



Global Advanced Research Journal of Educational Research and Review (ISSN: 2315-5132) Vol. 4(3) pp. 043-047, March, 2015
Available online <http://garj.org/garjerr/index.htm>
Copyright © 2015 Global Advanced Research Journals

Full Length Research Paper

Limitations and Pitfalls of PowerPoint Presentations: Najran University Medical Students' Point of View

Abuobieda Bala Abusharib¹, Ihab Hamed Nourein², Mohammed Ayed Huneif³, Abdelrahman Mohamed Abdelrahman¹, Moawia Ali Elshaikh⁴

¹Assistant professor of Pathology, Department of Pathology, College of Medicine, Najran University, KSA.

²Department of Pathology, College of Medicine, Najran University, KSA.

³Assistant professor of Pediatric, Department of Pediatrics, College of Medicine, Najran University, KSA.

⁴Assistant professor of Community Medicine, Department of Community Medicine, College of Medicine, Najran University, KSA.

Accepted 26 March, 2015

This is a descriptive cross-sectional study conducted in Najran University College of Medicine in Saudi Arabia. The aim was to find out some of the disadvantages of the PowerPoint presentations from the students' points of views. Only undergraduate medical students were included in the study. A questionnaire was designed that includes demographic data along with other data about PowerPoint presentations. One hundred and ten students participated in this study voluntarily, data was collected and analyzed using Statistical package for Social Sciences (SPSS Program). Result showed out of the total (n=110), 95(86%) of the students believed that PowerPoint presentations have a lot of pitfalls and limitations. Approximately half of the students 57(52%) reported that the most boring factor in the presentations was the large number of slides being presented. About 60 (54%) of the students considered that dim light was the first distracting factor. Whilst 28(25%) said that the flying text or slides during changing to the next one is the most distracting factors. Whereas, 74(67%) of the group reported that twenty to thirty slides per one hour presentation is quite suitable slides number in the presentations. Additionally, 73(66%) quoted that only six bullets in one slide were a quite suitable for effective presentation. Finally, 83(75%) of the whole group stated that mixing PowerPoint with conventional method of whiteboard chalks and talks is the most effective method of teaching. The authors concluded that most of the students believed that PowerPoint presentations have a lot of limitation which can make the presentation dull and boring. Also it is concluded that the use of integrated methods of chalks and talks in association with PowerPoint presentation is the most effective and satisfying tool for the students.

Keywords: Medical Education, Disadvantage of PowerPoint presentation, teaching methods.

INTRODUCTION

PowerPoint is a simple program now can be found on approximately 250 million computers worldwide, thirty

million PowerPoint presentations take place each a day despite of that PowerPoint has been widely criticized as an ineffective tool for communication and learning. The majority of researches indicated that students love PowerPoint type presentations as a lecturing method (April et al., 2009; Mustafa and Hidayet, 2008). Their preference

*Corresponding Author E-mail abuobiedha@hotmail.com
Tel: +966563408555

for PowerPoint lectures in contrast to their beliefs is not accompanied by better academic performance (Lois, 2014; Russell and Joel, 2006). Interestingly, results from a Nigerian study done by Hassan et al (Abdul-Aziz et al., 2014), opposed this theory and concluded that PowerPoint presentations significantly improves the academic performance of medical students more than conventional lecture methods. However, the small sample size of the study may reduce the power of his findings. On the other hand, Meo SA et al suggested that integrated (PowerPoint and chalkboard) method of teaching was found more suitable tool for teaching and learning than PowerPoint or chalkboard alone (Meo SA et al., 2013).

Much has been written about PowerPoint and its limitations. An information design expert, believes that "PowerPoint is evil" and said "it is making us more stupid." And he quoted in his book "The Cognitive Style of PowerPoint: PowerPoint has many inherent limitations which may reduce learning outcomes; for example most audience are finished reading the slide even before the speaker begins his talk (Rick, 2013).

Disadvantages of PowerPoint may be induced by more than one factor i.e. irrelevant information in slides, neglect of interaction with students and uncontrolled speed in presentations or poor design of slides (Ding and Liu, 2012). Also, the speaker often seems compelled to turn towards the screen and to talk to the projection rather than to the audience. Adding to that, in PowerPoint presentations there is loss of balance between listening, reading, and writing activities as a three corner of learning tools (Russell and Joel, 2006).

Another weakness of using PowerPoint in the classroom is that it takes the focus away from the lecturer and the relevant content of the lecture as well as from the students, and places it entirely on the slides themselves. Nunberg (1999) argues that PowerPoint slides "have begun to take on a life of their own, as if they no longer needed talking heads to speak for them" (Lois , 2014).

A lot of questions need to be answered about PowerPoint presentations in education, Is the use of PowerPoint making us better teachers or is it instead just exposing more and more students to "death by PowerPoint"?. Are we, as Parker contends, concentrating more on "formatting slides – because it's more fun to do than concentrate on what [they're] going to say"? Moreover, if using PowerPoint does not produce the intended beneficial effects on learning, what can be done to improve its uses? (Lois, 2014; Rodney and Rickard, 2014)

OBJECTIVE

The primary objective of this study was to find out and analyze the disadvantages of the PowerPoint presentations from the medical student's point of view in Najran University-College of Medicine.

METHODS AND MATERIALS

This was a descriptive cross-sectional study conducted in College of Medicine - Najran University- KSA, during the period of Jan-Feb, 2015. A questionnaire was designed that includes demographic data along with other data about PowerPoint presentations, the questions for example included the preferable method of teaching, the suitable number of slides per one hour presentation, number of bullets per one slide and distracting and boring factors in the presentations. All (140) undergraduate medical students from the 2nd to 6th year received the questionnaire. One hundred and ten students were participated in the study voluntarily. Data was collected and analyzed using SSPS Software Program. Then the results were presented in the suitable frequencies tables and figures.

RESULTS

One hundred and ten students participated in this study, their ages were between nineteen and twenty-four years old, 95(86%) of the students believed that PowerPoint presentations have a lot of pitfalls and limitations. And approximately half of the whole group 57(52%) reported that the most boring factor in the presentations were the large number of slides being presented. Followed by 37(33%) who indicated that the large number of bullets in each slide was a second boring factor. While, only 16(14%) stated fast presentation without giving enough time for the discussion is the most boring element during the presentations (Figure 3).

On the other hand, 60(54%) of the students considered that dim light as the first and the most distracting factor. While, 28(25%) said the flying text or slides during changing to the next one is the most distracting factor. About, 13(11%) stated a lot of colors in the background and only 9(8%) of the group believe that music sounds used in the presentation is the most distracting element (Figure 2).

Seventy-four (67%) of the group reported that twenty to thirty slides per one hour is a suitable slide number in the presentation. But, 9(8%) said that up to forty slides were suitable, while no one of the group said more than forty slide is suitable in one hour time. Interestingly, 57(52%) stated that now in their lectures they were given more than forty slides in one hour time.

Additionally, 73(66%) said that only six bullets in one slide were quite suitable for effective presentation. While 28(25%) believe nine bullets is the best (Table 1). Finally, eighty-three (75%) of the whole group stated that mixing PowerPoint with conventional method of whiteboard chalks and talks is the most effective method while a minority 15(13%) believe that isolated PowerPoint presentation could be the most effective method for teaching (Figure 1).

Table 1 Student's response to the most boring factors & the suitable numbers of slides and bullets

Question	Answer options	Frequency	Percentage
The most boring factor is?	Large number of slides	57	51.8%
	Large number of bullets	37	33.6%
	Fast presentation	16	14.5%
The suitable Numbers of slides in one-hour presentation is?	10-20 slides	27	24.5%
	20-30 slides	74	67.3%
	30-40 slides	9	8.2%
The suitable numbers of bullets/slide is?	Three bullets	7	6.4%
	Six bullets	73	66.4%
	Nine bullets	28	25.5%
	Twelve bullets	2	1.8%

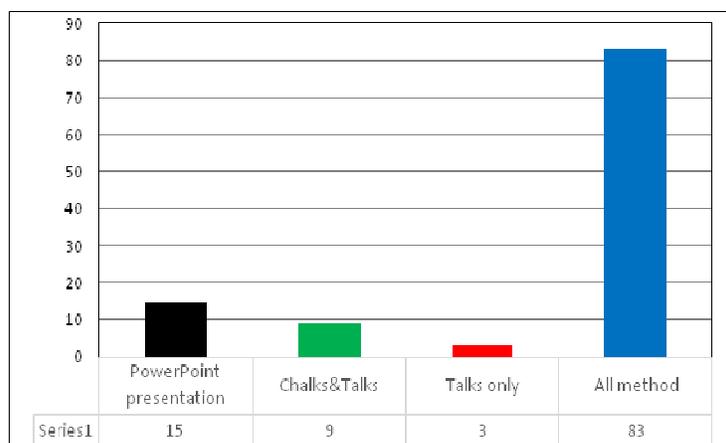


Figure I The preferable method of teaching to the students in the stud

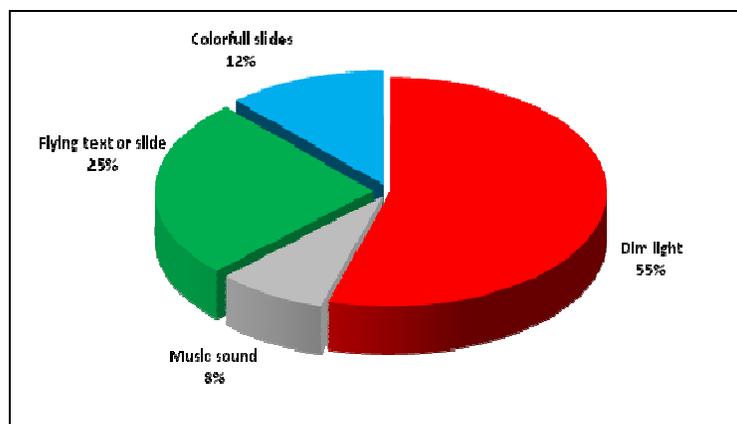


Figure (II) The most distracting factors during PowerPoint for the student in the study

DISCUSSION

Although PowerPoint presentation is a useful tool for teaching it is not without limitations and pitfalls, It has a negative impact on verbal and non-verbal communication between educators and their students, this can be explained by the focusing on the screen by the educators

and the students during the whole period of presentation, the majority of students in this study agreed that PowerPoint presentations have these weaknesses which completely consistent with Lois A. Jordan study (Lois , 2014). Additionally, most of the educational experts strongly believed that, while the instructors are talking the message would be understood only in conjunction with signal from

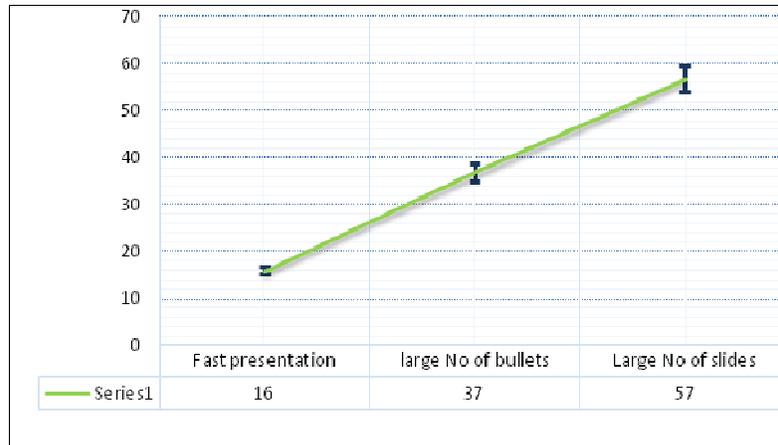


Figure III The most boring factor to the student according to the studied population

facial expressions, hand gestures, eye to eye contacts and body languages; this way of communications is considerably reduced in PowerPoint presentation. Furthermore, PowerPoint presentations reduce the interactive conversation and the critical thinking of the students as they are sitting passively without asking questions or taking notes. Another limitation is that it reduce the monitoring and scanning ability of the teachers on their students. Basically, all of these limitations are inherent or built-in the program and it is not easy to skip them completely. (Lois, 2014; Russell and Joel, 2006).

This study showed that dim light is the most distracting factor for the students, followed by using animation (flying slides or words), then colorful background and music sounds (Figure2), These goes with the findings of Sloboda (Sloboda, 2003) and Tresa Kaur Dusaj (Tresa 2013) and Rodney M. Schmaltz and Rickard Enström (Russell and Joel , 2006). Amazingly, Jennifer M et al study (Jennifer et al., 2008) reported that their students preferred sounds from popular media, color background and dimmed light. It seems that the preferences are considerably varied among different student's disciplines and specialties.

Furthermore, it was revealed that the most boring elements for the student were stuffed and crowded presentation with a lot of number of slides, then high number of bullets, followed by rapid change of slide, (Figure 3) these findings agreed with various studies which recommended to give two minutes discussion for each slide, and putting six bullets with six words only in each slide i.e. (6-by-6 rule) (Cooper et al., 2003; Petroski, 2004; Russell and Joel, 2006).

Most of these pitfalls are slide designs which are a misuse of the program by the user himself. Really, this is the trap where most of the instructors might fall in; even the authors themselves could not be excluded. Fortunately, they can be skipped if the user becomes aware of, unlike inherent or built-in pitfalls.

Finally, in this study most of the students prefer

integrated method of teaching using PowerPoint in association with whiteboard talks and chinks. (Figure1) This is consistent with a study was done at king Saud University in KSA, which concluded that integrated PowerPoint and a chalkboard method of teaching was found more suitable tool for teaching and learning than PowerPoint or chalkboard alone (Sansgiry et al., 2004).

CONCLUSIONS

From the student's point of view, the authors concluded that PowerPoint presentation have a lot of limitation and pitfalls. Also concluded that using the integrated method of chinks and talks in association with power point presentation makes it preferable for the students

RECOMMENDATIONS

For effective interactive PowerPoint presentation the following recommendations must be kept in mind and followed:

- Avoiding too many animations, as this can distract the audience, and if you want to use animations, use the same type for all slides, for example, don't have text "fly" from the bottom of one slide, then from the top on the next slide, and so on.
- The 6-by-6 rule should be Followed: On any given slide use no more than six bullet points and no more than six words per bulleted statement.
- Dim light should be avoided if possible because it may provide a relaxing atmosphere
- Using integrated method of chinks and talks in association with the slide show and keep good non-verbal communication with the audience by using facial expression, hands gesture, and voice tone in a proper way and time.

REFERENCES

- Abdul-Aziz Hassan, Isa Usman, Sani Awwalu (2014). Impact of PowerPoint Presentation on the Academic Performance of Medical Students of Ahmadu Bello University Zaria. *Sub-Saharan African Journal of Medicine*, 2: 3–7.
- April Savoya, Robert W. Proctor (2009). Information retention from PowerPoint™ and traditional lectures. *Computers & Education*, 52 (4): 858–867.
- Axtell K, Maddux C and Aberasturi S (2008). The effect of presentation software on classroom verbal interaction and on student retention of higher education lecture content. *International Journal of Technology in Teaching and Learning*, 4(1):21–33.
- Cooper, Singe S, Yoder Wise PS, (2003). Teaching with slides, PowerPoint, and overhead projectors. *J Contin Educ Nurs*, 34:245–6.
- Ding Xingeng, Liu Jianxiang (2012). Advantages and Disadvantages of PowerPoint in Lectures to Science Students. *I.J. Education and Management Engineering*, 9:61-65.
- Jennifer M. Appersona, Eric L. Lawsa (2008). An assessment of student preferences for PowerPoint presentation structure in undergraduate courses. *Computers & Education*, 50(1): 148–153.
- Lois A. Jordan (2014). PowerPoint®: It's not "Yes" or "No" - it's "When" and "How" *Research in Higher Education Journal*, 22: 1–13.
- Meo SA, Shahabuddin S, Al Masri AA (2013). Comparison of the impact of PowerPoint and chalkboard in undergraduate medical teaching: an evidence based study. *AM. - J Coll Physicians Surg Pak*, 23 (1): 47-50
- Mustafa Akdag and Hidayet Tok, (2008). The Effects of Traditional Instruction and PowerPoint Presentation-Supported Instruction on Student's Achievement. *Education and Science*, 33(147):26-34.
- Petroski Henry (2004). Changing Slides. *ASEE Prism*, 13(7): 22-26.
- Rick Penciner (2013). Does PowerPoint enhance learning?. *CJEM*, 15(2): 109-112.
- Rodney M. Schmaltz and Rickard Enstrom, (2014). Death to weak PowerPoint: strategies to create effective visual presentations. *Frontiers in Psychology*, 5, Article 1138, 1-4.
- Russell J. Craig and Joel H. Amernic (2006). PowerPoint Presentation Technology and the Dynamics of Teaching. *Innov High Educ*, 31:147–160.
- Sansgiry, Sujit S, Bhosle (2004). Students' Attitudes Toward PowerPoint Timed Quizzes. *American Journal of Pharmaceutical Education*, 68: 1-5.
- Sloboda (2003). Brian Creating effective PowerPoint presentations *Management Quarterly. ProQuest Central*, 44 (1): 20-24.
- Tresa Kaur Dusaj (2013). Pump up your PowerPoint[R] presentations: effective use of visual aids promotes audience engagement. *American Nurse Today*, 8 (7): 43-47.