

A STUDY TO ASSESS THE EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING EMOTIONAL INTELLIGENCE (EMOTIONAL QUOTIENT) AND ITS RELATION WITH PROFESSIONAL SUCCESS AMONG STAFF NURSES OF A SELECTED HOSPITAL IN HASSAN

Mr. Kallesh B., Assistant Professor, Department of Psychiatric Nursing, Government College of Nursing, Hassan, Mobile No.: 8105363632; Email ID: kallesh.bandre@gmail.com

Mr. Somashekara S T, Assistant Professor, Psychiatric Nursing Department, Government college of Nursing, Hassan, Mobile No: 7353278827; Email ID: somu.Khalli@gmail.com

Ms. Pushpalatha H. P., Assistant Professor, Department of Obstetrics and Gynaecological Nursing, Government College of Nursing, DC Residency Behind, Hassan – 573201, Mobile No.: 9972729187; Email ID: hppushpalatha@gmail.com

Ms. Jayaveena G. T., Assistant Professor, Department of Child Health Nursing, Government College of Nursing, Hassan, Mobile No.: 9663862300; Email ID: jayaveenagt@gmail.com

Abstract

This evaluative study assessed the effectiveness of a Self-Instructional Module (SIM) on knowledge regarding Emotional Intelligence (EI) and its relationship with professional success among staff nurses at a selected hospital in Hassan. Recognizing that healthcare quality depends heavily on nursing competencies, and that EI is a critical soft skill for career success and patient care, the study utilized a purposive sampling technique and a structured knowledge questionnaire to measure outcomes before and after the intervention. Results revealed a substantial baseline knowledge deficit, which significantly improved from a pre-test mean score of 44.4% to a post-test mean of 86.9%. The calculated *t*-value confirmed that the SIM was highly effective in increasing knowledge, while χ^2 analysis demonstrated significant associations between post-test scores and the respondents' gender, family type, previous knowledge, and source of information. Ultimately, the study concludes that structured self-instructional modules are effective educational tools for enhancing nurses' understanding of emotional intelligence, thereby equipping them for better professional performance.

Key words: Effectiveness, SIM, Knowledge, Emotional Intelligence (EI), Staff nurses.

Introduction

Every individual is born with innate intellectual and emotional potential that develops through maturity and experience. Emotional Intelligence (EI) describes the ability to monitor, discriminate, and utilize emotional information from oneself and others to guide thinking and actions (Salovey & Mayer, 1990). Historically, intelligence was viewed primarily through a cognitive lens, defined by Wechsler (1944) as the global capacity to act purposefully, think rationally, and deal effectively with the environment. However, cognitive intelligence (IQ) accounts for only about 20% of life success, leaving the remaining 80% largely dependent on EI (Goleman, 1995).

Emotions and thinking significantly overlap and cannot be viewed completely apart from each other (Ellis, 1962). While IQ determines whether an individual possesses the cognitive capacity to handle technical complexities within a field, EI serves as a much stronger predictor of professional success, leadership efficiency, and personal well-being (Bar-On, 1997). The core components of EI include self-awareness, emotional regulation, motivation, empathy, and social skills. Fortunately, unlike fixed cognitive traits, EI competencies are not static; they represent learned capabilities that can be actively cultivated and developed to improve mental, physical, and social health (Mayer & Salovey, 1997).

Need for the Study

While modern organizations possess tools and technology to manage information, nothing replaces the human capacity to master emotions within interpersonal and professional domains. In highly stressful, emotionally charged environments like healthcare, practitioners face immense demands from patients, families, and regulators (Lanser, 2000). Healthcare delivery requires not only academic and clinical expertise but also deep emotional literacy to handle events bound with illness, trauma, and death (Cooper & Sawaf, 1997).

This is particularly critical in the nursing profession, where the "nurse-patient interaction" serves as the core of clinical practice. High EI among nursing professionals is directly correlated with a collaborative style of conflict resolution, reduced workplace anxiety, and superior clinical performance (Morrison, 2008). Conversely, practitioners who are over-stressed or disillusioned experience severe burnout, directly compromising patient-centered care. In developing countries like India, this issue is exacerbated by low nurse-to-patient ratios; research indicates that an overwhelming 87.4% of staff nurses experience high levels of occupational stress (Bhatia & Kishore, 2010).

Despite its evident value, more than half of practicing nurses exhibit low overall levels of emotional intelligence, and EI training remains largely absent from formal nursing curricula (Srinivasan & Samuel, 2016). Because nurse emotional intelligence has a direct, positive correlation ($r = 0.59$) with the quality of services delivered in hospitals, there is an urgent need to evaluate current knowledge levels and implement targeted interventions (Sharma, 2016). Assessing frontline staff and introducing structured educational tools, such as Self-Instructional Modules, is essential to enhance EI capabilities, mitigate professional stress, and optimize patient outcomes.

OBJECTIVES OF THE STUDY

- To assess the existing knowledge regarding emotional intelligence (emotional quotient) and its relation with professional success among staff nurses.
- To evaluate the effectiveness of self-instructional module on knowledge regarding emotional intelligence (emotional quotient) and its relation with professional success among staff nurses.
- To find the association between post-test knowledge score of staff nurses and their selected demographic variables.

HYPOTHESES:

H₁- There will be a significant difference between mean pre-test and post-test knowledge scores regarding emotional intelligence (emotional quotient) and its relation with professional success.

H₂ - There will be significant association between post-test knowledge scores of staff nurses and their demographic variables.

OPERATIONAL DEFINITIONS:

- **Effectiveness:** It refers to significant increase in level of knowledge of staff nurses regarding Emotional Intelligence (Emotional Quotient) and its relation with professional success.
- **Self-Instructional Module:** It is one of the educational materials that help individualized learning about the Emotional Intelligence (Emotional Quotient) and its relation with professional success.
- **Knowledge:** It refers to information and facts given by staff nurses regarding Emotional Intelligence (Emotional Quotient) and its relation with professional success by responding to the structured knowledge questionnaire.
- **Emotional Intelligence:** The capacity to be aware of, control, and express one's emotions and to handle interpersonal relationship judiciously and empathetically.
- **Staff Nurses:** In this study it refers to registered staff nurses working in a selected hospital in Hassan.
- **Professional success:** Professional success is what we are aiming for in our professional life, or our place of work.

ASSUMPTIONS:

- Staff nurses may have some knowledge regarding Emotional Intelligence (Emotional Quotient) and its relation with professional success.
- Self-instructional module may improve the knowledge of staff nurses regarding Emotional Intelligence (Emotional Quotient) and its relation with professional success.

DELIMITATIONS:

- Study is delimited to the 40 staff nurses who are available at the time of data collection.
- Study is delimited to the staff nurses who are working in selected hospital in Hassan.
- The study is limited to 40 staff nurses available during data collection period.

RESEARCH METHODOLOGY

RESEARCH APPROACH

A research approach provides the overall direction for conducting a study and guides the selection of appropriate methods for data collection and analysis. The present study adopted an **evaluative approach**, which is suitable for measuring the effectiveness of an intervention by finding out how well a programme or procedure is working. This approach was selected to determine the effectiveness of a **Self-Instructional Module (SIM)** on knowledge regarding Emotional Intelligence and its relation with professional success among staff nurses by comparing their pre-test and post-test knowledge scores.

RESEARCH DESIGN

The study employed a **One-Group Pre-test and Post-test Pre-experimental Research Design**. A single group of staff nurses was assessed using a pre-test (O_1), followed by the administration of the Self-Instructional Module (X). A post-test (O_2) was conducted on the 7th or 8th day using the same structured questionnaire to evaluate the effectiveness of the intervention.

VARIABLES OF THE STUDY

- **Independent Variable:** The Self-Instructional Module (SIM).
- **Dependent Variable:** Knowledge of staff nurses regarding emotional intelligence and its relation with professional success.
- **Extraneous Variables:** Age, sex, income, type of family, education status, religion, marital status, and previous exposure to information.

SETTING OF THE STUDY

The study was conducted at **Sri Chamarajendra Hospital at Hassan**. This setting was selected because the subjects were easily available and motivated to participate.

POPULATION, SAMPLE, AND SAMPLING TECHNIQUE

The target population comprised staff nurses working in selected hospitals at Hassan. The sample consisted of **40 staff nurses** working at Sri Chamarajendra Hospital at Hassan, selected using a **purposive sampling technique**.

- **Inclusion Criteria:** Staff nurses working in Sri Chamarajendra Hospital, Hassan, who were present during data collection and willing to participate.
- **Exclusion Criteria:** Staff nurses who were not present during data collection or were unwilling to participate.

DEVELOPMENT OF THE SELF-INSTRUCTIONAL MODULE (SIM)

The Self-Instructional Module was prepared based on the study objectives, an extensive review of literature, and suggestions obtained from expert consultations. The content focused on emotional intelligence and its relation to professional success. The module went through content validation by experts, and necessary modifications were incorporated into the final draft before implementation.

DESCRIPTION OF THE TOOL

A **Structured Knowledge Questionnaire** was used for data collection. The tool consisted of two parts:

- **Part I:** Socio-demographic profile containing 10 items (Age, Gender, Religion, Marital Status, Educational Status, Professional education, Speciality in M.Sc. or PhD (N) if done, Previous Knowledge, and Source of Information).
- **Part II:** A structured knowledge questionnaire consisting of **40 items** covering four distinct areas:
 - *Aspect-I:* General information about professional success and emotional intelligence.
 - *Aspect-II:* Factors responsible for the development of EI.
 - *Aspect-III:* Importance of EI in the nursing profession.
 - *Aspect-IV:* Measurement of EI.

Each correct answer was assigned a score of one, and every wrong answer received a score of zero, resulting in a maximum score of 40 and a minimum score of 0.

VALIDITY AND RELIABILITY

Content validity of the tool and the SIM was established by **08 experts**, including one psychiatrist, one statistician, one psychiatric social worker, and five psychiatric nursing experts. Reliability was established using the **split-half Karl Pearson correlation method**. The reliability coefficient of the structured questionnaire was found to be 0.97, and the corrected reliability of the total tool was 0.98, indicating high reliability and feasibility.

PILOT STUDY

A pilot study was conducted from **17 April 2018 to 24 April 2018** at Sri Chamarajendra Hospital, Hassan, to evaluate the effectiveness of the SIM, determine statistical analysis methods, and assess the feasibility of the final study. The findings confirmed that the study design was highly feasible.

DATA COLLECTION PROCEDURE

Formal administrative permission was obtained from the District Surgeon of Sri Chamarajendra Hospital at Hassan. The main study was conducted from **28 January 2015 to 04 February 2015**. After explaining the objectives and gaining consent, the investigator administered a pre-test using the structured knowledge questionnaire, which took approximately 45 minutes. The SIM was distributed immediately following the pre-test on the same day. A post-test

was conducted on the 8th day using the identical questionnaire to evaluate the effectiveness of the module, with participants taking around 40 minutes to complete it.

PLAN FOR DATA ANALYSIS

The collected data were analyzed using descriptive and inferential statistics based on the study objectives.

Descriptive Statistics

- **Frequency and percentage distributions** were used to analyze the socio-demographic data of the staff nurses.
- **Mean, mean percentage, and standard deviation** were implemented to assess the baseline and post-intervention knowledge levels.

Inferential Statistics

- **Paired *t*-test** was used to determine the significance of the intervention and assess the overall effectiveness of the SIM.
- **Chi-square (χ^2) test** was applied to find statistically significant associations between post-test knowledge scores and selected socio-demographic variables.

RESULTS

Table 1: Classification of Respondents by Personal Characteristics

N=40

Characteristics	Category	Number of Respondents	Percent (%)
Age group (years)	21–30	14	35.0
	31–40	10	25.0
	41–50	9	22.5
	51–60	7	17.5
Gender	Male	23	57.5
	Female	17	42.5
Marital status	Married	40	100.0
	Unmarried	0	0.0
Professional qualification	GNM	13	32.5
	Basic BSc (Nsg)	9	22.5
	PcBSc (Nsg)	9	22.5
	MSc (Nsg)	9	22.5
Specialty in Post graduation	Mental health nursing	3	7.5
	Medical surgical nursing	2	5.0
	Child health nursing	2	5.0
	OBG	3	7.5
	Community health nursing	0	0.0
	No Specialty / Non-PG	30	75.0

The demographic profile of the 40 staff nurse respondents reveals a relatively young and mature workforce, with the largest age segment falling between 21 and 30 years old (35.0%), followed by 25.0% in the 31 to 40 age bracket, while the remaining 40.0% are distributed among those aged 41 to 60. In terms of gender distribution, males comprise the majority at 57.5%, while females account for 42.5%. Notably, 100% of the sample group is married. Regarding their professional qualifications, the distribution is fairly balanced; general nursing midwives (GNM) represent the highest proportion at 32.5%, whereas basic BSc, post-certificate BSc, and MSc nursing graduates each evenly comprise 22.5% of the respondents. Furthermore, a significant majority of the participants (75.0%) do not hold a postgraduate specialty, while the remaining 25.0% who do are split closely between mental health nursing (7.5%), obstetrics and gynecological nursing (7.5%), medical-surgical nursing (5.0%), and child health nursing (5.0%).

Table 2: Overall Pre-test and Post-test Mean Knowledge Scores

N=40

Aspects	Max. Score	Mean	SD	Mean (%)	SD (%)	Paired t-Test
Pre-test	40	17.75	2.7	44.4	6.9	24.81*
Post-test	40	34.05	3.5	85.1	8.9	
Enhancement	40	16.30	4.2	40.8	10.4	

*Significant at 5% level, $t_{(0.05,39df)} = 1.96$

The staff nurses' baseline pre-test mean knowledge score was low at 17.75 (44.4%). Following the implementation of the Self-Instructional Module, this score rose significantly to 34.05 (85.1%), marking a clear knowledge enhancement of 16.30 (40.8%). The calculated paired t-value of 24.81 vastly exceeds the critical table value of 1.96 ($p < 0.05$), proving that the intervention statistically and significantly improved the nurses' understanding. This confirms the research hypothesis (H_1) and demonstrates that the Self-Instructional Module was highly effective.

Table 10: Association Between Demographic Variables and Post-Test Knowledge Level

N = 40

Demographic Variables	Category	χ^2 Value	P-Value (Table Value)
Age group (years)	21–30 / 31–40 / 41–50 / 51–60	1.50	$P > 0.05$ (7.815) ^{NS}
Gender	Male / Female	4.68	$P < 0.05$ (3.841) *
Professional Qual.	GNM / BSc / PcBSc / MSc	0.36	$P > 0.05$ (7.815) ^{NS}
Specialty (PG)	MH / MS / Child / OBG / No	1.91	$P > 0.05$ (9.488) ^{NS}
Religion	Hindu / Muslim / Christian	0.83	$P > 0.05$ (5.991) ^{NS}
Type of family	Joint / Nuclear	4.29	$P < 0.05$ (3.841) *
Family income/month	₹25k–35k / ₹35k–50k / ₹50k–1L	1.47	$P > 0.05$ (5.991) ^{NS}
Previous knowledge	Yes / No	6.50	$P < 0.05$ (3.841) *
Source of info.	Self / Training / Media / No	9.78	$P < 0.05$ (5.991) *

*Significant at 5% Level; ^{NS} Non-significant

The Chi-square (χ^2) analysis demonstrates that gender ($\chi^2 = 4.68$), type of family ($\chi^2 = 4.29$), previous knowledge ($\chi^2 = 6.50$), and source of information ($\chi^2 = 9.78$) are statistically significant factors ($P < 0.05$) influencing the post-test knowledge scores of the staff nurses. Females, individuals from nuclear families, those claiming no prior knowledge, and those with formal education/training profiles scored significantly higher in the "Adequate" knowledge category. Conversely, baseline variables such as age, professional qualification, postgraduate specialty, religion, and monthly family income showed no statistically significant association ($P > 0.05$) with the post-test knowledge levels.

Conclusion

This study successfully demonstrated that the Self-Instructional Module (SIM) is a highly effective educational tool for addressing a significant baseline knowledge deficit among staff nurses regarding emotional intelligence and its positive impact on professional success. While the study faced internal validity and generalization constraints due to its small, non-probability sample ($N=40$) and the absence of a control group or long-term follow-up, the significant post-test knowledge improvements emphasize critical implications across nursing dimensions. Specifically, these findings highlight the need for nursing administration and education to incorporate continuous training programs, workshops,

and scientific research on emotional literacy, ultimately equipping nurses with the psychological competencies and technical expertise necessary to deliver superior, patient-centered care and achieve career fulfillment.

Acknowledgements

The investigator expresses sincere gratitude to the District Surgeon, Nursing Superintendent, and authorities of Sri Chamarajendra Hospital, Hassan, for granting permission and supporting this study. Heartfelt thanks are extended to the 40 staff nurses who willingly consented and actively completed the pre-test, Self-Instructional Module, and post-test. Their cooperation made this study successful.

Conflicts of Interest

The authors declare no financial, personal, or professional conflicts of interest regarding the design, conduct, data analysis, or reporting of this study.

Funding and Sponsorship

This study received no financial support or sponsorship from any funding agency. All expenses related to the development of the Self-Instructional Module and data collection were borne entirely by the investigator.

Ethical Considerations and Informed Consent

Administrative approval was obtained from the District Surgeon of Sri Chamarajendra Hospital, Hassan. The objectives of the study were explained to all eligible staff nurses prior to data collection. Informed consent was obtained from each subject, and complete confidentiality, anonymity, and voluntary participation were maintained throughout the study.

References

1. Bar-On, R. (1997). *The Bar-On Emotional Quotient Inventory (EQ-i): A measure of emotional intelligence*. Toronto, Canada: Multi-Health Systems.
2. Bhatia, N., & Kishore, J. (2010). Occupational stress among staff nurses in tertiary care hospitals of Delhi. *Journal of Communicable Diseases*, 42(4), 287–292.
3. Cooper, R. K., & Sawaf, A. (1997). *Executive EQ: Emotional intelligence in leadership and organizations*. New York: Grosset/Putnam.
4. Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: Lyle Stuart.
5. Goleman, D. (1995). *Emotional Intelligence: Why it can matter more than IQ*. New York: Bantam Books.
6. Lanser, E. G. (2000). Why EQ affects your bottom line. *Healthcare Executive*, 15(6), 18–22.
7. Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). New York: Basic Books.
8. Morrison, J. (2008). The relationship between emotional intelligence and conflict handling styles of professional nurses. *Journal of Nursing Management*, 16(8), 976–983.
9. Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211.
10. Sharma, A. (2016). Impact of nurses' emotional intelligence on quality of services in hospitals. *Indian Journal of Health and Wellbeing*, 7(5), 539–543.

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