

Future Educator's Attention: Insights From B.Ed. Students

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ABSTRACT

This study investigates the attention levels among future educators, specifically B.Ed. students, to determine if gender and locality influence their attentional capabilities. To achieve this, the researcher developed a self-made attention tool comprising 58 items across two dimensions. Utilizing a random sampling technique, a sample of 100 B.Ed. college students from Chennai was selected. Statistical procedures were employed to standardize the tool, ensuring its reliability and validity. The research results indicated that the p-value for gender is 0.848 and the p-value for locality is 0.926. Consequently, the hypothesis stating that there is no significant difference in attention due to gender, as well as the hypothesis that there is no significant difference in attention due to locality, are both accepted. These findings underscore that attention among B.Ed. students are not significantly influenced by either gender or locality. This study provides valuable insights into the attentional characteristics of B.Ed. students, highlighting the consistency of attentional capabilities across different demographic factors. These findings have implications for educational practices aimed at enhancing attentional skills among future educators, suggesting that universal strategies may be effective regardless of gender or geographical location.

Keywords: Education Psychology, Teaching Learning, Attention, Types of Attention, Teacher Trainees, Students.

INTRODUCTION

Attention is a fundamental cognitive process essential for effective learning and teaching. In the context of education, the ability to maintain focus and concentration significantly impacts both the learning experiences of students and the teaching efficacy of educators. Future educators, such as B.Ed. students, must develop strong attentional skills to manage classroom dynamics and facilitate effective learning environments.

This study aims to investigate attention levels among B.Ed. students, with a particular focus on examining the influence of gender and locality. By understanding how these factors affect attention, educational strategies can be tailored to better support future educators in their professional development. The sample for this study was randomly selected from B.Ed. college students in Chennai, ensuring a diverse and representative cohort. This research will delve into various aspects of attention in psychology, including the different types of attention and strategies to enhance attention among teacher trainees. By exploring these areas, the study seeks to provide valuable insights and practical recommendations for improving attentional skills in future educators, thereby contributing to their overall effectiveness and success in the classroom.

ATTENTION IN PSYCHOLOGY

Attention is a state of consciousness in which an individual can respond to one or more stimuli. In psychology, a

stimulus can be any task, object or event that requires a response. Attention encompasses both the duration one can maintain focus and the number of things one can focus on simultaneously. Attentional processes are the factors that influence how focus and behaviour are directed towards a stimulus. Essentially, these processes determine how the brain prioritizes and processes information related to stimulus. The type and duration of sustained attention are influenced by these factors.

Cognitive psychologists study attention. They are trained in neuroscience and specialize in memory, memory loss and mental processes. Since attention and memory are intertwined with learning, cognitive psychologists aim to understand how people acquire knowledge, process and grasp concepts, solve problems and recall information.

TYPES OF ATTENTION

The most commonly utilized types of attention are selective, divided, sustained and executive. Each type has distinct characteristics that are essential for individuals in various situations.

1. Selective Attention: The capacity to focus on one particular stimulus while ignoring other irrelevant or distracting stimuli.
2. Divided Attention: The ability to simultaneously focus on two or multiple tasks or stimuli, often referred to as multitasking.
3. Sustained Attention: The ability to maintain focus on a specific task or stimulus over an extended period of time.
4. Executive Attention: The management of attention resources, involving planning, decision-making, error detection and overriding automatic responses.

Each type of attention plays a crucial role in different contexts and activities, making them essential components of effective cognitive functioning.

SELECTIVE ATTENTION:

Selective attention refers to the cognitive processes that enable an individual to choose and concentrate on specific input for further processing while simultaneously filtering out irrelevant or distracting information. This ability is crucial for managing cognitive load and maintaining focus in complex environments. By selectively attending to pertinent stimuli, individuals can enhance their productivity and effectiveness in tasks that require sustained concentration and quick adaptation to changing conditions.

DIVIDED ATTENTION:

Divided attention is the brain's ability to focus on two different stimuli simultaneously and respond to multiple demands in the environment. This type of simultaneous attention allows us to process various sources of information and successfully perform multiple tasks at once. It is essential in everyday life, enabling activities such as driving while listening to the radio or having a conversation while cooking. Effective divided attention helps in enhancing productivity and managing complex tasks, requiring a well-coordinated cognitive effort to balance and prioritize different streams of information.

SUSTAINED ATTENTION:

Sustained attention is primarily concerned with concentration and refers to the ability to maintain focus on an object or task for an extended period. This type of attention is crucial for tasks that require continuous monitoring and consistent performance over time, such as studying for an exam, working on a long-term project, or driving on a monotonous highway. Sustained attention enables individuals to remain engaged and productive, ensuring that they can effectively process and respond to ongoing demands without becoming distracted or fatigued.

EXECUTIVE ATTENTION:

Executive attention plays a crucial role in managing information in short-term memory by effectively blocking potentially distracting information from the focus of attention. This selective process allows the brain to prioritize relevant information, maintain focus on tasks, and facilitate efficient cognitive processing. By filtering out distractions, executive attention helps individuals stay organized, make informed decisions, and adapt to changing circumstances effectively. It is essential for maintaining productivity and achieving optimal performance in various cognitive tasks.

STRATEGIES TO BOOSTING ATTENTION IN TEACHER TRAINEES

Boosting attention among teacher trainees involves implementing a range of effective strategies aimed at enhancing their ability to focus, sustain concentration, and manage cognitive resources effectively. These strategies include promoting active engagement through interactive teaching methods and hands-on activities, incorporating structured breaks to facilitate mental recharge, and clearly outlining learning goals and objectives for each session. Additionally, using varied instructional techniques, such as visual aids and group activities, helps maintain engagement and cater to diverse learning preferences. Breaking down complex information into smaller chunks, teaching active listening skills, and introducing mindfulness practices further support trainees in maintaining attention and reducing distractions. By creating a conducive learning environment, minimizing disruptions, and integrating technology appropriately, teacher trainers can foster an environment where trainees can develop and strengthen their attentional skills essential for effective teaching and learning. Regular feedback and opportunities for reflection also play a crucial role in helping trainees assess their attention levels, identify areas for improvement, and refine strategies to enhance focus and overall learning outcomes.

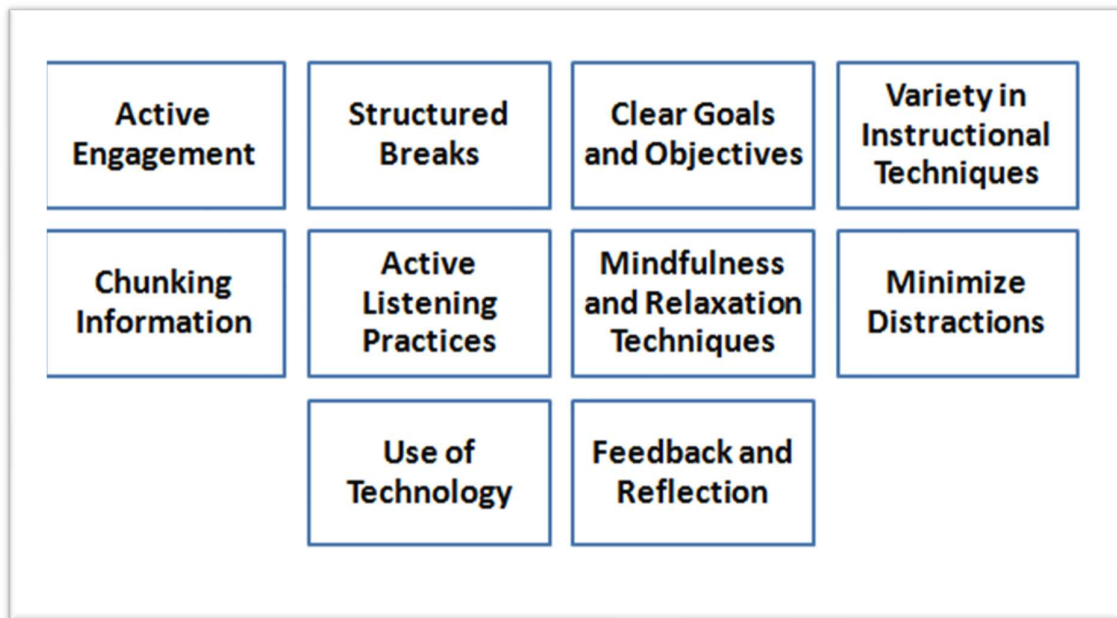


Figure 1: Strategies to boosting Attention in Teacher Trainees

Implementing these strategies can create a supportive learning environment that fosters attentional skills among teacher trainees, equipping them with the ability to engage effectively in teaching and learning activities.

OBJECTIVE OF THE STUDY

This study aims to investigate the attention among B.Ed. students, examining the influence of gender and locality.

SAMPLE

The sample was selected randomly from Chennai B.Ed. college students. The total sample was 100.

HYPOTHESIS

There is no significant difference in attention among the B.Ed. students owing to differences in

- Gender
- Locality

REVIEW OF RELATED LITERATURE

Chia-Hui Chen et al., (2021): Research has shown that targeted training programs can significantly enhance cognitive functions such as divided attention in school children. Notably, one study found that only training girls led to a substantial improvement in their divided attention after the training period, with statistical significance ($p < 0.001$, $MD = -0.77$, $ES = -0.12$). This suggests that specific interventions may be particularly beneficial for female students. The "FIFA 11+ for Kids," a school-based exercise intervention, demonstrated overall effectiveness in improving

attention among schoolchildren. However, the results indicated a marked positive outcome specifically in schoolgirls' divided attention post-intervention. This finding underscores the potential of structured exercise programs to enhance cognitive abilities in educational settings, with implications for gender-specific adaptations to maximize benefits.

Jiun-Yu Wu, Tzuying Cheng (2019): A study conducted with 771 undergraduate and graduate students from 10 universities in Taiwan examined gender differences in media-related perceived attention problems (PAP) and their associations with media-multitasking self-efficacy (MMSE). The results indicated that males exhibited higher PAP compared to females. Furthermore, higher MMSE was linked to distinct attentional challenges based on gender: for females, it was associated with increased executive and orienting problems, while for males, it correlated with heightened alerting problems. Additionally, higher orienting problems were related to more negative self-esteem in males. Among females, higher PAP was connected to poorer academic achievement. These findings underscore the complex interactions between gender, media usage, attentional issues, and academic outcomes, providing valuable insights into the cognitive and psychological impacts of media multitasking.

Chao-Chang Lee et al., (2019): The research explored the impact of using the online instant response system "Kahoot!" in an Earth Science class in a rural area of Taiwan. Utilizing a mixed-methods approach with a quasi-experimental design, the study examined the effects of this mobile technology intervention. Participants included seventh-grade junior high school students, who were randomly divided into two classes and taught by the same teacher, with one class using Kahoot! as an instructional tool. The study aimed to determine whether mobile technology influenced students' learning motivation and achievement, as well as to understand the learning processes involved. Findings revealed that the use of Kahoot! significantly enhanced students' learning motivation and captured their attention. It also provided incentives for students to preview and review learning materials, thereby promoting learning efficiency. Additionally, the integration of Kahoot! in the classroom led to improved learning achievement among the rural-area students. These results highlight the potential of mobile technology to positively impact educational outcomes in rural settings.

J.J. Ricarte et al., (2015): Despite the recognized potential benefits on mood state, attention, and concentration, there are limited studies on the effects of mindfulness-based interventions (MBI) in primary education, particularly within rural school settings. One study addressed this gap by comparing two groups of 45 children, aged 6 to 13, from a rural school. Post-intervention results indicated that the MBI group experienced improvements in mood state, concentration, and immediate auditory-verbal memory. However, no significant effects were observed in focused attention and working memory. These findings suggest that implementing MBI in rural primary education settings is both feasible and beneficial in the short term. Nonetheless, further research over a longer duration is necessary to fully understand the long-term effects and potential of sustained mindfulness practice in school environments.

TOOLS USED FOR THE STUDY

In the present study, the researcher developed a self-made attention tool consisting of 58 items across two dimensions: (1) External Factors and (2) Internal Factors. Each item alternative was assigned a weight ranging from strongly agree to strongly disagree for favorable items. In the case of unfavorable items, the scoring was reversed. The reliability of the scale, assessed through the split-half method and test-retest method, yielded a Cronbach's alpha of 0.867, which is highly significant, and a validity of 0.93.

ANALYSIS AND INTERPRETATION

H1: There is no significant difference in attention among the B.Ed. students owing to Gender.

TABLE 1 -Table showing a difference in attention among the B.Ed. students owing to Gender.

Variable	Category	N	Mean	SD	t ratio	df	Sig
Gender	Male	18	135.278	13.6158	0.192	98	P = 0.848* p > 0.05 (not sig)
	Female	82	134.695	11.2345			

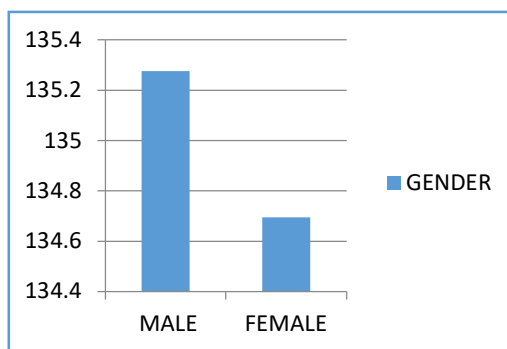


Figure 2: Bar diagram on gender

The above table as well as the figure 1 shows the mean scores standard deviation and 'p-value of selected demographic variable.

The p-value of Gender is 0.848, which is greater than the p-value at 95% confidence level (0.05) with a degree of freedom of 98.

Hence the hypothesis assumed that there is no significant difference in attention among B.Ed. students owing to the difference in gender is accepted.

Thus, we conclude that there is no significant difference between attention and gender among B.Ed. students.

H2: There is no significant difference in attention among the B.Ed. students owing to locality.

TABLE 2 -Table showing a difference in attention among the B.Ed. students owing to locality

Variable	Category	N	Mean	SD	t ratio	df	Sig
Locality	Rural	30	134.967	12.3022	0.093	98	P = 0.926* p > 0.05 (not sig)
	Urban	70	134.729	11.4144			

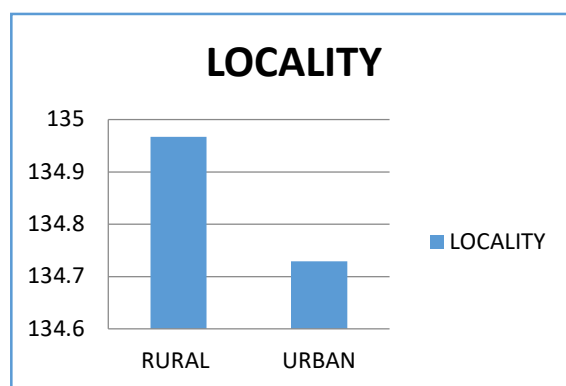


Figure 3: Bar diagram on locality

The above table as well as the figure 2 shows the mean scores standard deviation and 'p-value of selected demographic variable.

The p-value of locality is 0.926, which is greater than the p-value at 95% confidence level (0.05) with a degree of freedom of 98.

Hence the hypothesis assumed that there is no significant difference in attention among B.Ed. students owing to the difference in locality is accepted.

Thus, we conclude that there is no significant difference between attention and locality among B.Ed. students.

RECOMMENDATIONS

Based on the findings of this study, several recommendations can be made to further enhance attentional capabilities among B.Ed. students:

1. **Implement Universal Attention Enhancement Strategies:** Given that attention among B.Ed. students does not significantly vary by gender or locality, educators can employ universal strategies to enhance attention in all students. Techniques such as mindfulness training, active learning methodologies, and structured classroom management practices can be effective.
2. **Integrate Attention Training in Teacher Education Programs:** Teacher education programs should incorporate modules focused on attentional skills development. This could include workshops, seminars, and practical exercises designed to improve attention management and concentration abilities.
3. **Promote Awareness of Attentional Strategies:** Educators should be encouraged to raise awareness among B.Ed. students about the importance of attention and provide them with practical strategies to maintain focus in diverse classroom environments.

CONCLUSION

In conclusion, this study investigated the attention levels among B.Ed. students and explored the influence of gender and locality on attentional capabilities. The research findings, supported by statistical analysis, indicated that neither gender nor locality significantly affects attention among future educators. These results suggest that attentional skills among B.Ed. students are relatively stable across different demographic factors. Therefore, educational interventions aimed at enhancing attention should focus on universal strategies that cater to the diverse needs of students without emphasizing gender or geographical distinctions. By implementing the recommended strategies, educational institutions can better prepare future educators to effectively manage attention in the classroom, ultimately fostering optimal learning environments for students.

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