

# Combating Mind Wandering in The Area of Academics

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**Abstract** - This paper presents how the wandering mind is linked to the field of academics. We are also going to talk about how can we interpolate memory test in reducing mind wandering. We also mention here the strategies to train our brain. Here we devise the measures to combat mind wandering during studies i.e. Learning Mental Self-Regulation for improved concentration and arranging factors that you can immediately control your mind. Also we will focus on two applications that can be built to study mind wandering.

**Key words**-- Mind Wandering, Meandering, Attention, Distracting Factors, Interpolate, Memory, Academics, Face-Name pair, Stay here itself, Worry, Spider Techniques.

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## I. INTRODUCTION

Everyone has work or task to be completed in our daily life. But these tasks often take too much time to complete. This is due to the fact that while working we are not focused and somewhere we are wandering. There are lot of factors that distracts you from completing your work. These distracting factors often shorten your time span of attention. No matter how focused you are in your work there will be some distracting objects to pull your attention back from the work. It will waste your time and energy. It will try to restrict you from completing your task on time or at all. There are so many examples of distraction in today's time of internet, the mobile phones, Facebook, WhatsApp, Twitter, etc. These things have distracted people more than being a boon as it has shortened the time span of attention. These distractions have led to difficulties in concentrating in the academics.

## II. HOW WE CAN INTERPOLATE MEMORY TEST IN REDUCING MIND WANDERING AND IMPROVE LEARNING OF ONLINE LECTURES?

If we interpolate the online lectures with the memory tests, then it can help us in reducing the mind wandering to a great extent in the lectures and foster task-relevant activities like taking notes of lectures which help in learning of lecture content. Memory test can be done through various techniques like interpolating the study of list of words, face-name pairs, and prose passage and this

improves the quality of learning process and this can help us to retain the content of the lecture for a longer time. To define face-name pairs technique, in this technique, basically it is used to test your ability to remember the respective names of the faces. It is a sort of quick test that is used to find out and help the researchers. It's a 10-minute memory test in which in front of the user on the screen it flashes 56 faces with their respective names underneath. The participants are told to try to remember the face-pairs.

Now, in the second part of the test the participants are shown different faces and names and the test takers are to be answered that whether they have seen the faces before or not. This technique can help in finding the Wandering Mind. Through interpolation of online lectures with various techniques has helped students to resist the tendency to get into mind wandering and make it easier to task-relevant activities such as note taking in a manner that improves learning. If we interpolate an online lecture with testing, it can help the students to quickly and in an effective manner extract the lecture contents by reducing the occurrence of mind wandering and increasing the speed of note taking and improved learning. This testing can be used to help students to remain in attention to lecture content so that it supports task-relevant and hence improves learning. To make efficient use of study time the students and professionals can suggest techniques to make use of online learning as an important tool to bring elevation in the field of education [1][2].

### III. INTRODUCTION ABOUT THE APPS

To study the effect of mind wandering in students we have devised two applications namely – the blink app and judging concentration app We performed the study on 20 students and result was recorded.

#### *a) Blink App*

Using this app, we record the eye blink movement of the person while we are reading text from the mobile, tablet or laptop. We took a duration of 15 minutes and with the help of front camera we counted the eye blink occurring in the students randomly. We can also study the relationship between level of concentration between different age groups by performing this test [3].

#### *b) Concentration app*

This can be used to judge the amount of time for which a student can focus on particular task. Suppose a normal mathematical calculation is asked like  $2+2=?$  How much time will it take to answer this? Probably a second. If single set of questions are provided, then it will take only some minutes. However, if it takes more than one second to answer a question, it may lead to a situation of mind wandering. So it can be used to judge the duration for which the mind stayed focus on the task. It can be used to increase the concentration level. There is a timer of one second set for every question and if the time limit exceeds, message is generated saying mind wandering occurred and total time for which the mind remained focus is generated. Hence an individual can know the time for which he remained focus [4].

### IV. HOW CAN WE FOCUS A WANDERING MIND?

Concentration can be termed as the ability to focus all of your attention on a particular task. There are some concentration improving strategies. These techniques can be practiced to learn and improve the quality of concentration [5].

#### *These include:*

- a) Mental self-regulation.
- a) Factors need to be arranged to immediately control your mind.

#### *A. Mental self-regulation*

This technique requires practice. Through these concentration techniques you will notice considerable improvement in yourself within a period of four to five

weeks. By training your mind how to self-control the mind will relieve you from mind wandering.

#### *How to start practicing these techniques:*

##### *1. Stay here itself*

This is a very simple strategy still the most effective one. In this technique what you need to do is just whenever you notice that you are meandering, just say to yourself “Stay here itself”, and gently get your wandering mind to a focused mind where you were concentrating. For Example: Suppose you are driving, and your attention strays from driving to going for a date or having some tasty food in your dinner. As you realize that you are wandering just say to yourself “Stay here itself”. When your mind wanders again repeat it every time. Practicing this technique for some weeks will definitely improve your ability to focus more than before. The duration of mind wandering will become less. After some time, you yourself will notice a difference in yourself.

##### *2. The Spider Technique*

In this technique, you need to take a vibrating tuning fork next to a spider web. The spider will react and looking for what is vibrating the web. Do it several time, now you will notice that the spider does not come again looking what is disturbing it. Similarly, it also applies on human beings. For Example: Suppose you are studying in your room and someone is entering in your room or the door of the room is closed by someone or some other person is there in your room who is doing his work. So, you have to train yourself like that spider only that you do not allow yourself to participate in the disturbance happening around you. You have to be focussed on all what you are doing. When you feel you are getting distracted just say to yourself “Stay here itself” and you will be now focused on what you were doing.

##### *3. Special Worry or Think Time*

This an another technique that is used to keep yourself more concentrated towards you work. A research is done on this that if you set a special time for thinking process which are out of the world or a special time for worrying about something then people worry much less i.e., approximately about 35 percent less than what they used to do. Steps for this technique:

1. Set your special time daily in your routine for worry time or think time.

2. When you find yourself that you are worrying, you need to remind yourself that you have a special time for worrying and thinking.

3. Let your thoughts go for some time, perhaps with the "Stay here itself" technique. Now, be sure that you take out some time for that special time to think on the distracting thoughts of the day.

***Some other mental Strategies:***

***1. Tally your mental wandering***

Take a paper. Draw two lines and divide it into three sections named and label them as "morning", "afternoon", "evening". Each time you mind wanders, make a tally in the respective section. Keep the record of each day with you. As your skill of self-controlling will develop, you'll see the number of tallies will decrease comparatively. And that is amazing.

***2. Take a break***

When you take a break from doing some task for some time. Oxygenate yourself that is get more oxygen to your brain. Get up and walk around the room for some time. When we sit for long periods, blood tends to pool in the lower parts of our body and legs this is because of gravity. So when we take a walk, means getting more blood flow evenly throughout in our body. As, a result more oxygen is carried out to the brain and you are now more alert and focused than before.

***3. Give yourself rewards and incentives***

This a good technique to enhance your skill by rewarding yourself when you complete your task. These rewards will encourage you to complete your task fast, without wandering much. These rewards can be giving a treat to yourself with a pizza, a movie, or an evening of TV.

***4. Shift position in your seat***

Do not sit frozen only in one position. The different position changing will help to circulate the blood, sending more oxygen to your brain and helping you to be more focused.

***B. Factors need to be arranged which you can immediately control***

***1. Make a chart of your energy levels***

This is most important to know about yourself that when is your energy level highest? When is your energy level lowest? Now that's what the students miss out

to chart themselves and know about their energy levels and do their task accordingly. Because doing some difficult task in the most tiring period is not a good idea.

***2. Light***

Make sure that you have an adequate amount of light to study so that your eyes do not tire. You can use indirect lights to focus to avoid glare.

***3. Chair and Table***

Do not sit on an over comfort place like bed. Bed is where you sleep and dream. So study on proper chair and table.

***4. Posture***

Keep your posture straight right-up. So that you do not lean and get into a sleep mood and lose your concentration.

***5. Clear away all the Distractions***

Keep your distractions away from you before getting into study so that later on while studying you do not think about them instead focus more on studies. If all the above strategies are followed, you can find better results in your work and career.

**V. FUTURE SCOPE**

The future scope of this paper will be on the implementation and developing the applications to track the mind wandering through the "Blink App" and "The Concentration" application.

**VI. ACKNOWLEDGEMENT**

The authors would like to express their deep and sincere gratitude to their research mentor, Mr. Neha Tyagi Professor at G.L. Bajaj Institute of Technology & Management, for giving them the opportunity to do research and providing invaluable guidance throughout this research.

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