

Gibberish Meditation Improves College Students' Lecture Experience: Results of an Interventional Study from an Indian Institute.

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Abstract

Introduction - Gibberish meditation (GM) technique claims to relax, reduce stress, and remove unnecessary thoughts coming to mind and helps improve the person's attention.

Aim: To evaluate the lecture experience of dental fraternity students after practicing Gibberish meditation for 10 continuous session (once per day) versus 10 session once every week.

Methods- A study was undertaken among final-year BDS students. Group I (n=43) practiced GM once daily for ten sessions and Group II (n=51) practiced GM once weekly for ten sessions. Data was collected using 8 item feedback checklist. Data on open ended question (n=1) was categorized into five domains and responses to close ended questions (n=7) were subjected to statistical analysis.

Results- Forty three in Group I and 51 in Group II completed the study. Significantly favorable responses were obtained by Group II as compared to Group I with regards to comfort level ($P=0.02$), improved attention span ($P=0.0001$), reduction in attention wandering ($P=0.001$), improved concentration ($P=0.004$) and good lecture experience ($P=0.0002$). Memory improvement scored lowest in both the groups ($P=0.24$). Response for "relaxation felt" was nearly same in both the groups ($P=0.14$). Both the groups expressed responses in nearly same manner for the four domains of Gibberish meditation except that Group I opined that daily practicing of Gibberish meditation becomes boring and it should be done once every week.

Conclusion - Overall, Gibberish meditation had a favorable impact on student's classroom behavior. Students can probably try different meditation techniques daily to improve their interest in lectures.

Keywords- Dental Students, Gibberish Meditation, Learning Outcomes, Lecture Class, Meditation, Mind .

Introduction

The mind has an inherent nature of wandering.¹ This phenomenon occurs unintentionally and automatically and thus takes place anywhere and at any time, including classroom lectures. Most of the time, the lecture classes are teacher-centered and monotonous. It makes the students lose concentration quickly and become mentally absent from classroom lectures.² Maintaining students' attention in the classroom has become a necessity and challenge for teachers, as this is linked with the students' learning outcomes.

A study³ conducted to know teacher's perceptions regarding student's behavior reported that the students are non-attentive, idly sitting in the class and daydreaming, using electronic gadgets like mobile phones for texting, listening to music, surfing and playing games, sleeping during lectures, wandering around, doing other work and chatting on irrelevant topics among themselves. Student's attention needs to be at a maximum level to acquire knowledge. Lectures are scheduled for 60 minutes; however, the average attention span of students was found to be 15 minutes⁴, which indicates a necessity to work on increasing the attention span.

Literature throws light on many techniques used on students

to improve their attention, concentration, and classroom behavior like yoga⁵, pranayama⁶, gibberish meditation⁷, light instrumental music⁸, mantra meditation⁹ use of personal response systems¹⁰, Ananpana meditation¹¹, breathing and muscle relaxation¹², Ujjayi breathing¹³, and Vinayasa yoga¹⁴.

Gibberish meditation GM is a simple technique and can be easily performed by the students during the lecture class. A study⁷ has proved that GM is efficacious in improving students' classroom behavior; however, their evaluation is based on just one meditation session.

As against this background, that GM can improve the students' classroom behavior, a study was undertaken to evaluate the effect of practicing GM for a longer time duration and with different practicing frequency. In the present study, GM was introduced to the students preceding their lecture class for ten sessions. Then, feedback was obtained to assess the change if any in their lecture experience after practicing this meditation. Hence, the study aimed to evaluate the dental students' lecture experience after practicing GM once per day for ten continuous sessions versus once every week for ten sessions.

Methods

Study Design: Interventional Study

Inclusion Criteria for Participants

After obtaining clearance from the Institutional Ethics Committee DPU/R&R D/99 4/16, the study was undertaken by recruiting graduating dentist's studying fourth year of dentistry from a dental school in India. The inclusion criteria were the student's willingness to participate and perform the meditation for ten sessions. There were 87 dental students in Fourth-year Term II and 97 in Fourth Year Term I. Forty three out of 87 students from Fourth-year Term II and 51 out of 97 students from Fourth-year Term I respectively willing to participate in the study were recruited.

Study Protocol

An informed consent was obtained from all the participants. The study took place from the period of December 2015 to August 2016. There were two intervention groups. Group I Fourth-year Term II performed GM for ten continuous sessions once per day, and Group II Fourth-year Term I practiced ten sessions of GM once every week.

A demonstration /practice session of one hour was taken for all the students by the trained investigators SK and PK. A brief introduction about GM was given. A 5-minute timed GM began with the warm-up, which included clapping the hands at a different frequency for one minute. After that, the students were instructed to blindfold their eyes and follow the instructions for performing GM, which lasted for two minutes. GM was performed with closed eyes. All the students were instructed to produce meaningless sounds loudly, just like a child babbling when learning to speak. All the negative thoughts had to be thrown out while babbling. This was followed by two minutes of relaxation, wherein the students were instructed to relax by concentrating on their breath moving the air inside and outside, slowly becoming aware of the surroundings and removing the blindfold, rubbing the palm and cupping the eyes, and slowly opening them. For Group I, the GM session was conducted during their first lecture class at 2:00 pm every afternoon. GM was conducted for ten sessions daily from Monday to Friday for two consecutive weeks. For Group II, the GM session was carried out during their first lecture class scheduled at 9:00 am, once every week on Thursday. It was conducted for ten sessions.

After the 5-minute timed GM, the lectures began. After completing the ten sessions each, Group I and Group II participants filled out a feedback form consisting of eight questions refer to Table 1 for questions. Questions 1-7 were

close-ended, and each question had four multiple choices to a great extent, to some time, to a minimum extent, and not at all. Question 8 was open-ended. What are your views about GM regarding: 1. general feeling; 2. Influence on learning; 3. Inhibition while performing GM; 4. feelings before and after practicing GM and 5. Recommendation /suggestion, if any.

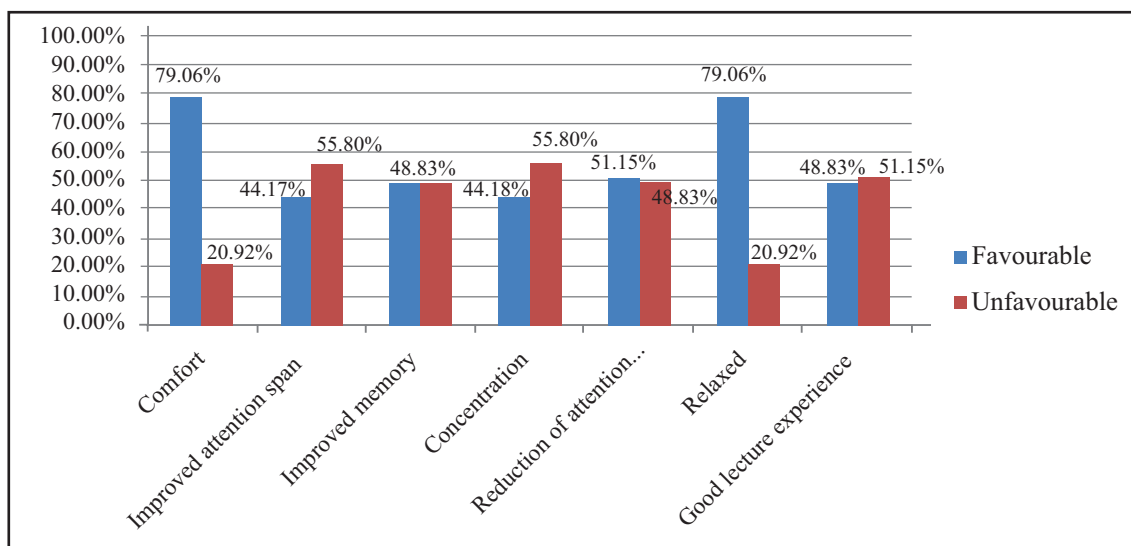
Data Analysis

For ease of analysis, out of the four choices per question, the two positive choices to great extent and to some extent were considered favorable responses, and two negative choices to a minimum extent and not at all were deemed unfavorable. This data was expressed as percentages. Comparison between the groups was done using the z-test at a significance level 0.05.

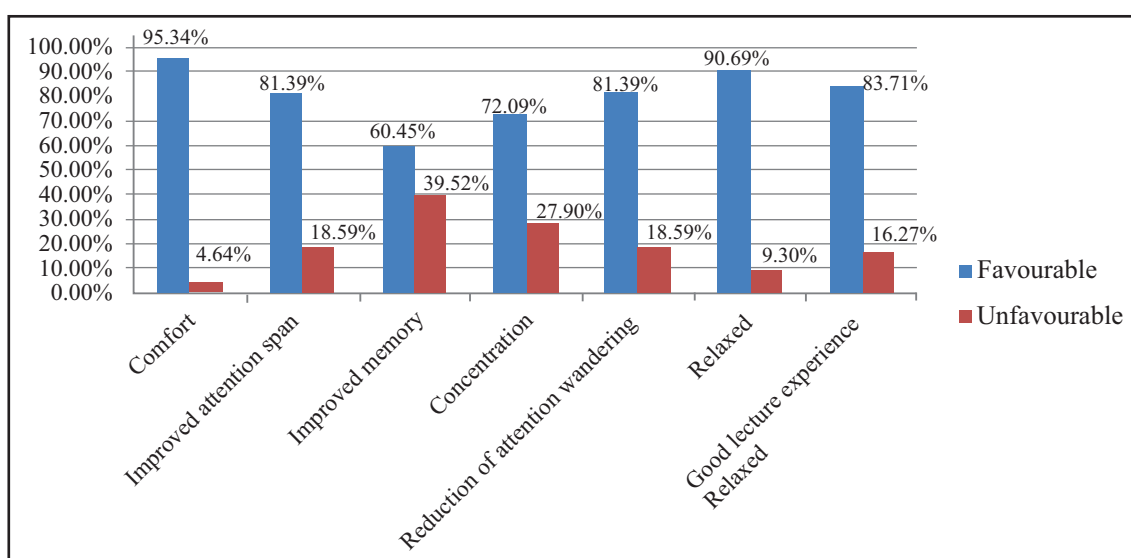
Results:

All (100%) the recruited participants (Group I=43) and (Group II=51) completed the study. Table 1 shows the favorable response proportion of the two groups. 79.06% in Group I and 95.34 % in Group II gave favorable responses for the comfort level (Q.1) while doing GM. Improved attention span (Q2), memory (Q3), and concentration (Q4) after practicing GM were reported by only 44.17%, 48.83%, and 44.18%, respectively, in Group I and around 81.39%, 60.45%, and 72.09% in Group II respectively. 79.06% of Group I and 90.69% of Group II students reported feeling relaxed (Q6) after performing GM. Reduction in attention wandering (Q5) and Improved lecture experience (Q7) was reported by 51.15% and 48.83% by Group I, respectively, and 81.39% and 83.71% by Group II students respectively after performing GM. Except for memory improvement (Q3) and relaxation (Q6), there was a statistically significant improvement in Group II compared to Group I for all the other parameters. Graph 1 and 2 depicts the graphical presentation of the favorable and unfavorable response of the two groups.

Question 8 was an open-ended question wherein the students were asked to express their views regarding the five domains of GM. Out of all the responses obtained, the most common statements under each domain for the two groups have been narrated in Table 2. Mixed reactions were observed in both groups. The students reported hesitation to perform GM in the initial sessions. In the recommendation domain, Group I students who did this meditation daily suggested that it gets boring to perform daily. Group II students who did this meditation weekly felt it could be practiced more often.



Graph 1 : Favorable and unfavorable responses of Group I



Graph 2 : Favorable and unfavorable responses of Group II

Discussion

Being attentive during lectures is very important in the learning process. It helps them to gain knowledge and implement it accordingly. However, the mind has a peculiar tendency to wander not only when a person is unoccupied but also when he is engaged in demanding tasks like reading, listening, or appearing for a test.¹⁵

GM is a dynamic meditation type that requires students to babble, shout, and scream.⁷ Because of active involvement in GM, it may not be comfortable for everyone to perform it. Moreover, since childhood, students have been taught to follow etiquette and stick to the classroom norms of not making noise and maintaining silence. On the contrary, this meditation differed from these norms and thus can be a reason for not being comfortable while practicing GM. Group II students were significantly more comfortable doing GM than

Group I (Table 1). This may be because the sessions here were conducted once a week, giving them enough time to get comfortable with GM between the sessions. While for Group I, the sessions were performed every day, giving them less/no time to adjust.

A comparison of the present study with other types of meditation studies showed varied results. The study¹¹ done among 1st year MBBS students reported 100% student agreement regarding the ease of performing Ananpana meditation for 5 minutes just before the lecture. Another study¹⁴ done among 1st year BAMS students who performed Nadi Shuddhi pranayama also reported 100% ease in performing the meditation. Similar level of feasibility and acceptability was reported in another study done among dental and dental hygiene students by performing posture and breathing exercises.¹⁶ The difference between the results of

these studies and the present study (Table 1) may be because of the different types of meditation performed. Anapana meditation¹¹ and Nadi Shuddhi pranayama¹⁷ required the students to sit calmly and concentrate on their breathing techniques following the instructions, while for Gibberish meditation, one has to participate actively.

In the present study, Group I have reported a statistically lower favorable response for attention span and concentration than Group II. At the same time, memory improvement is a low response from both groups and is not statistically significant (Table 1). Saxena R et al⁷ conducted a study among dental students, who reported significant improvement in attention, concentration, and memory among those who performed GM over those who did not. The results obtained from a study⁹ in which students conducted Mantra-Meditation reported that most students had better concentration and attention in lectures due to meditation. Similar results were found after practicing Anapana meditation, accounting for 97% and 92% improvement in concentration and memory, respectively.¹¹ A gradual increase in Ujjayi breathing exercise duration reported to be beneficial in improving attention among college students.¹³ Based on the literature, it's confirmed that performing meditation before a lecture benefits the student.

Both the groups in the present study reported the maximum favorable response for relaxed feeling post-GM, with no statistically significant difference (Table 1). Ingole A et al¹¹ said all the students felt calm, comfortable, and peaceful after Anapana meditation. Wankhede SV¹⁸ has also reported to have an excellent reduction in stress by 38% for students during lectures. Additionally performing Vinayasa yoga along with guided meditation for 60 minutes once a week for six weeks proved to be helpful in lowering stressful conditions just prior to exams among the pharmacy students.¹⁴ Further, the stress level significantly reduced after practicing yoga and meditation for 40 minutes on daily basis for four weeks amongst dental students.¹⁹

Both groups reported reduced attention wandering and improved lecture experience, significantly more among Group II (Table 1). A similar GM study⁷ reported a significant difference in the teaching and learning process experience of students in a group who practiced GM compared to the group that did not. This suggests that GM affects the overall learning experience of students. Enhancement in sustained attention among medical students was noted after performing yogic meditation technique²⁰

Table 1: Comparison between the proportions within the two groups with regards to favorable response to the parameters

	Group I	Group II	Z value/p value
1 Comfort level in doing GM	9.06	95.34	2.28, p=0.02*
2 Your attention span improved during lecture after meditation	44.17	81.39	3.91, p=0.0001*
3 Improvement in your memory	48.83	60.45	1.15, p=0.24
4 Improvement in your concentration	44.18	72.09	2.81, p=0.004*
5 Reduction in the "attention wandering" during lecture class	51.15	61.39	3.15, p=0.001*
6 Felt relaxed after GM	79.06	90.69	1.45, p=0.14
7 Improved lecture experience	48.83	83.71	3.73, p=0.0002*

*statistically significant

Table 2: Dental student's feedback after performing Gibberish meditation (Summary of the open ended question)

Sr. No.	Domains	Group I	Group II
1	General feeling after the Gibberish session	Very good feeling, felt good for 7 days, okay, liked the meditation, liked it very much, interesting for 6-7 days, fresh feeling felt, physical relaxation felt, energetic feeling, peaceful	It's a good meditation, very relaxing, felt refreshed, fun filled atmosphere experienced, enjoyed doing meditation, made day more cheerful, meditation makes fully awake, nice way to start a day, helped me in expressing my thoughts, calmness felt within and around

Cont...

Table 2: Dental student's feedback after performing Gibberish meditation (Summary of the open ended question)

2	Influence on learning process	Helpful to some extent, attention span improved a lot, beneficial, concentration improved, no significant change in attention felt, improved memory	It was useful in improving learning process, helped to improve concentration in lecture, helps for being attentive just 30-40 minutes and not for the whole day, helps to concentrate on person giving lecture
3	Inhibitions while doing GM	Boring to shout, became a routine later, hesitation to do GM, got boring after doing it everyday, relieved stress, uncomfortable	Takes time to get comfortable with this meditation, after few days it got comfortable, tried to perform this meditation in hostel and people around found it weird
4	General feeling during lectures after doing GM	Felt relaxed, felt sleepy after meditating for initial 5 minutes, freshness during the lecture, feels tired, relaxed feeling more than desired, better concentration, complete mental relaxation felt, reduced tension	Felt active for the lectures, felt relaxed, soothes mind, dint pay attention whether it helped in improving concentration, relaxation remained for only that class, able to ignore other thoughts and disturbances
5	Recommendations/ suggestions from participants	Fun if sessions taken once or twice a week, keep the sessions just for 10 days to last interest, other meditation should be taken, time duration should be reduced, use of blindfolds can be avoided, should be done for morning lectures than afternoon, should be continued	Duration of meditation should be increased, should be conducted every day, keeping the eyes closed without babbling will also help, should be continued for entire year

Group I (Table 2) reported GM as effective and created a fun-filled atmosphere for 4-5 sessions, but later, it became boring to perform daily, and the fun element was also lost. They also recommended not to keep such sessions daily. For the Group II students, where GM was performed only once a week rather than daily, their interest persisted throughout the subsequent ten sessions, making them entirely involved in every session. This can be a reason for the difference between the two groups. Group I students gave more negative responses than Group II.

This novel study contributes scientifically to the literature on the beneficial effects of GM. Except for one study⁷, there is no mention of GM in the literature. However, there are a few lacunae in the study design. In India, students have to study dentistry for four years. The fourth year is divided into Term I and Term II. Term II students are six months ahead of Term I. They have afternoon lectures and Term I have morning lecture schedules. Group I consisted of term II students, and Group II were term I students. Group II performed this meditation every day at 2.00 pm and Group I weekly once at 9.00 am. This difference in time was because of their varied lecture timings. Randomization was not followed, and two separate groups were taken. Taking two different groups resulted in a more significant sample size than dividing one group into two

small study groups. Group I, whose study was completed in 10 days, was compared to Group II, which took two and a half months to complete. This has proved to be an advantage where the students got time to adjust and accept the technique, which may have yielded a favorable outcome among the Group II students. Comparison with studies in the literature was limited to a few studies only, as there are few studies evaluating the different kinds of meditation to improve the lecture experience of the students.

GM meditation is beneficial. However, it has some stumbling blocks, like hesitation to babble loudly and the time required to get comfortable with this technique. Only when you dynamically get involved by really shouting, screaming, and babbling will you fully acquire its benefits.

Although the study has been conducted in India, the results can be generalized to the global student community. Lecture is the most common way of teaching and learning methodology practiced worldwide. The teachers should make a little effort to train themselves in GM and implement this practice of GM for their students before the lecture class so that the students can have an improved lecture experience, thus helping them in the learning process. It is recommended that researchers take up future studies to evaluate GM's effectiveness over other different meditations.

Conclusion

Practicing GM has shown a favorable response; however, practicing it once weekly before the lecture begins has enhanced improvements in the dental student's lecture experience.

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