

# A Skeletonian Synopsis of Class Attention

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## **Abstract**

Using a qualitative content analysis approach, this study reviewed 45 published studies, research on student's Class attention since 2008, primarily focusing on reasons for students' attention and inattention. This paper answers how student's attention can hamper, reasons behind students less attention in class, why student cannot sustain attention, how long student can hold attention and so on.

The primary focus of this study is to accumulate the researchers' thoughts, findings, experimental results in one frame so that any pedagogical stakeholders can easily get a unified understanding from this study. Another purpose of the study is to pile up the specific reasons for students' attentiveness and inattentiveness in class room.

The first chapter discuss the concept of attention from multivariate dimension. The methodology chapter includes the procedure about how the study is conducted. In findings chapter author listed out all the possible diversified related information in two sections; firstly, the reasons of factors affecting student attention and secondly, what the researchers recommends in different study. In discussion chapter author designed all the findings in a well manner and showed the final reasons and solutions. Author there represents uncontrollable and controllable factors with solutions.

**Keywords:** Class attention, Pedagogy, strategies, Effectiveness

## **CHAPTER 01: INTRODUCTION**

### **1.1 : Background of the study**

Attention is an abstract thing. Behind a compatible academic result/ performance, class attention is a mystical player. To understand what the teacher is delivering in class room, full concentration towards the lecture is fundamental. But this attention can be affected by many constraints.

Each educational institution always tries to provide quality education to their students. Education is not a one-way process, rather it is a minimum two-way process. Providing education is one kind of communication. What the teacher is trying to deliver have to be received by the students. For receiving or understanding what the teacher taught in class, attention is mandatory. Without students' attention trying to execute quality education is nothing but only vain.

There are no available proper sources where a reader gets overall idea about how attention works, constrains that affect class attention and how can we enhance/hold attention.

This study aims to gather the researchers' thoughts, findings, experimental results in one frame so that any person who are looking to get a unified understanding about the concept of class attention from this study. Another purpose of the study is to pile up the specific reasons for students' attentiveness and inattentiveness in class room

## 1.2: Attention: A brief Literature

Attention means concentrating on what is being said, discussed, or demonstrated, by using the minds to accurately bring information into the brain. In another word, attention is **the act or power of setting one's mind upon something**. According to Psychologists attention is the capability to actively process definite information in the environment while tuning out other details. Attention is considered limited in terms of both dimensions and duration, so it is important to have ways to efficiently manage the attentional resources we have available in order to make sense of the world.

Attention can be five types; Sustained Attention, Alternating Attention, Selective Attention, Focused Attention, Limited Attention. Sustained Attention is the ability to concentrate on one thing for a continuous period. Alternating attention means effortlessly shifting attention between two or more things with different reasoning demands. Selective attention comprises being able to pick and selectively join to certain stimuli in the environment while at the same time tuning other things out [20]. Focused Attention is being able to be rapidly drawn to a specific visual, auditory, or tactile stimuli such as a loud noise or a flash of light. Limited attention is a form of attention that also involves multitasking. Attention is a state of mental alertness and a focusing activity [11]. This mental alertness and a focusing activity may affected by psychological characteristics and the solution suggested by the teachers was that passing the exams would have to be more difficult and that the rules of discipline would have to change to facilitate punishment. Students stated that teachers should show greater interest in students, approach, students positively, and use a variety of teaching methods depending on the level of students.

Student attention is flexible. The process of learning is not merely determined by what the tutor teaches, but also how the student receives that information. An attentive student will naturally be more open to obtaining knowledge than a bored or frustrated student [14].

Attention as the ability to control impulsive behaviors, as well as self-regulate and adjust behavior, leads to positive outcomes in school [12].

Students' attention is heterogeneous but there were no significant gendered differences [4].

(Saravanakumar, 2008) considered attention as a selective process in case of class room [16]. So, teacher should attempt to select stimuli based on behavioral functions

(K.Mohan, 2015) considered attention as a cognitive stimulus which involves the neuro function related to attention. Ze said it functions under neural network [7]. Attention and memory mechanism are closely related to one another. Hence the educators should follow mediators of learning method. In this situation ze has to face many constraints on attention. If the teacher is able to minimize the constraints, ze could develop attention and enhance achievement among learners through stimulation.

Students who have difficulty concentrating may suffer from seriously disruptive illnesses such as attention deficit disorder and dyslexia [21]

Moreover, the conception of the attentional system of our brain recommends an academic dilemma. The system evolved to rapidly recognize and respond to sudden, dramatic vagaries that signal physical predatory peril, and to ignore or merely monitor the steady states, elusive differences, and gradual changes that don't transmit a sense of immediate alarm.

(Sylwester & Cho, 1993) says, an effective attentional system must be able to (1) quickly recognize and emphasis on the most significant item in a multifaceted environment; (2) endure attention on its concentration while monitoring related information and ignoring other stimuli; (3) access memories that aren't at present active, but that could be related to the current emphasis; and (4) shift attention rapidly when important new information arrives [21].

There is little difference among the opinion about how long student can pay attention towards lecture. Maximum authors claim that students' attention declines approximately 10 to 15 min into lectures [8]. Kim points out that attention varies based on the difficulty of the content and its relevance to the student, how favorable the environment is to paying attention, and each student's capability to withstand attention in class.

(Sousa, 2011) in his book answers how, the brain learns so that they can be more successful in their teaching, how does technology change the brain, how can teachers help student understand and recall more of what they teach, and what classroom strategies are more likely to appeal to the brain of today's student [19]? The study includes how emotions affect learning, memory, and recall, Challenged the understanding that the brain can multitask, how the brain acquires spoken language and suggestions about movement and exercise increase brain mass, improve mood, and boost cognitive processing.

## **CHAPTER 02: RESEARCH METHODOLOGY**

### **2.1: Research design**

This research is qualitative in nature. Only secondary data is used for conducting the study. The research methodology for this study was to review published studies and research on class attention, the range of which included literature reviews of class attention breakdown reason, causes of inattention and solutions for having and sustaining student attention in the class room. The qualitative content analysis approach had been followed during the study.

For data collection online databases including ERIC, EBSCO, Google Scholar, SAGE Online, Project Muse, Education Full Text were the major sources

### **2.2: Data Analysis**

During the initial review of the literature, the author began to note themes of different published paper related to this study. Findings of different published papers and articles was articulated in a manner so that a reader can get circumstantial knowledge in a well manner structure. In findings the author presents the reasons for not having student attention and the suggested solutions from different author to get attention and sustain it. In the next chapter the author gave a whapped framework which presents all the findings in a well manner so that the reader can find a gross overview of world class researchers recommendations in one frame.

### **2.3: Objectives**

The primary objective of this study is to accumulate the researchers' thoughts, findings, experimental results in one frame so that any pedagogical stakeholders can easily get a unified understanding from this study.

Another objective of the study is to pile up the specific reasons for students' attentiveness and inattentiveness in class room.

## **CHAPTER 03: FINDINGS**

(Saswati chaudhury, 2022) showed teachers' visual focus of attention is associated with students' basic academic skills and teachers' individual support for students in basic academic skills in authentic classroom settings [17]. (Saswati chaudhury, 2022) showed that teachers' visual focus of attention varied among students with different teacher-reported individual support[17]. The findings of that study suggest

that it is essential to ensure the suitable dispersal of students who necessitate greater individual support so these students can obtain more of the teachers' visual focus of attention in the classrooms

It has also been found Background classroom noise to negatively impact reading comprehension and word learning in adolescents and may have some negative effects on creativity in children, depending on their initial attention control skills

(Shoupe, 2021) explores whether the time-of-day of instruction impact class achievement [18]. The study recommends that student learning is influenced by teachers' time-of-day preferences as well as distinct student time-of-day likings. Ze said that not all students performed superlatively at one particular time-of-day and schools are not set up to match every student's optimal time-of-day preferences.

(Shoupe, 2021) also said, educational climate for high school requires 32 to 36 students in a classroom making it difficult to meet every student's individual needs[18].

The capability to continue prolonged attention is closely knotted to working memory. (Nairne, 1996) defined working memory as the mechanism that maintains short-term memories in an active state and triggers much of an individual's task-related cognitive processing, including maintenance of attention[13].

(Karrie E. Godwin, 2011) said that, non-task behavior is a serious challenge confronted by education practitioners on a daily basis. Definitely, former research has exposed that elementary students dedicate between 25% and 50% of instructional time off-task. Off-task performance is thought to be challenging as it hypothetically limits students' learning chances by reducing instructional time (Carroll, 1963)

(T. Lorraine Ammons, 1995) has revealed that students 'alertness and attentiveness are affected by time-of-day preferences[22]. That study showed that time of a day plays a noteworthy role in student class attention. Educators can analyze and find out the most suitable time to ensure maximum student attention. According to the analysis and findings, they can design their routine.

(McKeachie, 2006) in his often-recommended book on guidelines for lecturers, suggests that student attention will drift during an inactive lecture unless interactive policies are used to hold student attention. He suggests breaking up long class lectures with interactive policies.

(Mehmet Ali Cicekci, 2019) investigates about teachers' and students' opinions about attention problems. He concluded that the teachers perceived the attention problems that the students experienced during the course mostly as a problem arising from the students themselves while the students relate this problem with themselves as well as with other students, teachers and the environment[9]. According to the findings of (Mehmet Ali Cicekci, 2019), teachers as well as students easily noticed the psychological features, the behaviors they displayed and their low academic result, but the teachers appraise this situation more as punitive problems [10]. The solution suggestions of the teachers who kept the attention problems of the students out of their own sphere and their teaching performance were that passing exams should be tougher and disciplinary regulations should change to introduce punishment.

About attention gain (Fauzia, 2013) said that the teacher used desisting, chant, sound, clapping and singing a song in getting students' attention" [6].

(K.Mohan, 2015) the teacher's animation, enthusiasm the ability to convince the students, variation in mode of broad casting ideas to the students in terms of inflection, gesture, mobility, flexibility and expression, teacher's overview, energy, confidence and competence [7].

(Karrie E. Godwin, 2011) finds attention pattern allocation in kindergarten children transformed as a function of the classroom visual atmosphere.

(Pinar, 2015) conducted a study that scrutinizes the effectiveness of fixed-time (FT) and variable-time (VT) schedules and attention on the problem behaviors and on-task behaviors of students with and without intellectual disabilities in comprehensive classrooms in Turkey[15] .

The results proved that fixed-time and variable-time schedules of attention diminished problem behaviors, and amplified on-task behaviors during lessons. Furthermore, in the variable-time (VT) schedule of attention, gains were faster and steadier, and teachers performed VT more easily.

The students specified that teachers should demonstrate more interest towards the students, approach the students completely and use a diversity of teaching methods in accordance with the students' level.

Some consolidated findings of different study on reasons affecting attention are:

(Allison, 2020) **Teacher talking [2]** :

- teacher used very complicated language
- spoke quickly
- teacher didn't give enough concrete examples
- teacher gave concrete examples but didn't make clear the main ideas or the main point
- teachers voice lack of enthusiasm
- teachers body movement
- content of what Teacher said was not obviously useful relevant to me
- content of what Teacher said was too easy
- what Teacher said was too complex
- mental wandering (Anne Cummings, 2017)
- Talking is not interesting (Anne Cummings, 2017)
- Frequency of questions asking/ name mentioning (Anne Cummings, 2017)
- use of PowerPoints, lecture-based activities, and moments when other students are speaking
- Lecture time duration

### **Students' problem**

- student fatigue (Anne Cummings, 2017)
- Language unproficiency (Anne Cummings, 2017)
- Tiredness (Anne Cummings, 2017)
- Running low on mental energy (Anne Cummings, 2017)
- Topics interest (Anne Cummings, 2017)

### **Time Problem**

- time awake and time of day (Anne Cummings, 2017)

What academician can do? Academicians are the in-charge of class and central activities. (Harmer, 2007) said, it is important for teachers to discover a way to charm students to the classroom activities that the teachers have made.

Single way to make the learning atmosphere become more favorable is to help them engage in the learning process. When the students are involved in classroom activities, teachers have to make sure that the classroom condition is still controlled. When the students are involved in classroom activities, teachers have to make sure that the classroom situation is still under controlled. Moreover, they have to uphold an optimistic classroom situation. As the noise of the students can be difficult in the classroom, to overcome



the children's normal behavior to be physically active, teachers should manage their classroom management correctly. Some potential strategies used are facilitating collaborative work, coordinating seating arrangement in a conventional way, and stressing the rules and procedures in the classroom [1]; setting the pace and direction by leading the discussion and interaction [1]. ; and arranging the pupils into groups, addressing bad behavior, supervising the classroom, and providing rewards and punishment . (Fauzia, 2013) suggest to use desisting, chant, hissing, sounding, clapping, and eye contact[6].

(Erik Rosegard, 2013) accumulate strategies to getting student attention, the first one focuses on the beginning of the lesson; and the other one, on the body of the lesson. on the beginning of the lesson Erik suggest to Select a "cue", not to begin until all students are paying attention, remove distractions, punctuality, positive mentality, maintaining routine. Strategies to maintain students' attention, (Erik Rosegard, 2013) suggest to keep good activity flow, appropriate reaction to misbehavior, manage movement, Group focus,[5].

(K.Mohan, 2015) revealed some stimulus strategies to gain and sustain student attention[7] . He proposed some issues that can help resume student class attention. These are-

- Arousing students' attention and further sustain it.
- Motivating learning through new exploration and investigation.
- Building positive feelings towards teacher and school.
- Catering to individual sensory preferences and facilitating learning.
- Promoting learning by involving students.
- Promoting educational entertainment.

(K.Mohan, 2015) also provides some physiological measures. He measured heart rate in 4 students during a lecture as an indicator of arousal, which is one component of attention.

Brain systems that help determine and maintain attention are, Neurotransmitters, Brainstem, Limbic System, Neocortex. Ze also provides two general guiding principles for classroom management and instruction [22]. First, teachers should acclimatize their tuition to the built-in biases and limitations of their students' stable attentional mechanisms. Second, they should use imaginative teaching and administration strategies to boost the progression of their students' adaptable attention processes.

(K.Mohan, 2015) provides some directions for students by using which student can gain attention and sustain it. He suggested to take self-initiatives. To take self-initiatives student should-

**BUILD MOTIVATION:** This should be done when you don't know why you need attention. It is our psychology not to get attached within which we are not interested. Therefore, before expecting attention, we should develop some motivation to build attention psychologically

- Remind yourself of the why are you in the class, how important the topic is, what will happen if you don't understand the class topic.
- Set a goal about your expectation around learning and accomplishment
- Create a judgmental mentality because we hear what our brain says, rather anyone else
- Reward yourself for successful concentration achievement

**BE PRESENT:** "Being present" means being physically where attention should take place along with being psychologically there. To do so one can eliminate distractions, do a "brain dump" to get any distracting ideas out of head, try to not overschedule,

**TRAIN YOUR BRAIN:** As attention is based on the brain so, one can “train own brain” to pay better attention. some ways to train own brain are – “Practice single-tasking”, “Challenging the boredom response”

**ENGAGE WITH THE MATERIAL:** It leads students to believe that the way to learn is to listen passively, or simply write down what is said word for word. Take notes actively, read actively, question actively can be some solutions for getting engagement with the material

**HONOR YOUR ATTENTION SPAN:** It is important to determine how long you can stay focused before you start getting tired and less effective. Be sure to schedule ahead of time so that there is enough study time during the week to have enough academic time on the task. Learning works best with practice spaced out instead of piling up, which is also a more efficient approach to paying attention.

## **CHAPTER 04: DISCUSSION AND SUMMARY**

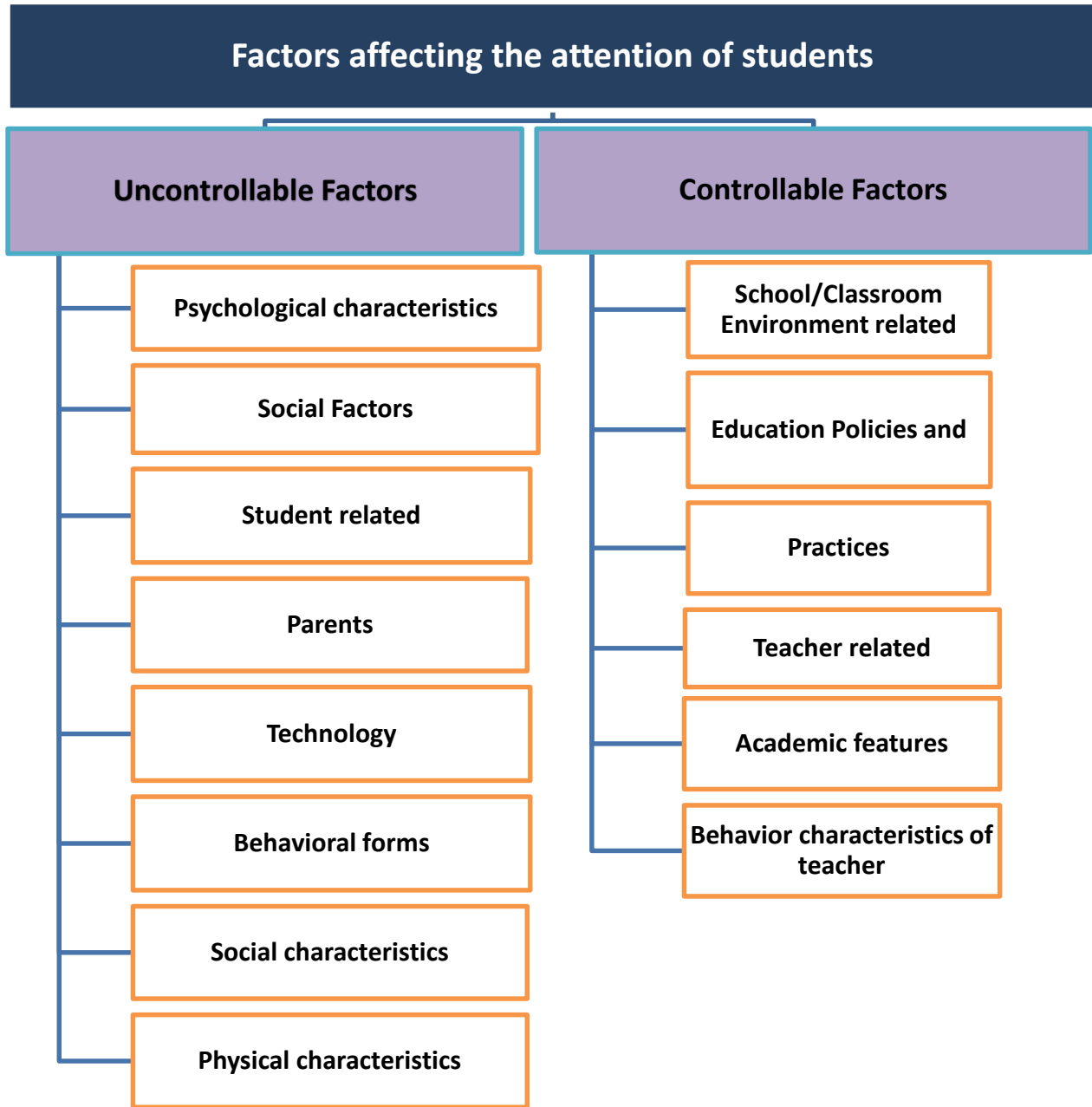
### **4.0: Introduction**

This section will discuss the all findings in a well sequence so that a reader can find a rhetorical overview of total study. There are two sections in this part. One will present the accumulated factors researchers showed affecting the student’s attention and other will present researcher’s thought about how to increase the students’ attention towards the course.

### **4.1: Factors affecting the attention of students**

After analysis different authors opinion this paper represents all the findings in a well decorated framework. The factors those are responsible for hampering students class attention are being organized in two categories. In the fig. 5.1 the two categories; uncontrollable and controllable factors responsible are being presented. The factors those are out of the power of academicians are being considered uncontrollable here and those the academicians can change or affect are being considered controllable factors. The factors of each section are being discussed more elaborately later.

(Arielle S. Keller, 2019) quoted that the students’ attention is heterogeneous[4] . The factors can vary from person to person. One factor responsible for particular person may not be responsible for the rest. It can also vary depending of the age or class of the particular student. Responsible factors in one age can be inactive in another age or class.



**Figure 4.1: Factors affecting the attention of students**

**Student related factors:**

- Low level of readiness, learning disability, getting to school without preparation, inadequate study, aimlessness etc.
- Personal (puberty problems, different perception levels, attention deficit, hyperactive, differences in areas of interest, having special problems, etc.)
- Psychological (disliking the course, indifference towards the course, aimlessness, low motivation, etc.)
- Physical (coming to school hungry, sleepless and tired, health problems, etc.)



**School/Classroom Environment related factors:**

- Noise (internal and externals)
- Negative physical properties of class
- Someone gets into class
- Lack of training materials
- Classes are crowded
- Inclusion students

**Social Factors:**

- Extracurricular talking among students
- Affected by friends/taking someone as a model

**Teacher related factors:**

- The way of the course/teaching methods
- Failure to determine or apply class rules
- Distracted attention
- Failure to refer students correctly to appropriate person
- Negative attitude or posture

**Education Policies and Practices related factors:**

- Duration of course
- Education program contains long-term break
- Lack of disciplinary forfeits
- Inadequate breathing time
- Lacking in the interest of textbooks
- Course subjects' difficulty
- Problems in education system
- Frequent change of teachers

**Parents related factors:**

- Problems in the family
- Parents do not spend time with the children
- Economic problems

**Technology related factors:**

- Use of mobile phone, tablet, internet, social media etc.

**Psychological characteristics related factors:**

- Excessive nervousness, getting tired, distraction, disinterestedness, prickliness, lack of purpose, inwardness, silence, amnesia, etc.

**Behavioral forms related factors:**

- Excessive nervousness, getting tired, distraction, disinterestedness, prickliness, lack of purpose, inwardness, silence, amnesia, etc.

**Academic features related factors:**

- Speaking more, opposite attitudes and behaviors towards the teacher, more engagement with mobile phones, playing games more, back-bencher, sleeping in class, irregular in the class, etc.

**Behavior characteristics related factors:**

- Irresponsible, hyperactive, careless, non-compliant, etc.

**Social characteristics related factors:**

- Facing family problems, less social skills, failure to fulfill responsibilities

**Physical characteristics related factors:**

- Sleepless, tired, hungry, health problems, learning disability etc.

**Behavior characteristics of teacher**

- Positive behaviors
- Humor/jokes
- Trying to involve students in the course
- Asking questions about the subject
- Changing tone of voice
- Asking the cause of distractibility
- Negative behaviors
- Warning loudly
- Yelling/scolding
- Doing nothing/ignoring
- Applying violence
- Threatening about passing the class
- Getting out of the classroom
- Using negative language (japing, humiliation, etc.)
- Sending to administration
- Sending to guidance service

**4.2: How to increase the students' attention towards the course are**

The answer of how to increase the students' attention towards the course are not specific. As factors can be different from situation to situation, age to age etc., the solution also should be contingent upon the plot. Some accumulated suggestions for having and sustaining student attention are given below:

**Suggestions/expectations of teachers**

- Physical conditions of schools should be improved
- Increasing the arrangement of training program for teachers and students

- More authority
- Career guidance is expected to take place at an early age.

### **School Management**

- More functional guidance service
- Orienting School and classroom rules to students and parents
- proper class decoration
- Increasing physical properties of classes
- Maintaining the proper number of students in classes
- Include visual materials
- Introducing performance-based reward

### **Family**

- Control the uses of computer, internet, phone etc.
- Increasing reading habits
- Keep kids from going through bad things.
- Children's emotions should be reinforced
- Co-operation with the school, be instructed by the child.
- Family problems should not be reflected in children's emotion
- Children's eating and sleeping habits should be monitored.

### **Teacher**

- Giving the sample and sense of success
- Allowing discipline in the classroom
- Making lessons exciting
- Sincerity, perfection and justice towards students
- Collaboration with guidance counselors for students with behavioral syndromes
- Students should be qualified according to their level
- Should be pertinent and willing to the profession
- Respecting individual and social variances.

## **CHAPTER 05: CONCLUSION**

### **5.1: Implications**

Each educational institution always tries to provide quality education to their students. Education is not a one-way process, rather it is a minimum two-way process. Providing education is one kind of communication. What the teacher is trying to deliver have to be received by students. For receiving or understanding what the teacher taught in class, attention is mandatory. Without students' attention trying to execute quality education is nothing but only vain. This study gave a whapped framework which presents all the findings in a well manner so that the reader can find a gross overview of world class researchers recommendations in one frame.

The study showed different controllable and uncontrollable variables responsible for student's distraction. Only pedagogical member's initiatives cannot solve the whole student's distraction problem.

Psychological, Physical, social, Family, technological etc. problems can be removed by unified efforts of parents, society and institution.

The summary here can be applied in different training session to orient the new academician with student attention concept. All academician who are interested in knowledge of getting and sustain student attention can find this paper informative and useful. This paper can be helpful to researcher who are involved with academy or class effectiveness related research.

## 5.2: Future Research opportunity

There is a doubt about the effectiveness of different suggestion given by different author. As studies was based on different location and levels, each suggestion and reasons effectiveness can be a matter of experiment from different country perspective. Even, researcher can experiment different suggestions at different levels of student (school going, College, University) suggested by different author. There is huge opportunity to in this case. Moreover, there can be more reasons behind inattentiveness of students in class room. New research can take place to reveal new reasons. There is no study about whether or not sequence of course choice affect students class attention retention. Another most important part is that after covid 19, online class is now a tradition instead of class postpone. There is very little research about online class attention and inattention reason. It is now time demanded research as we are now depended on online class

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