization will see other people as role models in improving professional self-concepts. Employees will begin to see from the organizational structure to the closest person who can be a consideration in shaping his concept personally in line with the development of his career.

Relationship between Work Characteristics and Professional Self-concept of Implementing Nurses

The purpose of performance management is to regulate performance, find out how

effective and efficient an organizational performance is, help determine organizational decisions related to organizational performance, the performance of each part in the organization, and individual performance, improve organizational capabilities and encourage employees to work according to procedures, with enthusiasm and productive so that the work results are optimal [35, 36].

In the results of this study, work characteristics, variables do not have a direct influence on productivity. The results of the study by Francesca and Gilberto [37] prove that wage increases can harm average productivity and average work openings. Increased wages are more likely to harm average productivity in the labor market where skills are less important than work calls, as the work market recruits nurses with lower education. Increasing wages may not be the most appropriate policy measure to address the actual shortage of nurses in this case.

Conversely, in the markets that the skills are more important than calls. It was because the case of competent nurses, increasing wage rates can lead to an increase in average productivity, although the average level of work openings does not always rise. In this second case, increasing wage rates can help overcome nursing shortcomings [37, 38].

Tsai [39], in his research, obtained the results of the relationship between the hospital board, the practice of front-line manager management, and the quality of care provided. Hospitals with more effective management practices offer high-quality care. Second, higher-ranking hospital boards have a superior performance by hospital management staff. Hospitals with hospital boards that pay more considerable attention to clinical quality have better management to monitor the quality of production.

Likewise, hospitals with hospital boards that use clinical quality metrics are more productive, having higher hospital management staff performance in target and operating settings. These findings help increase understanding of the dynamics between the board, front line management, and the quality of care and can provide new targets for improving care delivery.

Relationship between Organizational Environment and the Professional Self-concept of Clinical Nurses

Some studies require nurse organizational environmental factors related to nurse working conditions, patient care, nurse-physician collaboration, and nurse management at the unit and hospital level are very influential on nurse performance with mediated nurse work characteristics factors [7-9].

In this study, sub-variable leadership becomes a forming variable on organizational characteristics variables, professional self-concepts, and organizational environment. This shows that the leadership style has a significant influence on all aspects. Spence Laschinger and Fida [40] found authentic leadership styles had a positive effect on structural empowerment, which had a positive impact on perceived support for professional practice and a negative impact on nurses' perceptions that inadequate unit staff prevented high-quality patient care.

This workplace condition predicts work satisfaction [41]. The relationship between nurse-doctor and nurse management at the unit level provides an increased sense of personal achievement. Supportive nursing management at the unit level has a strong positive direct impact on the quality of care assessed by nurses and work outcomes such as work satisfaction and willingness to move and associated with increasing fostering social capital [9].

This shows that the organizational environment plays an important role in shaping the concept of professional self-care. Clinically competent nurses, collaborative work relationships, autonomous nursing practices, adequate staffing, control over nursing practice, managerial support, and patient-centered culture can improve productivity and quality of nursing care [42, 43]. Nurses mention inhibiting factors, such as cost-effectiveness policies and transparency goals for external accountability.

Nurses feel pressured to increase productivity and report high administrative workloads. In this study, the organizational environment in addition to giving an influence on professional self-concepts also

provides an influence on organizational characteristics, work characteristics, and work productivity. This shows that the organizational environment has an indirect effect on nurse work productivity. The organizational environment influences the professional self-concept of nurses, which will then affect the nurse's work productivity.

Relationship between Nurses' Professional Self-concepts and Implementing nurSes' Work Productivity

Liquid factors and staff relations in the nurse's professional self-concept in this study, in line with the results of the Schmidt and McArthur [44] literature study reveal that professional nursing values are defined as important professional nursing principles of human dignity, integrity, altruism, and justice that function as a framework for standards, professional practice, and evaluation. Caring is often noted in the relevant literature review of nursing values. It can be said that altruism, integrity, justice, and human dignity are theoretically related to caring.

Collaboration and teamwork can be implicit in the important attributes of respect, integrity, and justice. The results of the study by Chenevert, Jourdain, and Vandenberghe [45] show that the professional self-image of postgraduate nurses mediates the relationship between the perception of high involvement work practice (HIWP) and the intention to leave the profession. However, the intention to leave the profession was not related to professional roles. In addition, the professional self-image of the nurse is not related to the intention to leave the organization.

HIWP consists of factors of reward, competence development, decentralization of authority and information exchange. In this study, it appears from the characteristics of the organization and the organizational environment that have a significant influence on the professional concept of self-care — the establishment of professional self-concept of nurses related to care, knowledge, staff relations, and leadership. Satisfaction with the profession, development of competencies, teamwork to the ability to lead is an expectation in obtaining a high professional self-concept [46].

A negative work environment and unsatisfactory relationships with superiors and collaboratives, which resulted in negative effects that provided a sense of social isolation to nurses [47]. Negative work environments such as perceived burdensome workloads, tasks that focus more on inadequate documents and fiscal policies and budgets for nurse's cause nurses to feel that they do not have professional autonomy. Relationships with superiors and collaboratives such as negative relationships between top or administrative nurses, inadequate staffing patterns, no involvement of nurses in decision making so nurses feel weak and helpless in dealing with the work environment.

Andrews [47] revealed comments from respondents indicating that the inability that is felt directly affects the results of the quality of patient care and safety, which can lead to reduced self-concept. In such circumstances, self-concept might have a far greater effect on nurse organizational commitment than overall satisfaction with the work environment [47, 48]. The balance between work and life has a positive effect on productivity. This shows that nurse productivity is equally related to nurse dignity and respect. Dignity and respect for work is an indication of a respectful environment.

The nurse's experience of respect is associated with cooperation, recognition, independence, support, and justice [49, 50]. Manager's performance is a key factor that facilitates or inhibits nurse productivity [51]. Characteristics of managers that influence nurse team productivity include directing nurses by example, using leadership skills appropriately, supporting teams, motivating teams by acknowledging and thanking personnel, having good relationship skills, and paying attention to staff problems [49, 50].

This is also in line with Borhani [52] in his research found that efforts to improve Quality Work Life (QWL) and its dimensions can increase the productivity of decent groups, and move forward in improving public health. High nurse work productivity is formed from a high professional self-concept. This is due to the psychological condition of good nurses, nurses feel comfort

and safety, support from superiors and work environment, nurses feel more valued, nurses also feel involved in organizational or hospital activities and decision making. Professional self-concepts support the performance and productivity of nurses who will improve service quality and ultimately improve patient satisfaction and hospital productivity.

Limitation of Study

In giving answers to questionnaires, some nurses have not dared to give real answers related to the results given, fearing an impact on their work. So, it is necessary to conduct in-depth interviews to provide the factors that most influence the professional self-concept of nurses.

Conclusion

Organizational characteristics, work characteristics, and organizational environment have a relationship with professional self-concept of nurses. Furthermore, the self-concept of professional nurses has a relationship and can enhance nurse work productivity. Professional self-concept nurses form a professional identity in nurses who increase nurse productivity at work. In this study, assessing the productivity aspects of nurse work from professional self-concept and organization, so that the development of nurse work productivity related to other psychological aspects needs further research.

Acknowledgement

We would like thank to all Director of Hospital that has been permitted the study and all respondents that were cooperative to support the study.

References

1. Kemenkes (2017) "Info DATIN: Situasi Tenaga Keperawatan," Jakarta.
2. M S Kim (2011) "Moderating Effects of Self-Esteem and Self-Efficacy in the Relationship between Professional Self-Concept and Satisfaction in their Major among Nursing Students," *J. Korean Acad Soc. Nurs. Edu.*, 17 (2): 9-15.
3. M K D Skaggs, J F Daniels, A J Hodge, V L DeCamp (2018) "Using the Evidence-Based Practice Service Nursing Bundle to Increase Patient Satisfaction," *J. Emerg. Nurs.*, 44 (1): 37-45. doi: 10.1016/j.jen.2017.10.011.
4. P Krugman (1997) *The Age of Diminished Expectations*. Cambridge, Massachusetts, Londong, England: The MIT Press.
5. P Roghanian, A Rasli, H Gheysari (2012) "Productivity Through Effectiveness and Efficiency in the Banking Industry," *Procedia - Soc. Behav. Sci.*, 40: 550-556. 2012, doi: <https://doi.org/10.1016/j.sbspro.2012.03.229>.
6. S Letvak, R Buck (2008) "Factors influencing work productivity and intent to stay in nursing," *Nurs Econ*, 26 (3): 159-165.
7. R Gershon, P W Stone, M Zeltser, K Macdavit, S S Chou, J Faucett (2007) "Organizational Climate and Nurse Health Outcomes in the United States: A Systematic Review," *Ind. Health*, 45 (3): 15-23.
8. Orthmann S J Colff, J Rothmann (2006) "Occupational stress of nurses in South Africa," *Curratationis*, 29(2): 12-17.
9. P Van Bogaert, O Timmermans, D Van Heusden, E Franck (2014) "Nurse work engagement impacts job outcome and nurse-assessed quality of care: model testing with nurse practice environment and nurse work characteristics as predictors," *Front Psychol*, 5 (1): 12-61.
10. J Houser (2003) "A model for evaluating the context of nursing care delivery," *Nurs Adm.*, 33(1): 39-47.
11. K Nelson *et al* (2014) "Authentic leadership and psychological well-being at work of nurses: The mediating role of work climate at the individual level of analysis," *Burn. Res.*, 1(2): 90-101.
12. R H Mudallal, M Y N Saleh, H M Al-Modallal, R Y Abdel-Rahman (2017) "Quality of nursing care: The influence of work conditions, nurse characteristics and burnout," *Int. J. Africa Nurs. Sci.*, 7 (2): 24-30.
13. M T Mrayyan, I Al-Faouri (2008) "Predictors of career commitment and job performance of Jordanian nurses," *J. Nurs. Manag.*, 16 (3): 246-56.
14. M Yaghoubi, M Javadi, F Rakhsh, M Bahadori (2013) "A study of determining factors affecting the performance of nurses based on the achieve model in selected

- hospital of Isfahan (Iran)," *J Educ Heal. Promot*, 2(1): 49.
15. L S Cowin, R G Craven, M Johnson, H W Marsh (2006) "A longitudinal study of student and experienced nurses' self-concept," *Collegian*, 13 (3): 7.
 16. S A Chi, H S Yoo (2001) "Concept Analysis of Professional Nurse Autonomy," *J Korean Acad Nurs*, 31 (5): 781-92.
 17. Y Ten Hoeve, G Jansen, P Roodbol (2014) "The nursing profession: public image, self-concept and professional identity. A discussion paper," *J. Adv Nurs.*, 70 (2): 295-309.
 18. K Donelan, P Buerhaus, C DesRoches, R Dittus, D Dutwin (2008) "Public perceptions of nursing careers: the influence of the media and nursing shortages," *Nurs Econ.*, 26 (3): 143-50.
 19. M Takase, M Yamamoto, Y Sato (2006) "Impact of the perceived public image of nursing on nurses' work behaviour," *J. Adv. Nurs.*, 53 (3): 11.
 20. D P Arumsari, E Emaliyawati, A Sriati (2016) "Hambatan Komunikasi Efektif Perawat Dengan Keluarga Pasien Dalam Perspektif Perawat," *J. Pendidik. Keperawatan Indones.*, 2 (2): 11.
 21. I Jahanbin, Z Badiyepyma, F Sharif, F Ghodsbin, S Keshavarzi (2012) "The impact of teaching professional self-concept on clinical performance perception in nursing students," *Life Sci. J.*, 9(4): 7-15.
 22. L Valizadeh, V Zamanzadeh, R B Gargari, A Ghahramanian (2016) "Self-Esteem Challenges of Nursing Students: An Integrative Review," *Res. Dev. Med. Educ.*, 5 (1): 5-11.
 23. B J Kalisch, M Curley, S Stefanov (2007) "An intervention to enhance nursing staff teamwork and engagement," *J. Nurs Adm*, 37 (2): 77-84.
 24. L F Kemmer, M J P Silva (2007) "Nurses' Visibility According to The Perceptions of The Communication Professionals," *Rev. Latino-am Enferm.*, 15 (1): 8.
 25. et al Park SY, Bae DS, Nam JH (2007) "Quality of life and sexual problems in disease-free survivors of cervical cancer compared with the general population," *Cancer*, 110: 2716-25.
 26. L S Cowin, C Hengstberger (2008) "Causal modeling of self-concept, job satisfaction, and retention of nurses," *Int. J. Nurs Stud.*, 45 (10): 1449-59.
 27. J Randle (2001) "The effect of a 3-year pre-registration training course on students' self-esteem," *J. Clin Nurs.*, 10 (2): 293-300.
 28. Nursalam (2016) *Metodologi Penelitian Ilmu Keperawatan*, 4th ed. Jakarta: Salemba Medika.
 29. E Angel, R Craven, N Denson (2012) "The Nurses Self-Concept Instrument (NSCI): Assessment of psychometric properties for Australian domestic and international student nurses," *Int. J. Nurs. Stud.*, 26 (1): 31-51.
 30. E T Lake (2002) "Development of the practice environment scale of the nursing work index," *Res. Nurs. Health*, 25 (3): 176-88.
 31. R Loeppke et al (2003) "Health-Related Workplace Productivity Measurement: General and Migraine-Specific Recommendations from the ACOEM Expert Panel," *J. Occup. Environ. Med.*, 45(4): 349-59.
 32. R E Kopelman (1986) *Managing Productivity in Organizations: A Practical, People-Oriented Perspective*. Germany: McGraw-Hill Book Company.
 33. E Lee, J H S Kim, H Y Kim (2014) "Relationships between core factors of knowledge management in hospital nursing organisations and outcomes of nursing performance," *J. Clin. Nurs.*, 23(2): 3515-24.
 34. J Gibson, J Ivancevich (2012) *Organisasi, Perilaku, Struktur, Proses*. Jakarta: Binarupa Aksara.
 35. M Armstrong, A Baron (2005) *Productivity in Organization*. 2005: Philadelphia.
 36. D Wibisono (2006) *Manajemen Kinerja, Konsep, Desain, dan Teknik*. Jakarta - Indonesia: Erlangga.
 37. B Francesca, T Gilberto (2012) "Human health care and selection effects. Understanding labor supply in the market for nursing," *Health Econ.*, 21 (4): 477-83.
 38. J V Kovach, S Borikar (2018) "Enhancing Financial Performance: An Application of Lean Six Sigma to Reduce Insurance Claim Denials," *Qual. Manag. Health*

- Care, 27(3): 165-171. doi: 10.1097/QMH.0000000000000175.
39. T C Tsai, A K Jha, A A Gawande, R S Huckman, N Bloom, R Sadun (2015) "Hospital Board And Management Practices Are Strongly Related To Hospital Performance On Clinical Quality Metrics," *Health Aff.*, 34(8): 1304-11.
 40. S Laschiner, H K R Fida (2015) "Linking Nurses' Perceptions of Patient Care Quality to Job Satisfaction: The Role of Authentic Leadership and Empowering Professional Practice Environments," *J. Nurs. Adm.*, 45(5): 276-83.
 41. D Grembowski *et al* (2008) "Evaluation of the Group Health Cooperative Access Initiative," *Qual. Manag. Health Care*, 17 (4): 292-303, 2008, doi: 10.1097/01.qmh.0000338550.67393.a9.
 42. R A Kieft, B B J M de Brouwer, A L Francke, D M J Delnoij (2014) "How nurses and their work environment affect patient experiences of the quality of care: a qualitative study," *BMC Health Serv. Res.*, 14(1): 249.
 43. K Kusnanto, F A Rohmah, A S Wahyudi, H Arifin (2020) "Mental Workload and Stress with Blood Glucose Level: A Correlational Study among Lecturers who are Structural Officers at the University," *Syst. Rev. Pharm.*, 11 (7): 253-257. doi: 10.31838/srp.2020.7.40.
 44. B J Schmidt, E C McArthur (2018) "Professional nursing values: A concept analysis," *Nurs. Forum*, 53(1): 69-75.
 45. D Chenevert, G Jourdain, C Vandenberghe (2016) "The role of high-involvement work practices and professional self-image in nursing recruits' turnover: A three-year prospective study," *Int. J. Nurs Stud.*, 53(1): 73-84.
 46. B Guo, L Zhao, Y Gao, X Peng, Y Zhu (2017) "The status of professional identity and professional self-efficacy of nursing students in China and how the medical documentaries affect them: A quasi-randomized controlled trial," *Int. J. Nurs. Sci.*, 4 (1): 6-14.
 47. D Andrews, J Burr, A Bushy (2010) "Nurses' Self-Concept and Perceived Quality of Care A Narrative Analysis," *Asian Nurs. Res. (Korean. Soc. Nurs. Sci.)*, 12 (3): 2.
 48. H Halimatussakdiah, H Arifin, W Haryati, A Alhuda, N Asiah (2020) "Shariah Models-Based on Ethics Innovation in Nursing Documentation," *J. Glob. Pharma Technol.*, 12 (9): 130-139.
 49. N D Nayeri, A H Bahabadi, A Kazemnejad (2014) "Investigating the productivity model for clinical nurses," *Acta Med. Iran.*, 7 (1): 34-39.
 50. N D Nayeri, A A Nazari, M Selsali, F Ahmadi (2006) "Viewpoints of Nurses about Productivity and the Effects of Current Evaluation Process on it," *Sci. Mag. Yafte*, 7 (4): 91-100.
 51. J Howard *et al* (2018) "Creating and Sustaining Care Teams in Primary Care," *Qual. Manag. Health Care*, 27 (3): 123-129. doi: 10.1097/qmh.0000000000000176.
 52. F Borhani, A Arbabisarjou, T Kianian, S Saber (2016) "Assessment of Predictable Productivity of Nurses Working in Kerman University of Medical Sciences' Teaching Hospitals via the Dimensions of Quality of Work Life," *Glob. J. Heal. Sci*, 8 (19): 665-66.