

Impact of Teaching Time on Attention and Concentration

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Abstract: Attention is the most powerful asset of human beings, and if correctly used, it can have numerous benefits. At the same time it is very difficult to master. A descriptive survey was conducted to assess the impact of teaching time that is classes for two hour, on attention and concentration of student nurses. The study was conducted in selected College of Nursing, Dehradun, Uttarakhand, INDIA. Ninety one student nurses were selected by simple randomization. Data was collected through self-reported checklist. Majority, 95% of the students, were between the age group of 18 – 22 years. Forty five percent students were from GNM group and 55% students were from B.Sc. group. Result shows that 44% students had good attention and concentration, 46% students had an average attention and concentration and 10% of students had poor attention and concentration score during the teaching - learning activities.

Keywords: Attention, Concentration, Teaching Learning Activities and Student Nurses

I. Introduction

Attention is a complex cognitive process of selecting important issues and ignoring those which are less important. Attention and concentration both are equally important for the physiological and behavioural responses. When an individual is conscious, she/he possesses two types of attention, active and passive. Active attention is a voluntary process of increased alertness, concentration, interest and needs of a person. Curiosity and hunger are the stimulants for active attention. Passive attention can be said to be an involuntary cognitive process which easily gets distracted by any external stimuli.

Transient attention is for a short period of time approximately 8 seconds. Selective sustained attention helps the person to concentrate and focus on stimuli for a longer period of time. Attention span is the total time given by an individual to concentrate on any particular activity without getting distracted. According to Hartley and Davis the attention span of an average adult on a particular topic is for 10-20 minutes at a time. Mild change in mental focus helps the individual to regain attention for another few minutes. Further, it depends on the interest of the person. There are many factors which can reduce the attention span of a person, such as, fatigue, hunger, noise, external stimuli, emotional and mental status

Middendorf and Kalish did a study to assess the ability of the students to recall content taught during a lecture. Results show that most of the students were able to recall the initial content of the lecture which indicates that they were more attentive during the beginning of class and gradually they become less attentive. This study reveals that to achieve full attention and concentration of the students, lengthy classes should have breaks or some learning activities, to make the class enjoyable.

1.2 Need of the study

Attention helps a person in gaining knowledge. A class with pin-drop silence represents a well attentive class and helps the students to pay full attention to the topic. It is important for the students to pay attention and concentrate because it enhances their competency and skill to memorize the content for a longer period of time. There are many factors which can affect attention and concentration of students in the classroom, such as duration and method of teaching, novelty and repetition of topic, surrounding environment, interest, health and emotional status. If students do not pay attention during teaching learning activities, they will be involved in other activities such as private conversations, dropping pen or pencils, excessive movement of body parts, passing notes to others.

The environment of a professional college is very challenging. When an individual enters in a professional college as a student she/he has to prepare himself for higher education which demands attention and concentration during classes for future growth. According to Laurillard each student enters in college with their individual qualities such as, motivation, expectations, knowledge retention capacity, skill, experience, and ability to concentrate and solve problems, and access to student support facilities. These variables influence their capacity to learn and retain the content during teaching learning activities. This applies to student nurses also. They need to gain expertise in theory and practical subjects, to help them maintain professional standards and

dignity. If a student nurse will not sustain attention and concentration during teaching learning activities, then it will affect the quality of their knowledge and skills. To get the full attention and concentration, we need to know various contributing factors which distract students to learn effectively. The present study was aimed to find various factors which may influence attention and concentration of student nurses during teaching and learning activities.

1.3 Statement of problem

A study to assess the impact of Teaching Time on Attention and Concentration of Student Nurses of selected College of Nursing, Dehradun, 2013

1.4 Objectives

1. To assess the impact of teaching time on attention and concentration of student nurses.
2. To find association between characteristics of subjects and their attention and concentration.

II. Methodology

The research design used for this study was descriptive survey in nature. The study was conducted in a Nursing College of Dehradun. Total 91 subjects (50 from B.sc Nursing and 41 from GNM) from senior classes were selected by simple random technique who qualified using eligibility criteria of the study. Tools used for the study involved two sections. Section A was about sample characteristics (includes age, gender, class/group and duration of class preferred by the students) and Section B contains Self reported checklist (includes various factors which can distract the students during class). Tools were prepared by the researchers and content validity was ensured by submitting the tools to experts. Ethical permission was obtained from the ethical committee of the parent institute prior to data collection. Data was collected and analyzed by descriptive analysis.

III. Results And Findings

3.1 Sample Characteristics

According to Table no 1 86 (95%) students were between the age group of 18 – 22 years followed by five (5%) in the age group of 23–27 years. Out of 91 samples, 11 (12%) were male and 80 (88%) were female. Forty one (45%) students were from GNM group and 50 (55%) students were from B.Sc. group. Regarding language of instruction, six (7%) students preferred Hindi, 16 (17%) students preferred both Hindi and English, while majority of students 69 (76%) preferred English as the language of instruction. Seventy nine (87%) students preferred one hour classes and 12 (13%) preferred two hours classes.

Table No. 1: Frequency and Percentage Distribution of Sample Characteristics (N=91)

Variables	Frequency (f)	Percentage (%)
Age (in years)		
18-22	86	95%
23-27	05	05%
Gender		
Male	11	12%
Female	80	88%
Class		
GNM	41	45%
B.Sc.	50	55%
Language preferred by the students for class		
Hindi		
English	06	07%
Both	69	76%
	16	17%
Preferred time duration of classes		
One hour	79	87%
Two hours	12	13%

3.2 Attention and Concentration score

Table No 2: Attention and Concentration score of samples(N=91)

	Mean ±SD	Median	Mode
Attention and concentration Score	13.5 ±2.9	14	16

Data presented in Table no 2 shows that the mean of self reported practice checklist was 13.5 with standard deviation 2.9, median was 14 and mode was 16 respectively. According to available scores, the data was divided into three categories, good, average and poor.

3.3 Categories of Attention and Concentration

Data presented in Table no 3 shows that 40 (44%) students had good attention and concentration, 42 (46%) students had average attention and concentration and nine (10%) students had poor attention and concentration during lengthy teaching - learning activities.

Table no.3: Frequency and Percentage Distribution of the Three Categories of Attention and Concentration(N=91)

Categories	Range	Frequency (f)	Percentage (%)
Poor	(05-09)	9	10%
Average	(10-14)	42	46%
Good	(15-19)	40	44%

3.4 Association Between Sample Characteristics With Attention Concentration Score

Table No. 4: Association Between Attention And Concentration Score And Samples Characteristics (N=91)

Variable	Median and above median	Below median	Chi square
Age			
18-22	51	35	0.15
23-27	02	03	
Gender			
Male	03	08	3.27
Female	49	31	
Class			
GNM	22	19	0.64
B.Sc. Nursing	31	19	
Language preferred by the for class			
Hindi	06	00	NA
English	39	30	
Both	7	9	
Preferred time for class			
One hour	46	33	0.28
Two hours	06	06	

Chi square value = 3.84, NA= Not applicable

The data presented in Table no 4 depicts a statistically non-significance association between attention and concentration score and samples characteristics such as age (0.15), gender (3.27), class (0.64), medium of instruction and time preferred (0.28) by the students at $p < 0.05$ level of significance. Chi-square was computed to find association between attention and concentration score and baseline data of the samples.

IV. Conclusion

From the finding of this study, it can be concluded that most of the students lose attention and concentration during lengthy teaching learning activities and there was no significant association between sample characteristics with attention and concentration score of the students.

V. Recommendation

Based on this study, it can be recommended that lengthy lectures should have breaks, small group discussions or other learning activities, which enhances attention and concentration of students and make the learning interesting.

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References

- [1]. Calkins SD, Fox NA. Self-regulatory processes in early personality development: A multi level approach to the study of childhood social withdrawal and aggression. *Development and Psychopathology*. 2002;14:477–498.
- [2]. Posner MI, Rothbart MK, Fiske F, Kazdin K, Schacter S. Research on attention networks as a model for the integration of psychological science. *Annu Rev Psychol*. 2007;58:1–23.
- [3]. Khan Salman, Why long lectures are ineffective, oct 02. 2012, cited on 15th May 2014, URL available on <http://ideas.time.com/2012/10/02/why-lectures-are-ineffective/>
- [4]. Eichenbaum H, Yonelinas AP, Ranganath C. The medial temporal lobe and recognition memory. *Annu Rev Neurosci* 2007
- [5]. Merriam, S. B. & Caffarella, R.S.(1999). *Learning in adulthood: A comprehensive guide*. San Francisco, CA: Jossey- Bass Inc).
- [6]. Marois R, Ivanoff J. Capacity limits of information processing in the brain. *Trends Cogn Sci*. 2005;9:296–305.
- [7]. Posner MI, Snyder CR, Davidson BJ. Attention and the detection of signals. *Journal of Experimental Psychology: General*. 1980;109:160–174.
- [8]. Eger E, Henson RN, Driver J, Dolan RJ. BOLD repetition decreases in object-responsive ventral visual areas depend on spatial attention. *J Neurophysiol*. 2004;92:1241–47.
- [9]. Uncapher MR, Hutchinson JB, Wagner AD. Dissociable effects of top-down and bottom-up attention during episodic encoding. *Journal of Neuroscience*. 2011;31:12613–28.
- [10]. Rueda MR, Posner MI, Rothbart MK. The development of executive attention: Contributions to the emergence of self-regulation. *Developmental Neuropsychology*. 2005;28:573–594.
- [11]. Eisenberg N, Spinrad TL, Fabes RA, Reiser M, Cumberland A, Shepard SA, Murphy B. The relations of effortful control and impulsivity to children’s resiliency and adjustment. *Child Development*. 2004;75:25–46.