



NURSES COMPETENCE LEVEL AND ITS RELATIONSHIP WITH THEIR PERSONALITY TRAITS AND EMOTIONAL INTELLIGENCE IN SELECTED HOSPITALS, KOLKATA

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ABSTRACT

In the healthcare sector, measuring and validating nursing competence can help ensure the delivery of safe, evidence based, high quality care for patients. Nurse competence may be associated with some personal attributes, such as emotional intelligence and personality traits. With this view, a descriptive study was undertaken with the objectives to assess the competency level of nurses and its relationship with their personality trait and emotional intelligence in selected hospitals, Kolkata. Conceptual framework was based on the Competency Outcomes and Performance Assessment (COPA) model by Lenburg. Hundred staff nurses were selected through non probability convenient sampling technique. The tools used in this study were semi structured interview schedule and self reporting instrument. The study findings revealed that 74% of nurses had very good competency level. In all the domain of personality traits, staff nurses scored between low to high. The calculated mean in four emotional intelligence domains ranged from 25.05 -27.23 out of 40. There was positive correlation between nurses competence and extraversion ($r=0.13$), and 4 domains of emotional intelligence ($r =0.18$, $r =0.17$, $r =0.10$, $r =0.11$). The chi square value showed significant association between nurses' competence and exposure to educational programme. The study concluded that the nurses had a very good competency level. The study findings had several implications in various field of nursing. The study can be replicated on larger sample for better generalisations.

KEYWORDS :

INTRODUCTION

Nurses as an integral part of the health care system, encompasses the promotion of health, prevention of illness and care of physically ill, mentally ill and disabled people of all ages, in all health care and community settings. Nursing requires a lot of physical as well as mental stamina. Nurses should also be good at maintaining interpersonal relations and should be empathetic with a caring attitude. Nurses competence is based on the knowledge and skill taught to them. Nurses knowledge encompasses all pertinent information, including the scope of practice, standards of practice, standards of professional performance, science, humanities, experience, personal strengths and weaknesses. Skills include habits of mind; psychomotor, communication and interpersonal skills and diagnostic and ethical reasoning capabilities.

A study conducted by Codier, 2009 concluded that emotional intelligence scores in clinical staff nurses correlated positively with both performance level and retention variables. Clinical staff nurses with higher emotional intelligence, demonstrated higher performance, had successful careers and greater job retention.

MATERIALS AND METHODS

Study area

The present study was conducted at IPGME&R and SSKM Hospital, Kolkata, NRS Medical College and Hospital, Kolkata.

Variables

Research Variables

- Competency level of clinical nurse.
- Personality traits of clinical nurse.
- Emotional intelligence of clinical nurse.

Demographic Variables

Age, gender, educational qualification, professional qualification, total working experience.

Study Design

Descriptive survey research design.

Sample

Registered staff nurses working in neurology, ICU, ICCU, CTVS, ITU, and burns unit of selected Government hospitals, Kolkata.

Sample size

In the present study the sample size was 100 registered staff nurses working in neurology, ICU, ICCU, CTVS, ITU, and burns unit of selected Government hospitals, Kolkata.

Sampling Technique

Non probability convenient sampling technique was adopted for the present study.

Ethical consideration

The study was conducted after taking permission from ethical committee of respective institute. Formal permission was taken from Principal West Bengal Govt. College of Nursing, SSKM Hospital, Kolkata, Director Health Services of W.B, Informed consent was taken from each and every participant for maintenance of confidentiality.

Data collection Tools and techniques

Table 1 Data collection tools and techniques

Tool No.	Name of the tools	Variables to be measured	Techniques
I	Semi structured Interview Schedule	Demographic Variables	Interviewing
II	Critical Care Nurses Skills and Competency checklist	Competency level of nurses	Paper pencil
III	Standardised Big Five Inventory (BFI)	Personality trait of nurses	Paper pencil
IV	Standardised Quick Emotional Intelligence Test	Emotional Intelligence	Paper pencil

Validity

The content validity was obtained by giving the tools to 9 experts. The experts were selected on the basis of experience to related fields and interest in the problem area.

Reliability

Reliability of Critical Care Nurses Skills Competency Checklist to assess nurses competency level was computed by using inter-rater reliability method . The result was 1, indicating adequate reliability of the tool.

Reliability of Big Five Inventory (BFI) was computed by using Cronbach's alpha. The result was 0.98 for extraversion, 0.97 for agreeableness, 0.71 for conscientiousness, 0.96 for neuroticism and 1.00 for openness indicating adequate reliability of the tool.

Reliability of Quick Emotional Intelligence Test was 0.94 for emotional awareness, 0.98 for emotional management, 0.97 for social emotional awareness indicating adequate reliability of the tool.

Results and Interpretations

Demographic characteristics

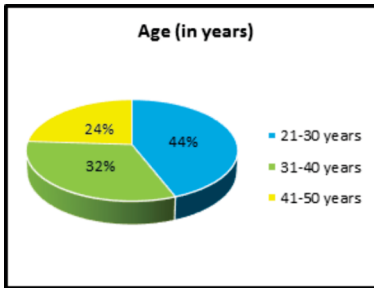


Figure 3 Pie diagram showing the percentage distribution of nurses according to their age (in years).

The data presented in figure 3 shows that 44%, 32% and 24% were in the age group of 21-30 years, 31-40 years and 41-50 years respectively.

n=100

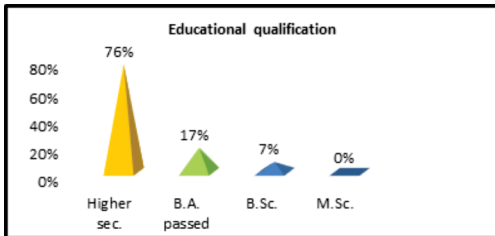


Figure 4 Bar diagram showing the percentage distribution of nurses according to their educational qualification.

The data presented in figure 4 shows that majority of the respondents, 76% have completed their higher secondary, 17% completed their B.A, 7% have completed their B.Sc. and none of them had M.Sc. qualification.

n=100

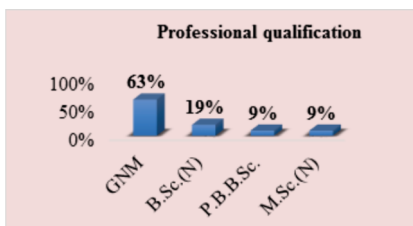


Figure 5 Bar diagram showing the percentage distribution of nurses according to their professional qualification.

The data presented in figure5 shows majority that is, 63% of nurses were professionally qualified as G.N.M, followed by 19%, 9% and 9% as B.Sc. Nursing, P.B.B.Sc. Nursing and M.Sc. Nursing respectively.

n=100

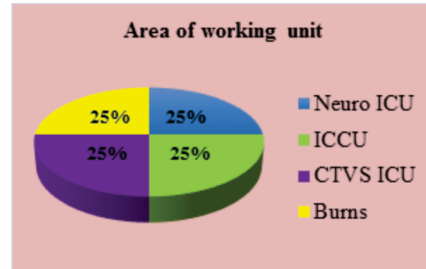


Figure 6 Pie diagram showing the percentage distribution of nurses according to their area of working unit.

The data presented in figure 6 shows that 25% of nurses were working in neurology ICU, 25% in ICCU, 25% in CTVS ITU and 25% in Burns respectively.

n=100



Figure 7 Pie diagram showing the percentage distribution of nurses according to their total years of working experience.

The data presented in figure 7 shows that 49%, 29% and 22% of nurses had >6 years, 1-3 years and 4-6 years of experience respectively as a professional nurse.

Findings related to assessment of competency level of nurses

Table 2 Frequency and percentage distribution of nurses according to competency level of nurses.

n=100

Competency level scores	Frequency	Percentage(%)
Low (0-25)	Nil	-
Good (26-50)	Nil	-
Quite good (51-75)	26	26
Very good (76-100)	74	74
Maximum possible score=100		

Data presented in table 2 shows the frequency and percentage distribution of the competency level of nurses. The findings reveal that majority 74% of nurses rated their competency as very good, 26% as quite good and none of them rated their competency as good or low.

Table 3 Range, mean, median and standard deviation of competency level of nurses.

Variable	Range	Mean	Median	SD
Competency level	50-100	79.08	80	3.53
Maximum possible score for each domain=100				

Data presented in table 3 shows that competency level score obtained by the nurses ranged from 50-100 with a mean of 79.08 and median 80, so it can be interpreted that the competency scores were normally distributed. The standard deviation calculated was 3.53 which indicates a moderate

dispersion of competency scores among the nurses.

Findings related to assessment of personality traits of nurses.

Table 4 Frequency and percentage distribution of nurses according to personality traits score.

n=100

Personality trait Domain	Low (5-13)		Average (14-22)		High (23-30)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Low (0-25)	Nil	-	68	68	32	32
Good (26-50)	Nil	-	29	29	71	71
Quite good (51-75)	Nil	-	08	8	92	92
Very good (76-100)	53	53	46	46	01	1
Very good (76-100)	Nil	-	41	41	59	59

Data presented in table 4 shows that 68% of nurses were having average extraversion which means they have moderate energy and enthusiasm; enjoy others company, but also desire a degree of privacy, 32% had high extraversion which means the respondents were high spirited, active, outgoing, extraverted, sociable; prefer to be around people most of the time and none of them had low extraversion in their personality trait.

Findings also reveal that majority, 71% of nurses were having high agreeableness which means they are co-operative and avoid conflict, tender, softhearted, sympathetic and selfless, 29% had average agreeableness which means these nurses usually remains warm, trusting and agreeable, but can be stubborn and competitive when required and none of them had low conscientiousness in their personality trait.

It also shows that majority, 92% were having high conscientiousness which means they have high standards and high level of focus on achieving goals; conscientious, reliable and well organized, 8% of the nurses had average conscientiousness which means they were generally organized and dependable but can relax and let things go; can efficiently work but can put work aside and none of them had low conscientiousness.

It also depicts that 53% nurses were having low neuroticism which means that these nurses readily experience negative emotions (anxiety, sadness, anger), they are reactive to stress; sensitive, prone to mood dips and swings, 46% nurses had average neuroticism which means that they are typically calm and handle stress well but occasionally had negative moods (anxiety, sadness, anger); emotional upsets rarely last very long and only 1 (1%) had high neuroticism in their personality trait which means she was emotionally very relaxed, stable, calm and secured; typically remained relaxed even under stress; seldom feel anxious or nervous.

It also shows that 59% were having high openness which means the nurses were imaginative, reflective, abstract,

Table 6 Domain wise frequency and percentage distribution of scores of emotional intelligence of nurses.

n=100

Score Domain	(0- 24)		(25-34)		(35-40)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Emotional Awareness	65	65	28	28	07	7
Emotional Management	25	25	62	62	12	12
Social Emotional Awareness	40	40	48	48	12	12
Relationship Management	34	34	56	56	10	10

Maximum possible score for each domain=40

Score (0-24) - Area for enrichment: Requires attention and development

Score (25-34 -Effective functioning: Considers strengthening

Score (35-40) - Enhanced skills: Uses as leverage to develop weaker areas

creative; had many interests; were very liberal and seek variety and change, 41% had average openness which means they prefer a balance between old values and new ones; they are practical but fairly open to change and none of them had low openness in their personality trait.

Table 5 Range, mean, median and standard deviation of personality traits score of nurses.

n=100

Personality traits	Range	Mean	Median	SD
Extraversion	14-30	21.48	22	4.24
Agreeableness	17-29	24.2	26	2.12
Conscientiousness	22-30	25.95	26	1.41
Neuroticism	7-21	13.15	13	1.41
Openness	16-30	23.23	24	2.83

Maximum possible score for each domain=30

Minimum possible score for each domain=5

Data presented in table 5 shows that nurses with a personality trait of extraversion ranged between 14 -30 with mean score of 21.48 and median 22 which indicates that the personality trait of extraversion scores were almost normally distributed among the nurses. The standard deviation calculated was 4.24 which shows moderate dispersion in the obtained personality trait scores.

It also shows that the nurses with a personality trait of agreeableness ranged between 17 -29 with mean score of 24.2 and median 26 which indicates that the personality trait of agreeableness scores were almost normally distributed among the nurses. The standard deviation calculated was 2.12 which shows a mild dispersion in the obtained personality trait scores.

Findings show the nurses with a personality trait of conscientiousness ranged between 22 -30 with mean score of 25.95 and median 26 which indicates that the personality trait of conscientiousness scores were almost normally distributed among the nurses. The standard deviation calculated was 1.41 which shows a mild dispersion in the obtained personality trait scores.

Findings also depict the nurses with a personality trait of neuroticism ranged between 7 -21 with mean score of 13.15 and median 13 which indicates that the personality trait of neuroticism scores were almost normally distributed among the nurses. The standard deviation calculated was 1.41 which shows a mild dispersion in the obtained personality trait scores.

It also shows the nurses with a personality trait of openness ranged between 16 -30 with mean score of 23.23 and median 24 which indicates that the personality trait of openness scores were almost normally distributed among the nurses. The standard deviation calculated 2.83 which shows a mild dispersion in the obtained personality trait scores.

Findings related to assessment of emotional intelligence of nurses

Data presented in table 6 shows that in the domain of emotional awareness,65% of nurses requires attention and development which means there is a need in this area for enrichment, 28% of nurses requires strengthening their emotional awareness for effective functioning in their emotional awareness and only 7% of nurses used leverage to develop weaker areas of emotional awareness which means they had enhanced skills related to this area.

Findings also show that in emotional management,25% of nurses requires attention and development which means there is a need in this area for enrichment, 62% of nurses needs strengthening for effective functioning of their emotions and 12% of nurses used leverage to develop weaker areas of emotional management which means they had enhanced skills related to emotional management.

Findings also depicts that in social emotional awareness, 40% of nurses requires attention and development which means there is a need in this area for enrichment, 48% of nurses requires strengthening their social emotional awareness for effective functioning and 12% of nurses used leverage to develop weaker areas of social emotional awareness which means they had enhanced skills related to this area.

It also shows that in relationship management, 34% of nurses requires attention and development which means there is a need in this area for enrichment, 56% of nurses requires strengthening their relationship management for effective functioning and only 10% of nurses used leverage to develop weaker areas of relationship management which means they had enhanced skills related to this area.

Table 7 Range, mean, median and standard deviation of emotional intelligence of nurses.

n=100

Emotional intelligence Domain	Range	Mean	Median	SD
Emotional awareness	11-40	25.05	25	7.07
Emotional management	13-40	28.08	27	2.12
Social emotional awareness	13-40	25.86	26	2.12
Relationship management	3-40	27.23	30	1.41

Maximum possible score for each domain = 40

Data presented in table 7 shows that the nurses emotional awareness scores ranged from 11-40 with mean of 25.05 and median 25. This indicates that emotional awareness scores were almost normally distributed among the nurses. The standard deviation calculated was 7.07 which shows moderate dispersion in the obtained emotional awareness scores.

Data also depict that the nurses emotional management scores ranged from 13-40 with mean of 28.08 and median 27. This indicates that emotional management scores were almost normally distributed among the nurses. The standard deviation calculated was 2.12 which indicates mild dispersion in the obtained emotional management scores.

Findings also reveal that the nurses social emotional awareness scores ranged from 13-40 with mean of 25.86 and median 26. This indicates that social emotional awareness scores were almost normally distributed among the nurses. The standard deviation calculated was 2.12 which shows mild dispersion in the obtained social emotional awareness scores.

Data also shows that the nurses relationship management scores ranged from 3-40 with mean of 27.23 and median 30. This indicates that relationship management scores were almost normally distributed among the nurses. The standard deviation calculated was 1.41 which shows mild dispersion

in the obtained relationship management scores.

Findings showing the relationship between level of competency and personality traits among nurses.

Table 8 Correlation coefficient and their significance between level of competency and different domain of personality traits of nurses.

Variables	Mean	r value	t value
Competency level vs Extraversion	79.08 21.48	0.13	1.298*
Competency level vs Agreeableness	79.08 24.2	0.06	0.189
Competency level vs Conscientiousness	79.08 25.95	-0.09	-0.895
Competency level vs Neuroticism	79.08 13.15	-0.14	-1.399
Competency level vs Openness	70.08 23.23	0.01	0.099

Data presented in table 8 shows the relation between level of competence and personality trait of extraversion. The calculated mean competency level was 79.08 and the mean personality trait of extraversion was 21.48. The calculated 'r' between them was 0.13 with a 't' value of 1.298 which is statistically significant at 0.05 level of significance hence it can be interpreted that there was a low positive correlation between competency level of nurses and their personality trait of extraversion that means as the extraversion personality trait of nurses increases from low to high, competency level also increases significantly.

It also shows the relation between level of competence and personality trait of agreeableness, the calculated mean competency level was 79.08 and the mean personality trait of agreeableness was 24.2. The calculated 'r' between them was 0.06 with a 't' value of 0.189 which reveals low limited degree of positive correlation between competency level of nurses and their personality trait of agreeableness.

Data also depict the relation between level of competence and personality trait of conscientiousness, the calculated mean competency level was 79.08 and the mean personality trait of conscientiousness was 25.95. The calculated 'r' between them was -0.09 with a 't' value of -0.895 which reveals a negative correlation between competency level of nurses with their personality trait of conscientiousness that means with an increase in the conscientiousness personality trait, competency level decreases.

It also shows the relation between level of competence and personality trait of neuroticism, the calculated mean competency level was 79.08 and the mean personality trait of neuroticism was 13.15. The calculated 'r' between them was -0.14 with a 't' value of -1.399 which reveals a negative correlation between competency level of nurses with their personality trait of neuroticism that means with an increase in the neuroticism personality trait, competency level decreases. It also shows the relation between level of competence and personality trait of openness, the mean calculated competency level was 79.08 and the mean personality trait of openness was 23.23. The calculated 'r' between them was 0.01 with a 't' value of 0.099 which reveals a low limited positive degree of correlation between competency level of nurses and their personality trait of openness.

Findings showing the relationship between level of

competency and emotional intelligence among nurses.
Table 9 Correlation coefficient and their significance between level of competency and different domain of emotional intelligence of nurses.

Variables	Mean	'r' value	't' value
Competency level vs Emotional awareness	79.08	0.18	1.812*
	25.05		
Competency level vs Emotional management	79.08	0.17	1.107*
	28.08		
Competency level vs Social emotional awareness	79.08	0.10	0.396*
	25.86		
Competency level vs Relationship management	79.08	0.11	1.095*
	27.23		

't' df (98)=0.195, p<0.05*

Data presented in table 9 shows the relation between level of competence and emotional awareness, the calculated mean competency level was 79.08 and the mean emotional awareness was 25.05. The calculated 'r' between them was 0.18 with a 't' value of 1.812 which is statistically significant at 0.05 level of significance which indicates that there is a low positive correlation between competency level of nurses and their emotional awareness, that is, the staff nurses with high emotional awareness have a slightly higher level of competency than the others.

It also shows the relation between level of competence and emotional management, the calculated mean competency level was 79.08 and the mean emotional management was 28.08. The calculated 'r' between them was 0.17 with a 't' value of 1.107 which is statistically significant at 0.05 level of significance. This indicates that there is a low positive correlation between competency level of nurses and their emotional management, that is, the staff nurses with good emotional management exhibits a slightly higher level of competency.

It also shows the relation between level of competence and social emotional awareness, the calculated mean competency level was 79.08 and the mean social emotional awareness was 25.86. The calculated 'r' between them was 0.10 with a 't' value of 0.396 which is statistically significant at 0.05 level of significance which can be interpreted that there is a low positive correlation between competency level of nurses and their social emotional awareness, that is, the staff nurses with good social emotional awareness, had slightly higher level of competency.

It also shows the relation between level of competence and relationship management, the calculated mean competency level was 79.08 and the mean relationship management was 27.23. The calculated 'r' between them was 0.11 with a 't' value of 1.095 which is statistically significant at 0.05 level of significance. This indicates that there is a low positive correlation between competency level of nurses and their relationship management, that is, the staff nurses who maintained a good relationship management exhibits a slightly higher level of competency.

CONCLUSION

Based on the findings of the study it can be concluded that majority nurses rated their competency as very good. the present study also showed significant relationship between personality trait of extraversion with nurses competency. it also showed that positive correlation between nurses competency and overall emotional intelligence which was found statistically significant.

REFERENCES

1. Definition of Nursing [Internet], 2018 available from : <http://www.icn.ch/who-we-are/icn-definition-of-nursing>.
2. Nursing staff. Available from [http://www.aspirinminds.com/nursing staff](http://www.aspirinminds.com/nursing%20staff).
3. Emotional Intelligence. Available from [http://en.wikipedia.org/ wiki/ emotional intelligence](http://en.wikipedia.org/wiki/emotional_intelligence).
4. Emotional Intelligence theory. Available from <http://www.slideshare.net>.