



A STUDY OF SELF-PRODUCED DISTRACTERS IN MEDICAL STUDENTS AT SYRIAN PRIVATE UNIVERSITY

Youssef Latifeh^{1,2}, Omar Ebrahim¹, Dina Al Kabbani¹ and Mhd Nezar Alsharif*¹

¹Department of Internal Medicine, Faculty of Medicine, Syrian Private University, Rif Dimshq, Syria.

²Department of Psychiatry, Faculty of Medicine, Damascus University, Damascus, Syria.

Article Received on
21 December 2018,

Revised on 11 Jan. 2019,
Accepted on 01 Feb. 2019

DOI: 10.20959/wjpps20192-13179

*Corresponding Author

Dr. Mhd Nezar Alsharif

Department of Internal
Medicine, Faculty of
Medicine, Syrian Private
University, Rif Dimshq,
Syria.

ABSTRACT

Objective: This research aimed to study the personal and physiological factors of distraction among medical students. **Materials and Methods:** This is a cross sectional study including medical students at faculty of medicine of Syrian Private University during the academic year 2017/2018. We had 306 participants. A self-administered questionnaire, which included demographic information such as gender, academic year, age, and others, was given to the students. **Results:** Our study included 306 participants divided to 190 males (62.1%) and 116 females (37.9%). We found that the most common personal distracters were being hungry in lecture. In our study with 268 participants (88.4%) not affected by eating, drinking or gum chewing. **Conclusion:** Attention and Concentration are very important

to get efficient work, loss of focus and lack of concentration can lead to many problems in the future.

KEYWORDS: Attention, self-produced Distraction, medical students.

INTRODUCTION

The words attention and concentration are interchangeably used, yet they are quite different. Concentration is essential for success with in teaching. Concentration is significantly based on focusing on the present effortlessly, regardless of the past or future. On the other hand, attention is defined as withdrawal from some things in order to deal efficiently with other things. Distraction is simply defined as difficulty in concentration. In other words, the distracted person does not execute the duty, but is focused on unrelated things whether in

himself/herself or within the surrounding environment. Distracters are divided into self-produced distracters and external distracters. Self-produced distracters means that the person is the cause of distraction, while external distracters means that there is an external or an outside factor causing the distraction. Students in any community are considered the future of the society. Therefore continuous development of teaching techniques and education methods in order to limit the distracters of all types is crucial for the development of an efficient students and hence a better society.^[1,2]

Up to our knowledge, this study is the first of its type in Syria.

MATERIALS AND METHODS

This is a cross sectional study including medical students at faculty of medicine of Syrian Private University during the academic year 2017/2018. We had 306 participants. The Ethics Committee of the Syrian Private University approved our research protocol. A self-administered questionnaire, which included demographic information such as gender, academic year, age, and others, was given to the students. We did a validity and reliability test to determine the efficacy of the questionnaire. Then we did a pilot study of 30 medical students at Syrian Private University completed questionnaires. Cronbach's alpha was .81 for self-produces distractions which means that it was Acceptable level for the implementation of the proposal. SPSS software was used for analyzing the data statistics such as mean, standard deviation and frequency ratings.

RESULTS

Table 1: Demographic variables of our study.

| | | N | % |
|---------------------------|----------------------|-----|------|
| Gender | Male | 190 | 62.1 |
| | Female | 116 | 37.9 |
| Academic Year | 2 year | 67 | 21.9 |
| | 3 year | 68 | 22.2 |
| | 4 th year | 68 | 22.2 |
| | 5 th year | 64 | 20.9 |
| | 6 th year | 39 | 12.7 |
| Economic Status | Bad | 10 | 3.3 |
| | Median | 66 | 21.6 |
| | Good | 162 | 52.9 |
| | Excellent | 68 | 22.2 |
| Smoking | Yes | 121 | 41.9 |
| | No | 168 | 58.1 |
| Number of siblings | 0-2 | 104 | 34.5 |

| | | | |
|---------------------------------|----------------|------------------|------|
| | 3 | 64 | 21.3 |
| | 4 or more | 133 | 44.2 |
| Father Educational Level | Illiterate | 8 | 2.6 |
| | Primary | 26 | 8.5 |
| | Secondary | 70 | 22.9 |
| | Academic | 202 | 66.0 |
| Mother Educational Level | Illiterate | 22 | 7.2 |
| | Primary | 35 | 11.4 |
| | Secondary | 89 | 29.1 |
| | Academic | 160 | 52.3 |
| GPA | Mean | 2.4097(out of 4) | |
| | Std. Deviation | .45690 | |

Table 2: Responses of the Participants regarding internal Distractors (personal).

| Personal Causes of Distraction | | Response | | |
|--|---|----------------|-----------|------------|
| | | Not distracted | Sometimes | distracted |
| I get distracted when I sit at the desk close to my friends | N | 179 | 68 | 57 |
| | % | 58.9 | 22.4 | 18.8 |
| I get distracted because I think about my family | N | 190 | 69 | 47 |
| | % | 62.1 | 22.5 | 15.4 |
| I get distracted because I am busy with my plans with my friends after the classes | N | 214 | 52 | 40 |
| | % | 69.9 | 17.0 | 13.1 |
| I get distracted because I arrive late (at class) or leave early | N | 235 | 39 | 31 |
| | % | 77.0 | 12.8 | 10.2 |
| I get distracted because of my work in other subjects | N | 249 | 37 | 19 |
| | % | 81.6 | 12.1 | 6.2 |
| I get distracted when I hear the phone ringing | N | 220 | 50 | 31 |
| | % | 73.1 | 16.6 | 10.3 |
| I get distracted because of eating, drinking or gum chewing in the class | N | 268 | 21 | 14 |
| | % | 88.4 | 6.9 | 4.6 |
| I get distracted because I sit in the last desk | N | 174 | 49 | 82 |
| | % | 57.0 | 16.1 | 26.9 |
| I get distracted because of playing with pens, or things or papers | N | 253 | 32 | 20 |
| | % | 83.0 | 10.5 | 6.6 |
| I get distracted because of playing video games or using the mobile phone | N | 205 | 53 | 47 |
| | % | 67.2 | 17.4 | 15.4 |
| I get distracted when I think about my bad economical statuses | N | 265 | 20 | 20 |
| | % | 86.9 | 6.6 | 6.6 |
| I get distracted because of physical illness; coughing, in pain... | N | 219 | 44 | 41 |
| | % | 72.0 | 14.5 | 13.5 |
| I get distracted because I am busy thinking about familial problems at home | N | 229 | 46 | 29 |
| | % | 75.3 | 15.1 | 9.5 |
| I get distracted when there's a student from a different gender sitting beside me | N | 255 | 34 | 17 |
| | % | 83.3 | 11.1 | 5.6 |
| I get distracted in the lecture when I am hungry | N | 135 | 85 | 84 |
| | % | 44.4 | 28.0 | 27.6 |

Table 3: Responses of the Participants regarding internal distractors (Psychological):

| Psychological Causes of Distraction | | Response | | |
|--|---|----------------|-----------|------------|
| | | Not distracted | Sometimes | Distracted |
| I get distracted because I feel drowsy or asleep | N | 134 | 96 | 76 |
| | % | 43.8 | 31.4 | 24.8 |
| I get distracted because of imaginary thinking | N | 180 | 76 | 50 |
| | % | 58.8 | 24.8 | 16.3 |
| I get distracted because of emotional feelings | N | 224 | 51 | 30 |
| | % | 73.4 | 16.7 | 9.8 |
| I get distracted because I am anxious or stressed | N | 155 | 87 | 63 |
| | % | 50.8 | 28.5 | 20.7 |
| I get distracted because of daydreaming | N | 221 | 43 | 42 |
| | % | 72.2 | 14.1 | 13.7 |
| I get distracted because I think about bad things and wrongdoings | N | 253 | 35 | 17 |
| | % | 83.0 | 11.5 | 5.6 |
| I get distracted when I think about my bad economic status | N | 265 | 20 | 20 |
| | % | 86.9 | 6.6 | 6.6 |
| I get distracted because of physical illness; coughing, in pain... | N | 219 | 44 | 41 |
| | % | 72.0 | 14.5 | 13.5 |
| I don't know, I get distracted without knowing the reason | N | 159 | 56 | 87 |
| | % | 52.6 | 18.5 | 28.8 |

Table 4: Correlation between personal factors and psychological factors of distraction.

| | | | Count and Percentiles | | | | Chi Square Test | |
|---|----------------|-------|---|-----------|------------|-------|------------------|---------|
| | | | Percentages of student distracted caused by psychological factors | | | Total | Chi Square Value | p-value |
| | | | Not distracted | Sometimes | distracted | | | |
| Levels of student distracted caused by personal factors | Not distracted | N | 184 | 60 | 0 | 244 | 170.242 | 0.000* |
| | | % | 63.0% | 20.5% | 0.0% | 83.6% | | |
| | Sometimes | N | 12 | 32 | 1 | 45 | | |
| | | % | 4.1% | 11.0% | 0.3% | 15.4% | | |
| | distracted | N | 0 | 1 | 2 | 3 | | |
| | | % | 0.0% | 0.3% | 0.7% | 1.0% | | |
| Total | N | 196 | 93 | 3 | 292 | | | |
| | % | 67.1% | 31.8% | 1.0% | 100.0% | | | |

Our study included 306 participants divided to 190 males (62.1%) and 116 females (37.9%). The questionnaire was distributed among students from the second to the final year. Response rates of students from the second to the fifth year were similar around 21%, while the sixth year (final year) students' response rate was the lowest (12.7%). (Table 1).

Most of the participants had good economic status (52.9%) compared to (3.3%) who had bad economic status. Regarding smoking, most of the participants were nonsmokers 168 students (58.1%) compared to 138 students (41.9%) who were smokers. (Table 1).

We studied the number of siblings of the participants and we found that most of them had 3 children (21.3%). The questionnaire had a section about the GPA of the last year, because it could be affected by distraction. The mean GPA of the participants was 2.4 (out of 4) with a Std. Deviation of (0.457). (Table 1).

DISCUSSION

Regarding internal distractors (personal distractors), a similar study (3,4,5) found that phone ringing during class was the most common cause of distraction, while another study (6) found that it was one of the least common causes. In our study, phone ringing was neither the most nor the least common cause. (Table 2).

Eating, drinking or gum chewing which are a common cause of distraction in a similar study (6+7) was the least cause of distraction (personal). In our study with 268 participants (88.4%) not affected by it. (Table 2).

We found that the most common personal distractors were being hungry and sitting in the last desk during lectures with 84 (27.6%) and 82 (26.9%), respectively. (Table 2).

A similar study (5) found that drowsiness or sleeping during class was the most common internal distractor (psychological). In our study, 76 participants (24.8%) were distracted by feeling drowsy, which was the second most common cause preceded only by getting distracted for unknown reasons. (Table 3).

We found a significant statistical correlation between personal factors and psychological factors of distraction ($p=0.000$). 164 students (63%) were not distracted by neither of them. 60 students were only distracted sometimes by psychological factors (20.5%) compared to 12 students (4.1%) who were only distracted sometimes by personal factors. 32 students (11%) were distracted sometimes by either personal or psychological factors. Two students were always distracted by either personal or psychological factors. (Table 4).

Compliance with Ethical Standards

Funding: This study was not funded by any institution.

Conflict of Interest: The authors of this study have no conflict of interests regarding the publication of this article.

Ethical approval: The names and personal details of the participants were blinded to ensure privacy.

REFERENCES

1. Castle p, buckler s. how to be a successful teacher: strategies for personal and professional development: sage, 2009.
2. Aligolbandi, k., siamian, h., balaghafari, a., et al. comparative of distraction factors among male and female students of sari allied medical sciences' students. *materia socio-medica*, 2015; 27(6): 404-8.
3. Shelton jt, elliott em, eaves sd, exner al. the distracting effects of a ringing cell phone: an investigation of the laboratory and the classroom setting. *journal of environmental psychology*, 2009; 29(4): 513–521. [pmc free article] [pubmed]
4. Pottharst s. cell phones: a classroom distraction: *daily campus*, 2012. [updated tuesday, november 20 2012; cited 2013 2013.1.30]. available from: <http://www.smudailycampus.com/mobile/news/cell-phones-a-classroom-distraction-1.1079676>.
5. Attia na, baig l, marzouk yi, khan a. the potential effect of technology and distractions on undergraduate students' concentration. *pak j med sci.*, 2017; 33(4): 860-865.
6. Aligolbandi k, siamian h, balaghafari a, et al. comparative of distraction factors among male and female students of sari allied medical sciences' students. *mater sociomed*, 2015; 27(6): 404-8.
7. Mehralizadeh s, ghorbani r, zolfaghari s, et al. factors affecting student concentration in classroom: medical students' viewpoints in semnan university of medical sciences. *iranian journal of medical education*, 2013; 13(8): 663–671.