

## AN ASSESSMENT OF VARIOUS COMPETENCIES ON THE JOB PERFORMANCE OF NURSES: AN EMPIRICAL STUDY

**Sharanika Dhal<sup>1</sup>**

Research scholar Dept. of MBA Birla School of Management

Birla Global University, Bhubaneswar, Odisha

Sdhal.scholar18@bgu.ac.in

Contact: 9668195392

**Dr. Snigdha Mohapatra<sup>2</sup>**

Asst. Professor (HR and OB) Dept. of MBA Birla School of Management Birla Global

University, Bhubaneswar, Odisha

---

### ABSTRACT

The exploratory study investigated nurse's assessment of various competencies on job performances. Nurse's self-evaluation on their job performance was depicted as the indicator of the quality of services they usually provide. A total of 60 items are clustered into 5 basic competencies by using Exploratory Factor Analysis (EFA) in SPSS: Behavioural Competencies, Clinical Competencies, Managerial competencies, Ethical Competencies and Technological Competencies. 700 nurses are invited to participate and 660 data was collected successfully by manually and Google doc. from five multispecialty hospitals of Bhubaneswar, Odisha. Multiple Regression analyses found that Clinical Competencies (CC), Behavioural Competencies, Ethical Competencies (EC) and Technological Competencies (TC) are positively related to Job Performance (JP) and Managerial Competencies (MC) are negatively related. This may be helpful for the nursing professionals to emphasize more and more training on the above-mentioned competencies to perform in a better way. As per the assessment of competencies; trainers or seniors or experts of the relevant field should design the course curriculum and also the training or learning sessions to make the nurses more competent and confident to provide good quality of service.

**Keywords:** Competencies, training, performance, service, health and nurses

---

### INTRODUCTION

Nurses are the most important human capital in the hospital and healthcare industry. As per the current demanding situations in the healthcare industry, nurses should be trained in the best way to perform better in every aspect i.e. clinical and nonclinical. Proper training programs, strong academical background and various learning sessions may be helpful to enhance the job performance. Job performance depends upon skill, knowledge, abilities and attitude etc. It depends upon various professional and

workforce competencies of nurses. For example, Clinical competencies, Behavioural competencies, Ethical Competencies and Technological competencies, etc. are important for nurses to provide proper patient care. Professional competencies are the basic elements in the provision of nursing care and help in the delivery of quality service care. World Health Organization (WHO) requires all the member countries to report and execute the plans for strengthening the nurse's skills and ability to raise the performance level. Competence Based training need

assessment is necessary for nurses as it help to build up a proper professional identity( Franco and Tavares, 2013) by combining knowledge and skill. It provides a vision to develop a good career path and present a proper identity in the service sector and person's identity depends upon interest, Roles, Attitude, Value and Orientation etc. The applicability of training, tenure prolongation and education as a method to improve job performance. But it can be appreciated if there is a developpement of scale for measuring the job performance. With the formal educationpattern, it is necessary for all the professions should be upgraded, updated and upskilled with proper training program (Asiamah et al., 2019).An extensive literature survey revealed that several kinds of research are done on general core competencies in the nursing sector i.e. interpersonal relationships, communication, leadership, mentoring, teaching, clinical management and time management etc. But not much more researches are done on the present demanding competencies like managerial competence, behavioral competence, ethical competence and technological competence and its relationship with the job performance. So the study aims to identify different competencies or KSAs (Knowledge, Skills and Attitudes) in the nursing sector to fulfill the requirement for any demanding situations This study analyses the identified competencies forms a competency model framework and also designs an assessment tool for the nursing sector that will help them to deliver quality service and care. Along with that, it will study the relationship of various competencies of nurses with the job

performance which will help to know which competency mostly enhances the level of performance.This study may contribute to developing one basic scale for the measurement of various competencies of nurses in hospitals. In further, the developed instrument can be modified as per requirement. It is very much important that the quality of the healthcare professionals should be monitored and improved. This can be helpful to update the policies protocol about the nurses. To validate the instrument and for better results, another round of study can be done with a larger sample size and can be taken from different hospitals of different cultures. This paper helps identify new constructs in the area of training in the nursing area. It will help to analyze the importance of various competencies of nursing professionals and their relationship with their performance. It will help to know the impact of competency development on job performance whether it's positive or negative.

### **Literature Review**

Competencies ensure the right people throughout the workforce are equipped to achieve maximum performance outcomes. Job Performance is “the outcome of reaching a goal or set of goals concerning a job, role or organization” (Campbell et al., 1990). It's better to align individual goals with the organization's aim and objectives for holistic improvement. Competencies are the combination of knowledge, skill, personal characteristics, individual and group behavior, interpersonal relationship, positive attitude andstrong ethical behavior, etc. Different competency models used to derive the

competencies of a particular group of professionals are as follows:

**a. Theory of Professional Competence**

Professional competence requires the practitioner to perform practice responsibilities as delineated in a set of outcome statements and daily practice, use reflection. Achievement of these outcomes requires four core types of competence: 1) knowledge/cognitive, 2) functional (e.g., diagnosis, performing surgery, and other technical skills), 3) personal or behavioral, and 4) values/ethical (e.g., professional) (Cheetham & Chivers, 1996). These core types also involve the use of generic competencies such as critical thinking, problem-solving, and self-directed learning. These generic competencies are also called “meta-competencies.”

Competencies are divided into four types: **Cognitive** (Use of knowledge at work), **Functional** (Effective performances at work, **Personal** (Ability to adopt appropriate, observable behaviors in work situations) and **Ethical** (Possession of appropriate personal and professional work values thus making sound judgments in work situations).

**b. ASTD model or the American Society for Training and Development Model, 2013**

It is introduced 30 years back to derive competencies in different sectors. The study highlights the most important fundamentals and business competencies required for the profession. The Revised Edition ASTD Competency study: The training and Development profession redefined and the key trends that affect the future practices as follows: Advances in Technology and inherent capability,

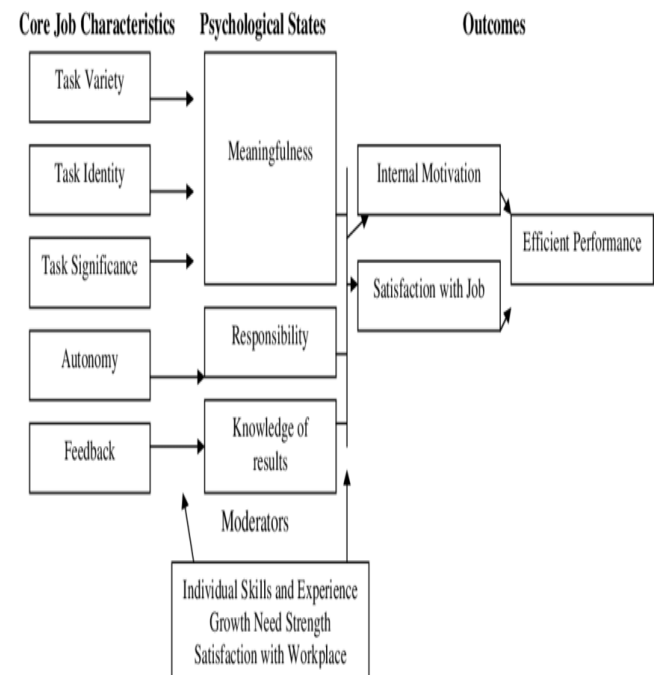
Advances in software application, Growing adoption of mobile devices for learning, A Culture of connectivity and information sharing, Increased ability to use and information sharing, Increased ability to use and collect “Big data”, Shifting Demographics in the workplace, Increasing globalized platform, Economic volatility and Uncertainty. There are two sections in the model:

1. Foundational Competencies: Business skill, Global mindset, industry Knowledge, Interpersonal Skills, Personal skills and Technology Literacy.
2. Area of Expertise (AOE): Performance Improvement, Instructional Design, Training Delivery, Learning Technology, Evaluation Learning Impact, Managing Learning program, Integrated Talent Management, Coaching, Knowledge Management and Change Management.

The incorporation of foundational competencies and AOE to the HR system will create an integrated system with a common set of competencies. This model can be used to derive the competencies of a particular group of professionals to expand and enhance the skills. The purpose of performance assessment will be helpful for research, personnel decision, for making an appraisal, training and development, and self-improvement. Proper leadership and clinical skills are required for special cases for better service (Smythe et al., 2013). Competence-based identification helps to identify competencies and help to develop training need assessment tools, increase

performances, helps to establish training and professional development strategies and helps to deliver better service to patients. Tong Lee and Wang (2016) studied the effectiveness of a healthcare training program for enhancing the pediatric nurse's competencies. This study describes that the competency-based assessment is done individually and in a group to enhance the performance of the nurses. Restructuring of the curriculum is done by Competency mapping. The static, outdated, inappropriate and poorly designed syllabus is changed to the right one in the healthcare organization of Africa to produce competent graduates. It mentioned various issues in the nursing sector like lack of proper education in secondary level of nurses, mismatch of the curriculum with the competencies, shortage of teaching staffs, inadequately trained staffs, unavailability of physical resources, etc. Self-assessment is also important for the staff and can be done in various ways which are important for self-improvement (Markoulli et al., 2016) i.e. Facebook, Online survey, Person job fit, volunteer, Job Interview, Online questionnaire, Applicant pool and Empathy questionnaires. Lurie and Garrett (2017) studied the scales, impacts and varieties of Competency-based Education (CBE) that will help to change the educational curriculum. It is important to develop emotional intelligence for the nurse as it helps to focus on accurate perception and expression of emotions and understand the emotional knowledge by regulating the self-emotion with others. Competencies related to emotional, social and cognitive intelligence can be developed by experiences and proper

training programs. Changing environment and diverse workforce always needed competency mapping and a right process of learning to strengthen the performances in each sector.



[ Fig No-1(Source: Job Characteristic theory by Hackman and Oldham, 1980)]

Initially, nurses focused on medicines as they started their journey as health professionals. After working for a long period, they have decided to work for patient care, changes in the work organization, division of task, demands greater flexibility, mobility, structural reforms, medical innovations which need skill development. Nowadays technological competency also enhances job performance like e-health, online working, data recording and documentation by different software, etc. It helps a patient-centric system that reduces complexity. Campbell and Wiernik (2015) suggested competency models help in the assessment of performance in a work role.

Communication skill is important to perform better in the work region; it is seen from the study of training in youth-friendly service provision. Managers suggested to improve clinical competency of the nurses to make them more confident in patient care and to provide better service. Clinical competency is the wise application of technical and communication skill, knowledge, clinical reasoning, emotions and values in clinical setting. It influences the quality of services or patient care in many ways. It is used as an index for evaluation and accreditation of hospitals. Nursing informatics competency is positively related to job satisfaction and job performance (Lee et al., 2015). There are several factors affect competency development like: experience, opportunities, environment, personal characteristics, motivation, theoretical knowledge, health monitoring system, cost, safety, public awareness and expectation of patients and their family members (Soroush et al. 2016). In the Great Lakes Region and Competency-Based training is fruitful for young nurses (Weiss et al., 2018). Nursing competency help to provide basic foundation for nursing curriculum. It is important to identify the required competencies for continuous professional development (Fukada M., 2018).

The Job Characteristics Theory (JCT), developed by Hackman and Oldham, is widely used as a framework (Fig No-1) to study how particular job characteristics affect job outcomes, including job satisfaction. The five job characteristics are skill variety, task variety, task significance, autonomy, and feedback (Mayrowetz et

al., 2005; Asiamah et al., 2019). Personal competencies are associated with successful job performances. Job satisfaction is highly related to patient turn over and a critical indicator of job performance and quality of patient care (Liu et al., 2019). According to American Association of critical care Nurses Healthy working environment (AACN, HWE), the Nursing assessment tool includes: Skilled communication, true collaboration, appropriate staffing, effective decision making, meaningful recognition and authentic leadership etc. (Kim, 2019). The Interprofessional Collaboration practice (IPP) embraced four core competencies like values and ethics, Roles and responsibility, Interprofessional Communication and team and teamwork. Identifying and characterizing the core curriculum outcomes among training programs for nurse practitioners is important to enhance the performance. Some of the competencies having their effect on the individual performance; Ex: Emotional intelligence, Stress management, Teamwork management, organization culture competence, knowledge management, etc. Adequate training, availability of resources, continuing education, use of technology, proper documentation, IT infrastructure, patient-centered care, focus on leveraging the roles of each team member, mutual respect, relationship building, and communication will help in effective job performance. Mentoring competence is required for professional development and performance improvement (Tuomikoski et al., 2019). Proper mentoring requires clinical practice, knowledge about proper patient care, and feedback. As per the

AMO Theory (Ability, Motivation, and Opportunities), an increase in Training programs help in enhancing job performance as it increases skill variety and job knowledge (Asiahmah et al., 2019).

Nurses's compassion satisfaction could increase the competency development at clinical level(Zakeri et al, 2020). It has seen that various technological methods also used nowadays to develop proper competencies like: clinical informatics, video conferencing methods, use of different softwares and data management etc. to treat the concurrent disorders (Jouparinejad et al, 2020;Chicoine et al., 2020).There are certain key motivators in the organizations to perform better like communication skill, compensation and benefits, physical workplace environment, flexible workplace environment, flexible work practices and tech tools etc. (Sadhan et al., 2020). Construction of assessment tool for competency measurement is necessary for training and development (Hughes et al., 2020).Tannenbaum et al. (2021) suggested that teamwork and safety are required for effective job performance.

## RESEARCH METHODOLOGY

The present study adopted the quantitative research design and random sampling

### Data Analysis

(Table No-1: Descriptive Statistics)

| Sl. No. | Variables                            | Frequency | Percentage |
|---------|--------------------------------------|-----------|------------|
| 1.      | <b>Age (years)</b>                   |           |            |
|         | 20-30                                | 364       | 55.2       |
|         | 31-40                                | 295       | 44.7       |
|         | 41-50                                | 1         | 0.2        |
| 2.      | <b>Total Job Experiences (Years)</b> |           |            |
|         | Less than equal to 5 years           | 260       | 39.4       |
|         | 5-10                                 | 272       | 41.2       |
|         | 11-25                                | 128       | 19.4       |

method used for primary data analysis. A structured questionnaire (which is a modified version of Henessy Hicks instrument that usually used assess the competencies of health professional)of 60 items is made for data collection. The Likert scale used in the study ranges from 1 to 7 where 1 mean strongly disagree and 7 means strongly agree. The questionnaire( Hicks et al, 2006) was circulated among 700 participant and 660 are returned successfully. SPSS and Ms Excel are used to analyse the data and make inferences.

### Study objectives

- To identify various existing competencies of nursing professionals.
- To explore the gap between existing and required competencies.
- To develop a scale for the measurement of competencies in the present Indian situation.
- To study the relationship between various competencies and the job performance of the nurses.
- To develop a competency model for nursing professionals in the present Indian situation

|    |   |     |       |
|----|---|-----|-------|
| 3. | <b>Total Job Experience in the current Organization (Years)</b> |     |       |
|    | Less than equal to 5 years                                      | 483 | 73.2  |
|    | 5-10  | 133 | 22    |
|    | 11-25   | 44  | 6.6   |
| 4. | <b>Educational Qualification</b>                                |     |       |
|    | ANM   | 137 | 20.8  |
|    | GNM   | 132 | 20    |
|    | BSc. Nursing  | 341 | 51.7  |
|    | PG in Nursing   | 50  | 7.6   |
| 5. | <b>Hours of Work (Hours)</b>                                    |     |       |
|    | 40  | 46  | 7     |
|    | 50  | 484 | 73.3  |
|    | 60  | 122 | 18.5  |
|    | More than equal to 60   | 8   | 1.2   |
| 6. | <b>Unit</b>   |     |       |
|    | COVID   | 89  | 13.5  |
|    | Emergency   | 76  | 11.5  |
|    | General   | 188 | 28.5  |
|    | ICU   | 217 | 32.9  |
|    | Others  | 90  | 13.6  |
| 7. | <b>Native Place</b>   |     |       |
|    | Urban   | 72  | 10.99 |
|    | Semi Urban  | 75  | 11.4  |
|    | Municipal   | 48  | 7.3   |
|    | Rural   | 465 | 70.5  |
| 8. | <b>Marital Status</b>   |     |       |
|    | Married   | 268 | 40.6  |
|    | Unmarried   | 382 | 57.9  |
|    | Single  | 10  | 1.5   |
| 9. | <b>No. of dependent</b>   |     |       |
|    | 0   | 274 | 41.5  |
|    | 1   | 191 | 28.9  |
|    | 2   | 195 | 29.5  |

From the Demographic analysis (Table No.-1) or descriptive statistics it is seen that 55.2% of the total respondents are belong to category between 20-30 years, 44.7 % are belong to the category of respondents between 31-40 years and 0.2%

are belong to the category of respondents between 41-50 years. 19.4 % of the total respondents are having total job experiences between 11-25 years. 41.2% of the total respondents are having total job experiences between 5-10 years.

39.4% of the total respondents are having total job experiences between less than equal to 5 years.

From the above analysis, it can be concluded that there are two types of categories of senior nurses are available who are belong to the category of respondents between 11-25 years are having 11-25 years of experiences in the current organization i.e. 3.9 %. Another type who is having 5-10 years of experiences in the current organization but total experiences is 11-25 years. Similarly there are 20.2 % of senior nurse categories who are having 5-10 years of experiences in the respective current organization. 73.2 % of the total respondents are having less than equal to 5 years of experiences in the current organization.

20.8% of the total respondents are having ANM as educational qualification. 20% of the total respondents are having GNM as educational qualification. 51.7 % of the total respondents are having BSc nursing as educational qualification. 7.6% of the total respondents are having PG in Nursing.

If analysis is done on working hours (Table No.-1), it has seen that 7% of the total respondents are working 40 hrs. , 73.3% are working 50 hrs. , 18.5% are working more than 60 hrs. and 1.2% is working more than 60 hrs. As the data collected during COVID 19 period, it has seen that nurses usually working more than their official working hrs. 13.5% of the total respondents are doing their maximum duties in COVID ward, 11.5% of the total respondents are doing their maximum duties in Emergency

Dept., 28.5% are doing their maximum duties in General OPD, 32.9% are doing their doing in ICU (may be due to COVID ICU cases are increased and others like 13.6% are doing their duties in several Depts. like Gynaecology, Orthopaedics, Paediatrics and ENT etc.

From the above statistical analysis (Table No.-1), it has seen that maximum nurses are from rural places i.e. 70.5%. 7.3% of the total respondents are from Municipal corporation areas and 11.4% are from semi urban areas and 10.9% are from urban areas. It is also analyzed that 40.6% are married, 57.9% are unmarried and 1.5% is single from the total respondents. It is concluded from the above analysis that 41.5% of the total respondents are having no dependants, 28.9% of the total respondents are having one dependant and 29.5% of the total dependants are having two dependants. This data will be helpful to do further studies on the different factors affecting job performances.

#### **Factor Analysis**

To check the validity of the instrument's structure and its reliability, an exploratory factor analysis is done. Using a Varimax rotation and Cronbach's Alpha assessment data reliability is checked. Cronbach's Alpha is 0.942 for all 60 standardized items which shows data is reliable; KMO (Kaiser-Meyer-Olkin) became 0.845 measures the sample adequacy and Bartlett's test of sphericity,  $p = 0.000$  showing data is significant. The factor analysis yielded six factors with components are having Eigen values of  $> 1.0$ .

**Table No.-2: Identified constructs from Exploratory Factor Analysis (EFA)**

| Sl. No. | Factors/ Constructs (EFA)       | Percentage (Scale) |
|---------|---------------------------------|--------------------|
| 1.      | Behavioural Competencies (BC)   | 16.696             |
| 2.      | Clinical Competencies (CC)      | 32.029             |
| 3.      | Ethical Competencies(EC)        | 42.560             |
| 4.      | Managerial Competencies (MC)    | 51.946             |
| 5.      | Technological Competencies (TC) | 59.690             |
| 6.      | Job performance (JP)            | 66.426             |

**Identified Variables as follows (defined): (Table No.-2)**

**Dependent Variable:**

- a. **Job Performance (JP):** It defined as how an individual perform the duties and responsibilities.

**Independent Variables:**

- a. **Behavioural Competencie (BC):** It includes proper communication skill, developing trust, sincerity, time management, self improvement, adaptation, self-awareness and group behaviour etc.
- b. **Clinical Competencies (CC):** It includes identifying patient's needs, identifying patient's symptoms, evaluation and planning treatment for individuals, assessment of patients in casualty and non-casualty, application of subjective and objective methods for treatment of patients, systematic clinical examinations and follow check-up etc.
- c. **Ethical Competencies (EC):** It includes proper knowledge of medical and legal rules of the organization, practice of organization's policies, Maintenance of clear and authentic

documentation, awareness, accountability and adequate knowledge of professional ethics etc.

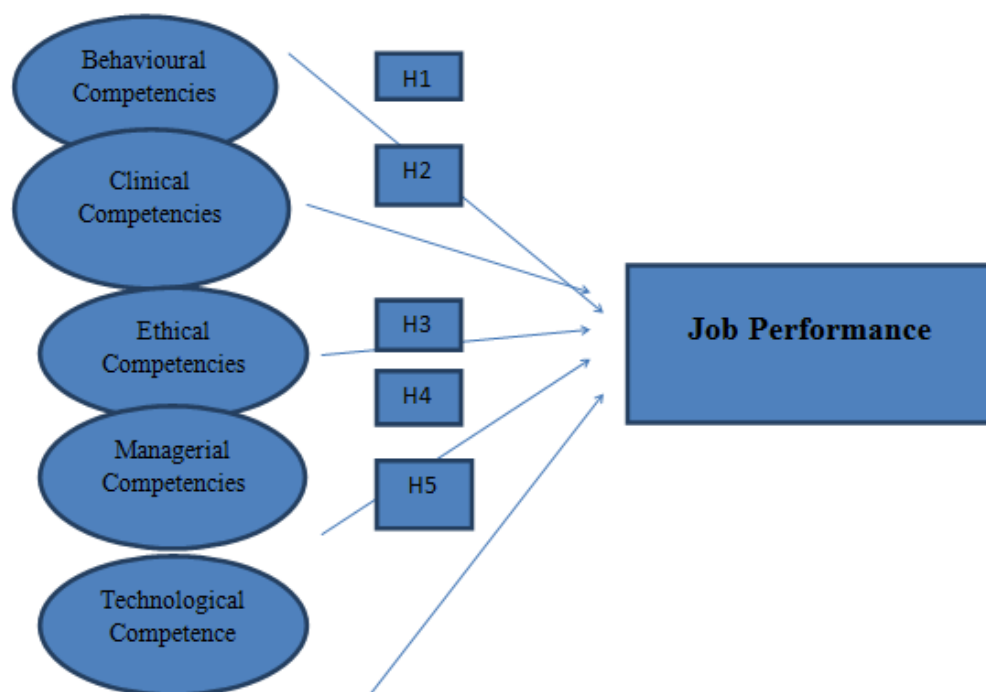
- d. **Managerial Competencies(MC):** It includes delegation, supervision, critical thinking, problem solving, workplace safety, quality management, monitoring, evaluation, support, collaboration, decision making etc.
- e. **Technological Competencies (TC):** It includes basic technological skills, use of internet, use of different softwares or technologies in the organization, clinical informatics and data management atc.

**CONCEPTUAL FRAMEWORK**

A competency domain refers to a broad group to which homogeneous and similar competencies belong. Each competency domain comprises of competencies (Competency factors). A competency factor is a variable that makes up the competency domain. The outcomes of the study are effective job performance. As per the constructs of job performance; it is

the extent to which possession of competencies improve the performance of

the nurses in the job sector.



(Fig No.-2: Conceptual framework showing the hypothesis taken between dependent and independent variable)

### Formulation of Hypothesis

Hypothesis is to be tested through large samples of data to be collected and quantitatively analysed; therefore facts are mathematically evaluated on identified causalities using proper quantitative techniques for axiology (Saunders, 2009). The study is constructed with the hypothesis that competency mapping results enhancing job performance of nurses. This study describes a model for investigating four competency groups and it offers an empirical evaluation of how these competencies influence the outcome of the study i.e. affect the job performance. From the research objectives the following research hypothesis are to be examined for analysis: (Fig No.-2)

H1: Perceived possessions of Behavioural Competencies(BC) have significant

impact on improvement of job performance

H2: Perceived possessions of Clinical Competencies(CC) have significant impact on improvement of job performance

H3: Perceived possessions of Ethical Competencies(EC) have significant impact on improvement of job performance

H4: Perceived possession of Managerial Competencies(MC) have significant impact on improvement of job performance

H5: Perceived possessions of Technological Competencies(TC) have significant impact on improvement of job performance

**Regression Analysis:**  
**(Table No:3- Model summery)**

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .593 <sup>a</sup> | .352     | .347              | .6379480                   | .352              | 71.007   | 5   | 653 | .000          | .717          |

a. Predictors: (Constant), TC, MC, CC, EC, BC

b. Dependent Variable: JP

**(Table No.: 4: ANOVA )**

**ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1     | Regression | 144.491        | 5   | 28.898      | 71.007 | .000 <sup>b</sup> |
|       | Residual   | 265.756        | 653 | .407        |        |                   |
|       | Total      | 410.248        | 658 |             |        |                   |

a. Dependent Variable: JP

b. Predictors: (Constant), TC, MC, CC, EC, BC

After exploratory factor analysis, six constructs are valid for hypothesis testing where job performance (JP) is the dependent variable and all others constructs are independent variables i.e. behavioural competencies (BC), clinical competencies(CC), managerial competencies(MC), ethical competencies(EC) and technological competencies(TC). From the above ANOVA (Table No: ), it is seen that F value is 71.007 which is significance and R value is 0.593.

**(Table No.-5: Regression Analysis)**

**Coefficients<sup>a</sup>**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
|       |            | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant) | 2.074                       | .247       |                           | 8.407 | .000 |
|       | BC         | .090                        | .023       | .134                      | 3.853 | .000 |
|       | CC         | .089                        | .031       | .096                      | 2.882 | .004 |

|    |       |      |       |        |      |
|----|-------|------|-------|--------|------|
| EC | .442  | .033 | .463  | 13.332 | .000 |
| MC | -.008 | .028 | -.009 | -.276  | .783 |
| TC | .084  | .035 | .084  | 2.409  | .016 |

a. Dependent Variable: JP

From the regression analysis (Table No.-5) and the above model summary (Table No.-3), Regression Equation of competencies of the nurses with related to job performance can be denoted as:

$$JP = 2.074 + 0.90 BC + 0.89 CC + 0.442 EC - 0.008 MC + 0.084 TC$$

Where,

JP= Job Performance

BC= Behavioural Competence

CC= Clinical Competence

EC= Ethical Competence

MC= Managerial Competence

TC= Technological Competence

R square= 0.352

(Significant at 5 per cent)

F value= 71.007

The above regression results indicate that behavioural competencies, clinical competencies, ethical competencies and technological competencies positively related to job performances of nurses. This is evident from the positive signs of the estimated co-efficient of the correspondence variables. This means if there is more training or learning sessions are done on the mentioned competencies, it will enhance the job performances of the nurses. Further managerial competencies are negatively related to the job performance of nurses. This is evident from the negative sign of the estimated co-efficient of the correspondence variable. That means according to nurses, managerial competencies is less important to perform better in their respective area as

comparable to others. It is found that that ethical competency, clinical competencies and behavioural competencies are mostly important for nursing professionals to perform better in the organization. The significance of R square as tested by the F statistic indicated that the regression equation is significant and hypothesis numbering H1, H2, H3 and H5 hold true.

#### Limitation

This research is done based on nursing professionals of the five multispeciality hospitals of Bhubaneswar, Odisha, hence the result may vary if done in other locations. Data samples can be large, it is limited as the data collection is disturbed due to pandemic. This result is limited to Nursing sector, hence it can be vary for other sectors.

#### Future Studies

This study may contribute for developing one fundamental instrument for the measurement of various competencies of nurses in hospitals. It is very much important that the quality of the healthcare professionals should be improved. This can be helpful to update the nursing policies protocol. To validate the instrument and for better result another round of study can be done in the near future with larger sample size and can be taken from different hospitals of different cultures. The assessment of various competencies will help the trainer or HR people or the respective persons of the nursing area to design a particular training

program that will enhance the level of performance positively as per the need of the different competencies as discussed above.

### Conclusion

This paper has highlighted the relationship of various competencies with the job performance in the multispeciality hospitals. It will help the organizations to identify the required competencies of nurses in different levels. It analyses how job performance is affected by different competencies. It is found that Clinical competencies, behavioural competencies, technological competencies and ethical competencies are necessary for the nurses as they are positively related to the job performances. Hence it is evident that organizations should work more and more on the above mentioned competencies to fulfil individual and organizational objectives simultaneously. Managerial competencies are also important theoretically but it needs further research to study about the impact of it on job performance empirically. So It can be concluded that competency development and training assessment help nurses to perform successfully in the organization.

### References

- Asiamah N, Mensah HK, Ocran B. An assessment of education, in-service training and tenure prolongation as methods for enhancing nursing performance. *Int J Health Care QualAssur.* 2019 Jul 8;32(6):910-926. doi: 10.1108/IJHCQA-07-2018-0190. PMID: 31282262.
- Campbell, J.P., McHenry, J.J. and Wise, L.L. (1990) *Modeling job performance in a population of jobs. Personnel Psychology*, 43, 313±33.
- Campbell, John & Wiernik, Brenton. (2015). *The Modeling and Assessment of Work Performance. Annual Review of Organizational Psychology and Organizational Behavior.* 2. 47-74. 10.1146/annurev-orgpsych-032414-111427.
- Cheetham, G. and Chivers, G. (1996), "Towards a holistic model of professional competence", *Journal of European Industrial Training*, Vol. 20 No. 5, pp. 20-30. <https://doi.org/10.1108/03090599610119692>.
- Chicoine G, Côté J, Pepin J, et al. *Impact of a videoconferencing educational programme for the management of concurrent disorders on nurses' competency development and clinical practice: protocol for a convergent mixed methods study* *BMJ Open* 2021;11:e042875. doi: 10.1136/bmjopen-2020-042875
- Franco, M., & Tavares, P.J. (2013). The influence of professional identity on the process of nurses' training: an empirical study. *Leadership in Health Services*, 26, 118-134.
- Fukada M. (2018). Nursing Competency: Definition, Structure and Development. *Yonagoactamedica*, 61(1), 1-7. <https://doi.org/10.33160/yam.2018.03.001>

- Hackman, J. R. (1980). Work redesign and motivation. *Professional Psychology*, 11(3), 445–455. <https://doi.org/10.1037/0735-7028.11.3.445>
- Hennessy, Deborah & Hicks, Carolyn & Hilan, Aflah & Kawonal, Yoanna. (2006). *A methodology for assessing the professional development needs of nurses and midwives in Indonesia: Paper 1 of 3. Human resources for health*. 4. 8. 10.1186/1478-4491-4-8.
- Hughes, L. J., Mitchell, M. L., Jones, C., & Johnston, A. N. B. (2020). *Measuring assessors' experiences of grading marginal student performances in clinical assessments – The assess-safe tool: Development and preliminary psychometric validation. Nurse Education in Practice*, 43, 102701. doi:10.1016/j.nepr.2020.102701
- Jouparinejad, S., Foroughameri, G., Khajouei, R. et al. *Improving the informatics competency of critical care nurses: results of an interventional study in the southeast of Iran. BMC Med Inform Decis Mak* 20, 220 (2020). <https://doi.org/10.1186/s12911-020-01244-5>
- Lee, Haeok & Kim, Minjin & Kiang, Peter & Shi, Ling & Tan, Kevin & Chea, Phala & Peou, Sonith & Grigg-Saito, Dorcas. (2016). Lee et al-2016-*Public Health Nursing*.
- Lee, J.-M., Gang, I.-S., & Yu, S.-J. (2015). The Influence of Nursing Informatics Competency on Job-Satisfaction and Nursing Performance. *The Korean Journal of Health Service Management*, 9 (1), 109–122. <https://doi.org/10.12811/kshsm.2015.9.1.109>
- Liu, H.-Y., Chao, C.-Y., Kain, V. J., & Sung, S.-C. (2019). *The relationship of personal competencies, social adaptation, and job adaptation on job satisfaction. Nurse Education Today*. doi:10.1016/j.nedt.2019.08.017
- Lurie, H., & Garrett, R. (2017). *Deconstructing competency-based education: An assessment of institutional activity, goals, and challenges in higher education. The Journal of Competency-Based Education*, 2(3), e01047. doi:10.1002/cbe2.1047
- Markoulli, Maria & Lee, Colin & Byington, Eliza & Felps, Will. (2017). *Mapping Human Resource Management: Reviewing the field and charting future directions. Human Resource Management Review*. 27. 367–396. 10.1016/j.hrmr.2016.10.001.
- Mayrowetz, D. (2005, November). *Perceptions and interpretations of distributed leadership: Implications for leadership development and school improvement*. Paper presented at the annual conference of the University Council on Educational Administration, Nashville, TN.

- Sadhna, P., Gupta, S., & Rastogi, S. (2020). *Key motivators for driving work performance amid COVID-19 in developing nations. International Journal of Work Organisation and Emotion, 11(2), 105.* doi:10.1504/ijwoe.2020.110619
- Smythe, Analisa & Jenkins, Catharine & Harries, Margaret & Atkins, Sue & Miller, Juliet & Wright, Jan & Wheeler, Nicola & Dee, Philip & Bentham, Peter & Oyebode, J.. (2014). *Evaluation of Dementia Training for Staff in Acute Hospital Settings. Nursing older people, 26, 18-24.* 10.7748/nop2014.02.26.2.18.e527.
- Soroush, F., Zargham-Boroujeni, A., & Namnabati, M. (2016). The relationship between nurses' clinical competence and burnout in neonatal intensive care units. *Iranian journal of nursing and midwifery research, 21(4), 424-429.*  
<https://doi.org/10.4103/1735-9066.185596>
- Tannenbaum SI, Traylor AM, Thomas EJ, et al *Managing teamwork in the face of pandemic: evidence-based tips BMJ Quality & Safety 2021;30:59-63.*
- Tuomikoski, Anna-Maria & Ruotsalainen, Heidi & Mikkonen, Kristina & Kääriäinen, Maria. (2019). *Nurses' experiences of their competence at mentoring nursing students during clinical practice: A systematic review of qualitative studies. Nurse Education Today, 85, 104258.* 10.1016/j.nedt.2019.104258.
- Weiss, Sebastian & Bongartz, Hannah & Boll, Susanne & Heuten, Wilko. (2018). *Applications of Immersive Virtual Reality in Nursing Education - A Review.*
- Zakeri, M. A., Bazmandegan, G., Ganjeh, H., Zakeri, M., Mollaahmadi, S., Anbariyan, A., & Kamiab, Z. (2020). *Is nurses' clinical competence associated with their compassion satisfaction, burnout and secondary traumatic stress? A cross-sectional study. Nursing Open.* doi:10.1002/nop2.636