

Nursing Teaching Staff's Memory and its Relation to their Performance, Achievement Motivation and Meaning of Life in Zagazig University

Nashwa Ahmed Hussein ⁽¹⁾, Sayeda Ahmed Abdel- Latif ⁽²⁾
& Hanaa Hamdy Ali ⁽³⁾

⁽¹⁾ Demonstrator in Psychiatric and Mental Health Nursing, Faculty of Nursing, Zagazig University, ⁽²⁾ Professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Cairo University, ⁽³⁾ Lecturer of Psychiatric and Mental Health Nursing, Faculty of Nursing, Zagazig University

Abstract:

Background: It is true that the success of the individual in his every-day business, profession, trade or other occupation depends very materially upon the possession of a good memory. **Aim** of the present study was to assess nursing teaching staff's memory and its relation to their performance, achievement motivation and meaning of life in Zagazig University. **Research design:** A descriptive correlation design was selected in carrying out this study. **Setting:** The present study was conducted at faculty of nursing in Zagazig University. **Sample:** A purposive sample consisted of all nursing teaching staff working at faculty of nursing in Zagazig University during data collection. **Tools** used to collect the data were; Socio-demographic data sheet, performance scale, Memory assessment clinic s-self rating scale, Achievement motivation scale and Meaning of life scale. **Results** of the present study showed that there was a highly positive statistical significant correlation between memory and performance while there was a highly negative statistical significant correlation between memory and meaning of life, but there wasn't not any correlation between memory and achievement motivation. **Conclusion:** It was concluded that memory was positively correlated with performance and negatively correlated with meaning of life; while memory wasn't correlated with achievement motivation. **Recommendations:** The study recommended that a training program for demonstrators to enhance their memory and guidelines of how to deal with memory problems according to the organizational hierarchy should be conducted.

Keywords: Memory, Nursing teaching staff, Performance, Achievement Motivation and Meaning of Life

Introduction:

No single mental ability is more important to personal success than a powerful memory. While most adults and children have the capacity for phenomenal memory, few ever know the simple secrets of harnessing this amazing ability. ⁽¹⁾

Memory is viewed as part of a repertoire of behavior designed to fulfill specific goals. For example, autobiographical memory functions to build and maintain personal identity and self-concept; prospective memory functions to enable an individual to carry out plans and intentions; spatial

memory functions so that an individual can navigate in the environment and everyday memory is essentially about the norms and habits of memory function rather than being concerned with the limits of capacity. ⁽²⁾

Nursing Educators are at the heart of ensuring a good quality of life for learners with special educational needs, regardless of where their education takes place and to enhance their performance, teachers could, and should, be drawing upon the best available evidence as they plan and implement their teaching. ⁽³⁾

Performance is a sequence of responses aimed at modifying the environment in specified ways. This "sequence of responses" includes the behaviors of an examinee what an examinee says, does, or creates and also defined as "simply the execution of an action."⁽⁴⁾

Achievement motivation refers to motivation stemming from a desire to perform well or a striving for success. It is evidenced by effort and persistence in the face of difficulties. It is regarded as a central human motivation and is a key determinant of aspiration and persistence when an individual expects that his or her performance will be evaluated on the basis of some standard of excellence.⁽⁵⁾

Meaning of life is typically referred to as a sense of coherence or understanding of existence, a sense of purpose in one's life, the pursuit and attainment of worthwhile goals, and an accompanying sense of fulfillment. Meaning in life is assumed to be cognitive in nature. The cognitive dimension of meaning in life includes beliefs that there is an ultimate purpose in life, beliefs in moral laws, and beliefs in afterlife. The operationalization of meaning in life is having meaningful goals and motives for goal striving.⁽⁶⁾

Significance of the problem:

Since time immemorial, humans have tried to understand what memory is, how it works and why it goes wrong. It is an important part of what makes individuals truly human, and yet it is one of the most elusive and misunderstood of human attributes. Memory is an integral part of all our daily activities. Nursing is one of the most significant and visible professions in the world. Memory is essential for the effective functioning for the nursing process system;

improve the quality of care and save the time. For educators; memory is the only evidence that something or anything has been learned. Educators must ensure that students attend to learning, attach new learning to previous learning, actively engage in learning, construct meaning and demonstrate their learning. All of this requires memory. So this study will be obtained a database about nursing teaching staff's memory and its relation to their performance, achievement motivation and meaning of life in Zagazig University and to provide guidelines of management.

Aims of the study:

The aim of the current study was to: assess nursing teaching staff's memory and its relation to their performance, achievement motivation and meaning of life in Zagazig University.

Research questions:

- What is the relationship between nursing teaching staff's memory and performance?
- What is the relationship between nursing teaching staff's memory and achievement motivation?
- What is the relationship between nursing teaching staff's memory and Meaning of life?

Subjects and Methods:

Research design:

A descriptive correlational design was utilized in this study.

Setting:

The present study was conducted at faculty of nursing, Zagazig University.

Subjects:

All nursing teaching staff working at the faculty of nursing, Zagazig University during the data collection (85).

Inclusion criteria:

All nursing teaching staff (nursing faculty members and their assistants. Nursing faculty members (emeritus professors, professors, assistant professors and lecturers. Faculty assistants (assistant lecturers and demonstrators).

Exclusion criteria:

Nursing teaching staff who refuse to participate in the study.

Sampling technique:

A Purposive sampling technique was used; All nursing teaching staff working at faculty of nursing were recruited in the sample.

Tools of data collection:

Four tools were used to collect the necessary data about the study subjects as the following:

Tool (I):

- **Part (1): Socio-demographic data sheet used to:** A specialized designed structured Socio-demographic data sheet .It was developed based on the review of currently related literature and used by the researcher to collect the necessary data about the subjects., it includes age, residence, department, position, marital status, number of children, number of years of teaching experience, an average income, and physical health, political family problems and any job stressors.
- **Part (2): Performance scale:** this scale was constructed by the investigator according to current related researches based on quality standards. Each of nursing teaching staff measured their performance by themselves (self rating scale). This scale includes seven competencies (planning, cognitive competencies, Personal competencies, professional

competencies, professional development, Productivity and Activities and projects).

- Each of these competencies has specific performance standards. Each of these standards measured by specific performance indicators. Responses were measured on 4-point likert scale .The four categories for scoring system are: 1) always, 2) often, 3) sometimes and 4) rarely, where the first response get 3 grades, second response get 2 grades, third response get 1 grades and fourth response get 0 grade. High scores of performance indicate high performance.

Tool (II): Memory assessment clinic s-self rating scale (MAC-S) designed and revised by Winterling et al. ⁽⁷⁾ .This scale evaluates one's insight into one's own memory function. This is a scale about the nature and frequency of memory failures experienced in daily life. It measure 3 specific factors namely, memory ability, global memory ability in various situations and frequency of memory problems .It consists of 49 items and assessment is measured on 5-point likert scale. It has test retest high reliability and concurrent validity adopted by Crook and Larrabea ⁽⁸⁾ with correlation ranging from .88 to .92 on memory ability, from .90 to .93 on frequency and .45 to .85 on the global scores. High scores on the scales indicate good subjective memory and low scores indicate a poor subjective memory.

Tool (III): Achievement motivation scale designed by Duda and Nicollas ⁽⁹⁾ translation and codification by Khadr ⁽¹⁰⁾ and re-codification by Abdul Khalik ⁽¹¹⁾ .This scale assess achievement motivation. It consist of 20 items and assessment is measured on 3-point likert scale .The three categories for scoring system are: 1) completely

agree, 2) often agree and 3) disagree ,where the first response get 3 grades , second response get 2 grades and third response get 1 grade. High scores indicate high achievement motivation and low scores indicate low Achievement motivation.

Tool (IV): Meaning of life scale:

Construction and re-codification was done by Abdul Khalik.⁽¹¹⁾ It consists of 70 items and assessment is measured on 3-point likert scale .The three categories for scoring system are: 1) completely agree, 2) often agree and 3) disagree, where the first response get 3 grades, second response get 2 grades and third response get 1 grade. High scores indicate high meaning of life and low scores indicate low meaning of life.

Content Validity:

The performance scale was tested for clarity, relevance, applicability, comprehensiveness, understanding and ease for implementation by "five" experts: all of them are professors from Psychiatric and Mental Health Nursing Department at the Faculty of Nursing, Cairo University, According to their opinions, minor modifications were applied.

Pilot study:

A pilot study was conducted on 9 nursing teaching staff included in total sample size to assess the applicability of the data collection tools arrangements of items, estimate the time needed for each sheet and the feasibility of the study and acceptance to be involved in the study.

Field work:

- **The tool construction phase:** Performance scale was taken up to 3 months to be constructed by the investigator from June to August and one month (September) for validity. During data collection

performance scale was put after memory scale according to their (Arabic-English) arrangement to facilitate data collection and data entry.

- **The preparatory phase:** It was done by obtaining a list of the names of nursing teaching staff from College Administration Department. Then obtaining an official permission from the Dean of the Faculty of Nursing for the approval to conduct the study and get access to nursing teaching staff list of names from College Administration Department.
- **The implementation phase:** It was executed in three months started on October, 2012 and was completed by the end of December, 2012. was the actual contact with the nursing teaching staff to clarify the objective of the study and the applied methodology and giving the same instructions; each subject was given the opportunity to fill-in the scales under guidance and supervision of the researcher to answer any question to avoid omitting any item of tool such as defining the meaning of the last question of socio-demographic data if the subjects have any physical problems, political, family problems and job stressors or any other problems. The subjects can select more than one and put an example for their selection. Then describe the schedule of memory clinic self rating scale which measures 3 specific factors namely, memory ability ranking from very poor to very good, global memory ability in various situations and frequency of memory problems ranking from very often to very rarely .The time when the tools were distributed to the subjects ranged from 9AM to 3PM. The

time needed to fill the tools ranged from half an hour to an hour.

- **The final phase:** At the end of the study, poster about guidelines of memory improvement was made by the investigator. In addition to this the investigator made a page in face book (Memory Clinic) that concerned with listing memory researches evidence that backs up much of the advice and techniques about memory improvement.

Administrative and ethical considerations:

An official permission was obtained from the Dean of the Faculty of Nursing to obtain their permission for data collection. Ethical issues were taken into consideration during all phases of the study. Prior to the initial interview, verbal explanation of the nature and the aim of the study have been explained to all nursing teaching staff included in the study sample. They have the right to refuse or to participate or to withdraw from the study at any time, and they were assured that the information would be utilized confidentially and used for the research purpose only.

Statistical analysis:

Data were analyzed using (SPSS windows) version 20. Numerical data were expressed as mean \pm SD. Qualitative data were expressed as frequency and percentage. Difference between qualitative variables was tested by using chi square. Relations between different numerical variables were tested using Pearson correlation. Probability (p-value) less than 0.05 was considered significant and less than 0.001 was considered as highly significant. Microsoft office excel software was used to construct the needed graphs.

Level of significance:

For all statistical tests done, the threshold of significance was fixed at the 5% level (p-value). A p-value $>$ 0.05 indicates non significant result and the p-value $<$ 0.05 indicates a significant results and the p-value is the degree of significance. The smaller the p-value obtained, the more significant is the result, the p-value being the probability of error of the conclusion.

Results:

Figure (1, 2, 3, and 4): describe the frequency of nursing teaching staff various study variables (memory, performance, Achievement motivation and meaning of life.

Concerning memory, **figure (1)** shows that 49.4% of the studied sample had fair subjective memory, 31.8% of the studied sample had good subjective memory. Also this figure demonstrates that 18.8% had poor subjective memory.

Concerning performance, **figure (2)** shows that 51.8% of the studied sample had higher performance, 27.1% of the studied sample had middle performance. Also this figure demonstrates that 21.2% had low performance.

Related to achievement motivation, **figure (3)** Reveals that 65.9% of the studied sample had higher Achievement motivation, 31.8% of the studied sample had middle Achievement motivation. Also this figure demonstrates that 2.4% had low Achievement motivation.

Also **figure (4)** shows that about half of the studied sample had higher meaning of life 58.5%. Also this figure demonstrates that 34.5% had middle Meaning of life.

Table (1): demonstrates the correlation between different study

variables. Memory had highly statistical significant correlation with performance ($r=.339$). While there was a negative correlation between memory and meaning of life ($r=-.227$) and there wasn't any correlation between memory and achievement motivation. Concerning meaning of life, it had a highly positive correlation with performance and achievement motivation ($r=.48$ & $.320$) respectively. This table also reveals that achievement motivation had a positive correlation with performance ($r=.283$).

Table (2): reveals the Correlation between socio-demographic characteristics of the studied sample and different study variables. Age had a positive correlation with meaning of life and performance respectively ($r=.261$). This table also reveals that position had a negative correlation with (memory & meaning of life) ($r=-.227$ & $-.241$) respectively. Also it had a highly negative correlation with performance ($r=-.292$). Also this table shows that years of experience had a positive correlation with (achievement motivation & meaning of life ($r=.218$ & $.269$)) respectively. While years of experience had a highly positive correlation with performance ($r=.307$). The same table illustrates that performance had a positive correlation with an average income ($r=.218$). This table also displays that achievement motivation had a positive correlation with physical health problems ($r=.233$).

Table (3): shows the correlation between performance elements and their scoring as reported by nursing teaching staff. This table demonstrates that 69.4% of the studied sample had high personal competencies, 54.1% of the studied sample had high cognitive competencies and 51.8% of the studied sample had high professional competencies. While 76.5% of the

studied sample had low activities and projects.

Discussion:

As regards memory and performance, the findings of the present study indicated that memory had a highly positive statistical significant correlation with performance. Similarly, Littlepage et al.,⁽¹²⁾ indicated that transactive memory system facilitated group performance. Group performance was higher when members differed in ability and when they allocated more work to the more proficient member.

TMS serves as one important means of enhancing both teamwork process and project team performance.⁽¹³⁾ This finding conducted that having a mature TMS can effectively enhance performance directly and indirectly through improving communication and coordination process. Moreover revealed that concurrent task performance significantly mediated the emotional enhancement of memory under divided attention.⁽¹⁴⁾

This finding suggests that having a better memory increases our ability to learn and retain information, it makes us more productive at work, it makes us feel more competent around handling the things that we need to do day to day and it makes us more tractable to the other people in our life.⁽¹⁵⁾ Regarding to memory and achievement motivation, the current study findings showed that no statistical correlation had found between memory and achievement motivation. These findings consistent with Ngaosuvan and Mantyla⁽¹⁶⁾ who conducted that extrinsic motivation has minimal effects on memory performance when factors contributing to item-specific biases during encoding and retrieval are taken into account. In the same line, Murayama and Elliot⁽¹⁷⁾ who indicated that achievement goals

had no significant effects on overall recognition performance.

This study indicates that our processing of new information might not be related to our achievement drives. So this study suggested that it is important to consider differentiation with regard to the timing of recognition assessment when studying motivation and memory. The results also suggested that the motives are moderately stable across memories and over time.

As for memory and meaning of life, the current study revealed that memory had a negative correlation with meaning of life. Similarly, Chung⁽¹⁸⁾ who confirmed that meaning of life did not significantly influence memory as predicted. These results contradicted with Mackay and Bluck⁽¹⁹⁾ who reported that vividness of meaning of life correlated to memory.

This may be that factor regression analysis of memory rating deviate toward the left to low scoring but factor regression analysis of meaning of life rating deviate toward the right to high scoring and made this negative statistical significant correlation. This may also due to the fact that the memory is intact regardless highly satisfied meaning of life which means that more powerful memory is not affected or influenced by meaning of life (personal variable).

Conclusion:

In the light of the main study findings, it can be concluded that, memory was positively correlated with performance and negatively correlated with meaning of life, while memory wasn't correlated with achievement motivation.

Recommendations:

On the basis of the most important findings of the study, the following recommendations are suggested:

- Continuous assessment of the memory status should be provided for the nursing teaching staff.
- A training program and an annual course should be conducted for demonstrators to enhance their memory in the form of conferences, seminars and workshops.
- Academic institution should work hardly and plan to enhance their staff achievement through avoiding the structural performance to increase the horizon for the nursing teaching staff.
- Raise the awareness about the concept of meaning of life among the nursing teaching staff.
- Staff development aiming at developing the faculties performance especially activities & projects and professional development.

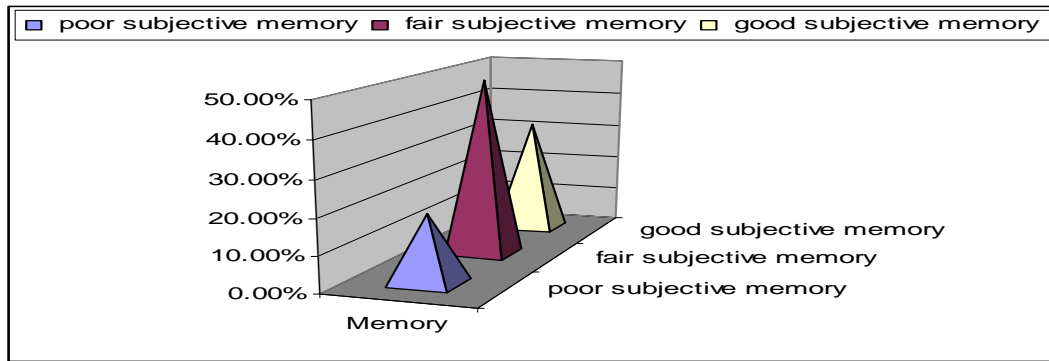


Figure (1): Frequency of memory among nursing teaching staff (n=85)

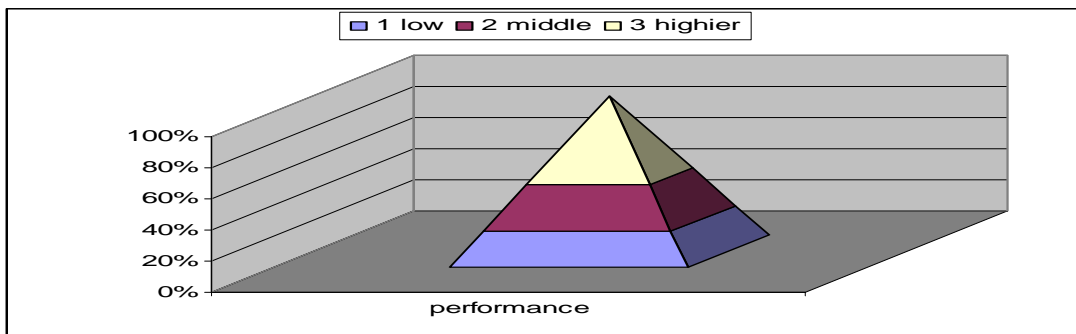


Figure (2): Frequency of performance among nursing teaching staff (n=85)

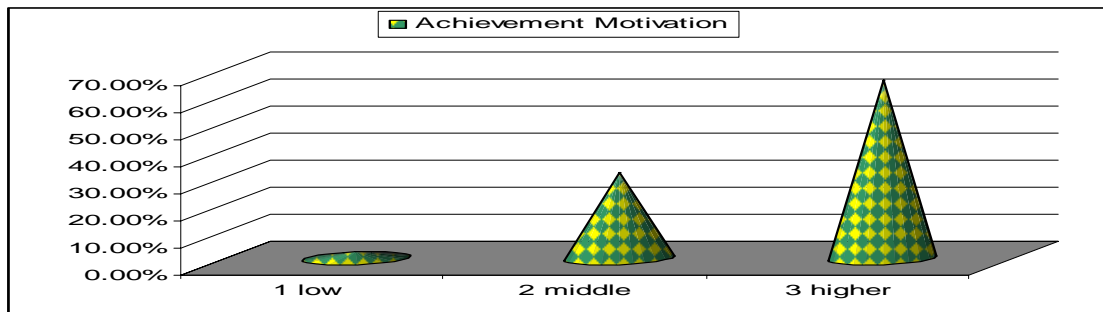


Figure (3): Frequency of achievement motivation among nursing teaching staff (n=85)

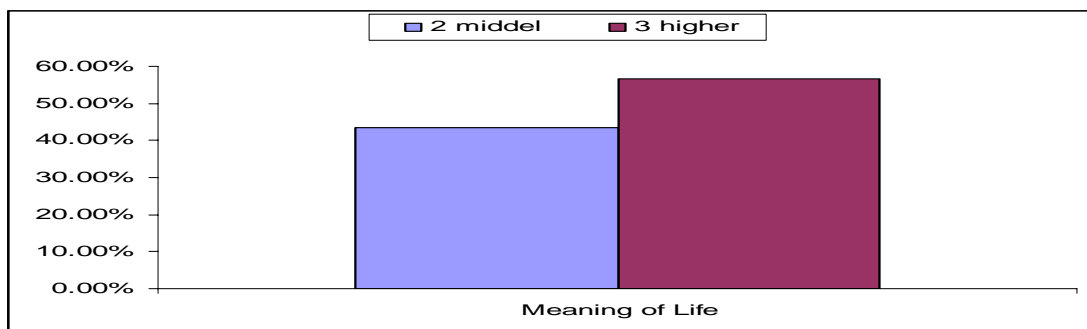


Figure (4): Frequency of meaning of life as reported by nursing teaching staff (n=85)

Table (1): Correlation between different study variables

Variable	Memory		Meaning of life		performance	
	p	r	p	r	p	r
▪ Memory	-	-	.037	-.227'	.002	.339"
▪ performance	.002	.339"	.000	.48"	-	-
▪ Achievement Motivation	-	-	.003	.320"	.009	.283'

Correlation is significant at the 0.01 level (2 tailed)

Table (2): Correlation between socio-demographic characteristics of the studied sample and different study variables

Variable	Memory		performance		Achievement motivation		Meaning of life	
	p	r	p	r	p	r	p	r
▪ Age	.058	.206	.016	.261'	.338	.105	.016	.261'
▪ position	.037	-.227'	.007	-.292"	.220	-.135	.26	-.241'
▪ Department	.966	.005	.506	.073	.733	.038	.451	.083
▪ Years of experience	.087	.187	.004	.307"	.046	.218'	.013	.269'
▪ Average income	.157	.155	.045	.218'	.850	.021	.149	.158
▪ Physical problems	.178	-.148	.885	.016	.032	.233'	.912	.012

* *Correlation is significant at the 0.05 level (2-tailed).*

** *Correlation is significant at the 0.01 level (2-tailed).*

Table (3): Correlation between performance subscale and their scoring as reported by nursing teaching staff

Performance elements	Nursing teaching staff (n=85)					
	Low		Middle		High	
	p	r	p	r	p	r
▪ Planning	11	12.9	31	36.5	43	50.6
▪ Cognitive Competencies	14	16.5	25	29.4	46	54.1
▪ Personal Competencies	3	3.5	23	27.1	59	69.4
▪ Professional Competencies	14	16.5	27	31.8	44	51.8
▪ professional Development	40	47.1	8	9.4	37	43.5
▪ Productivity	17	20.0	29	34.1	39	45.9
▪ Activities& Projects	65	76.5	20	23.5	-	-
▪ total staff performance	18	21.2	23	27.1	44	51.8

Correlation is significant at the 0.01 level (2 tailed)

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