



ORCID of the Journal: <https://orcid.org/0009-0000-0723-9485>

DOI Number of the Paper: <https://zenodo.org/records/13150887>

Edition Link: [Journal of Academic Research for Humanities JARH, 4\(3\) July-Sep 2024](#)

Link of the Paper: <https://jar.bwo-researches.com/index.php/jarh/article/view/445>

HJRS Link: [Journal of Academic Research for Humanities JARH \(HEC-Recognized for 2023-2024\)](#)

EFFECT OF TEACHER BOREDOM AND MUNDANE NATURE OF TEACHING ON ACADEMIC PERFORMANCE OF STUDENTS AT UNIVERSITY LEVEL

Corresponding & Author 1:	NAYYAR SULTANA , Lecturer, National University of Modern Languages Islamabad, Pakistan, Email: nayyarsultana121@yahoo.com
Co-Author 2:	ALEENA CHAUDHRY , Lecturer, National University of Modern Languages Islamabad, Pakistan, Email: aleenachaudhry@numl.edu.pk
Co-Author 3:	TALAT ANJUM , PhD Scholar, National University of Modern Languages Islamabad, Pakistan, Email: talatkam@gmail.com

Paper Information

Citation of the paper:

(Jarh) Sultana, N., Chaudhry, Al, & Anjum, T., (2024). Effect of Teacher Boredom and Mundane Nature of Teaching on Academic Performance of Students at University Level. In *Journal of Academic Research for Humanities*, 4(3), 130–137.

Subject Areas for JARH:

- 1 Humanities
- 2 Education

Timeline of the Paper at JARH:

Received on: 29-04-2024.
Reviews Completed on: 30-06-2024.
Accepted on: 26-07-2024.
Online on: 01-08-2024.

License:



[Creative Commons Attribution-Share Alike 4.0 International License](#)

Recognized for BWO-R:



Published by BWO Researches INTL.:



DOI Image of the paper:

DOI [10.5281/zenodo.13150887](https://zenodo.org/records/13150887)

Abstract

Boredom in the academic setting poses significant challenges affecting both students and teachers. This study explores how students' academic performance is negatively impacted by teachers' boredom and the routine nature of teaching. The students of BS, B.Ed. Hons and teachers of the educational sciences department are the focus of the study. The sample, which makes up 10% of the entire population is chosen using a simple random sampling method by using a quantitative research approach. A structured questionnaire is used in the data collection process. The main conclusions highlight the complex relationship between academic boredom and elements like standardized testing, administrative work, repetition, low engagement, and resource constraints. The study reveals the potential long-term consequences on students' motivation, self-esteem, and overall academic achievement. Recommendations include the adoption of varied teaching styles and strategies to address boredom with a focus on creating positive learning environments.

Keywords: Boredom, Mundane, Performance, Diverse, Psychopathological

Introduction

(Molera, Martos, Perez, et. al. 2024), A negative academic emotion that can affect both students and teachers in different ways is boredom. Anxiety is the negative emotion that has been studied the most, despite boredom being a more recent academic emotion that has drawn attention from academics and educators. There's a purpose to boredom. It inspires people to think outside the box and make new goals. However, boredom fosters the development of their skills, imagination, and self-worth. Teachers often need help, so they try to push themselves and alter their ways of teaching to create a more positive environment. (Batool, Faqir, et. al. 2024), Effective instruction requires the use of a good teaching method by the instructor. When choosing a teaching style, a teacher has a lot of options at their disposal. Anything that is considered mundane is extremely commonplace and neither unique nor fascinating. It is not uncommon for teachers to find it difficult to find personal time outside of the classroom because teaching can be a physically and mentally taxing profession. Teacher fatigue and burnout are possible outcomes of this. (Bridge, Horey, et. al. 2023), A lesson plan can be written by the instructor, obtained online, from another instructor, or a book. When selecting a method, a teacher needs to consider the students' backgrounds, knowledge, and learning objectives. Instructors understand that each student learns differently and presents their information in unique ways. Teachers frequently employ strategies that accommodate different learning styles to support their student's retention of knowledge and comprehension (Smith & Jones, 2023). Various strategies and methods are used to ensure that every student has an equal chance to learn. The phrase describes an uncomfortable emotional or psychological state associated with low levels of physical and cognitive arousal, specific time perceptions (e.g., dragging, standing still), and action

tendencies to detach oneself from the environment. This defines boredom as a confluence of low vitality, discontent, letdown, irritation, distraction, and lack of drive to pursue previously established objectives. It is ubiquitous in learning environments and has a consistent impact on a variety of learning-related variables, including motivation, self-control, engagement on an individual basis, cognitive function, learning strategies, and learning outcomes. (Van, Gotch, et. al. 2024), Kids' academic performance could be negatively impacted for a very long time if teachers don't meet their needs. A lack of motivation brought on by ineffective instruction can lead to bad study habits and poor grades. Pupils may become disinterested in their studies and develop negative attitudes toward education. This could limit their future options and impede their intellectual development. (Ortiz, Hernandez, et. al. 2023), In addition to negatively affecting academic performance, poor teaching can have a significant impact on students' self-esteem. Students who consistently perform poorly or struggle to understand the material may get discouraged and lose confidence in their abilities. They might thus have a negative self-image and be less willing to take chances or grasp new opportunities. (Han, Gao, 2023), Academic boredom is a common occurrence as well as a very rich concept. It does not yet have clear and succinct definitions. Nonetheless, the majority of researchers concur that there are a variety of emotions connected to education, and academic boredom which is defined as a negative deactivating goal achievement emotion is just one of them. Academic boredom can negatively impact students' school-based learning, as evidenced by current field research. (Asal, Yousuf, et. al, 2023), Academic boredom has the potential to eventually indicate more serious psychopathological disorders, such as depression and anxiety (Daniels, Klassen, & Tze, 2016).

Research problem

Since education is the fundamental building block of societal advancement, the effectiveness of the learning process is essential to students' academic achievement. Students' learning is greatly influenced by their instructors, whose enthusiasm and involvement inspire students and increase their motivation and productivity. However, it has been found that the use of dull teaching strategies and teacher ennui could be obstacles to learning. Students' academic performance is negatively impacted by teachers' dull methods and boredom, which is one of the most significant issues in education.

Hypothesis

H1: There is a significant impact between boredom and the mundane nature of teaching on the academic performance of students

H2: There is no significant impact between boredom and the mundane nature of teaching on the academic performance of students.

The Rationale of the Study

Academic performance suffers when learning is hindered by academic tedium. Students who find their classes boring tend to become easily distracted, skip more classes, and ultimately miss out on important learning opportunities. Boredom is common, but it's not a given. When students are well-versed in the subject matter being covered, boredom in the classroom is certain to occur. The subject has nothing to do with actual experiences. It is challenging for the instructor to discuss the subject in detail. Students' full focus is also harmed by a subpar physical classroom environment. (Muhammad, Muhammad, Arshad, 2023), A teacher must stay away from kickers because they can cause indifference and apathy. For example, teachers need to assign an interactive task to every student to help them become better at solving complex problems. Every few minutes, Students should be allowed to take a break and recharge so they can focus on the lessons and homework. To fully grasp the complexity of their students, teachers should

use flawless and practical styles. (Laghari, Chachar, et.al. 2023), Overachievers are prone to boredom because they believe they already understand the material covered in the ongoing learning session. They are eager to proceed. Conversely, average students experience boredom because of the absence of order in the classroom, which is the. Throughout their academic careers, students greatly benefit from the role that teachers play. For instance, she must make all students engage in an interactive activity to improve their complex problem-solving skills. Students must be allowed to take a break every few minutes to let themselves re-energize to concentrate on the topics and assignments. Teachers should incorporate impeccable and easily applicable styles to better understand the complexities of the students. Overachieving students are susceptible to tedium because they think that they are already aware of the topics being taught in the ongoing learning session. They can't wait to move ahead. On the other hand, mediocre students feel bored due to lack of discipline within the class which is the root of evil. They feel lost and look for a permanent solution to their problems. Teachers should foster curiosity and learnability in students. Dewaele, J. M., & Li, C. (2021).

Significance of the Study

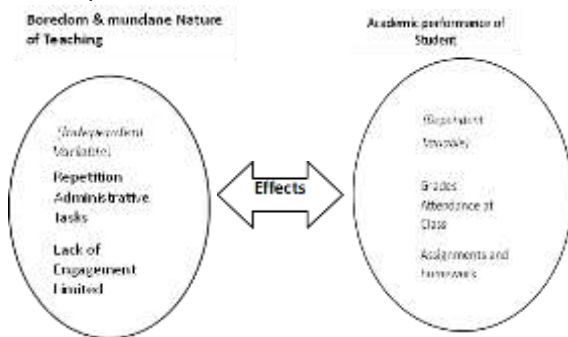
If teachers don't meet the needs of their students, their academic performance could be negatively impacted for a very long time. A lack of motivation brought on by ineffective instruction can lead to bad study habits and poor grades. Students may become disinterested in their studies and develop negative attitudes toward education. This could limit their future options and impede their intellectual development. In addition to negatively affecting students' academic performance, ineffective teaching can also have a significant negative impact on students' self-esteem. Teachers at the elementary and secondary levels as well as aspiring educators will benefit from this study in terms of how they

will instruct children and it will help the future researchers as well. [Eren, A., & Coskun, H. \(2016\)](#).

Research Objectives

1. To see the effect of teacher boredom and the mundane nature of teaching on the academic performance of students.
2. To investigate how the boredom and mundane nature of teaching affect the academic performance of students.
3. To analyze the core cause of boredom and the mundane nature of teaching.

Conceptual Framework



[Nett, U. E., Goetz, T., & Daniels, L. M. \(2010\)](#).

Literature review

Teacher boredom and the mundane Nature

The dullness of teaching and teacher boredom have drawn more attention in educational research because of the possible effects they may have on university-level student engagement and academic achievement. [Nett, U. E., Goetz, T., & Daniels, L. M. \(2010\)](#).

Teacher Boredom: Causes and Consequences

Teacher boredom is characterized by a lack of interest, monotony, and enthusiasm in the classroom and can be caused by a variety of factors, including burnout, disillusionment with the educational system, and dissatisfaction with the teaching profession ([Fried et al., 2019](#)). Research indicates that bored teachers find it difficult to effectively teach the material, which decreases student attention and interest. ([Vansteenkiste et al., 2019](#)).

Mundane Teaching Practices and Student Engagement

The routine nature of teaching is often associated with the use of repetitious teaching

techniques, a reliance on traditional pedagogical approaches, and a lack of creativity in curriculum design. ([Evans, 2018](#)). Research has indicated that classrooms with routine-based teaching methods typically encourage students to learn passively, which lowers their intrinsic motivation and interest in learning. Furthermore, the frequency of routine teaching methods could be a factor in the gap between course material and practical application, which would make college students disinterested and indifferent. ([Sarwar, Khurram, 2023](#)), English had to be used for writing studies at first. Second, studies that were qualitative and case-based were not included. Third, research assessing academic or achievement boredom with bipolar scales that is, rating learning experiences on a continuum between exciting and boring was not included. Fourth, tests of academic disinterest had to be given concurrently with or before tests of learning techniques, motivation, and performance. [Coskun, H., & Eren, A. \(2016\)](#).

Impact on Academic Performance

Their findings supported the observation made by [Moskowitz & Dewaele \(2021\)](#) that passionate educators "May enjoy teaching more, and that enjoyment might rub off on students." These results do show how the teacher and students in the EFL class spread positive emotions to one another. It should come as no surprise that the shared positive emotional experiences also contribute to the decrease of negative emotions like fear and boredom, the development of a positive, engaging, and psychologically safe classroom environment, and the rise in student participation and involvement in tasks or activities ([Dewaele & MacIntyre, 2014](#)). The results are consistent with the pattern found in educational psychology, which holds that while negative emotions are associated with disengagement, positive emotions are associated with increased engagement ([Linnenbrink-Garcia et al., 2011; Oga-Baldwin, 2019; Philp & Duchesne, 2016](#)).

Research Methodology

The goal of quantitative methodology is to use statistical techniques to quantify and analyze the relationships between variables in a study. This methodology is used to answer research questions that call for the measurement and analysis of numerical data, and it is typically associated with empirical research.

Research Design

The quantitative approach was used to check how teacher boredom and mundane nature affect the academic performance of students. The questionnaire consisted of 11 statements on a 5-point scale. The scales are based on 1=Strongly Disagree, 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree.

Population

All afternoon B.Ed. and BS students and teachers of the Educational Sciences department of the National University of Modern Languages Islamabad comprised the population of the study. The population is small, so researchers approach 70% of the students for sampling.

Sampling Technique

Simple random sampling is used in this research. It is a method of selecting a sample from a population in such a way that every possible sample of a given size has an equal chance of being chosen. It is a fundamental and unbiased technique commonly used in statistical research and surveys.

Sample Size

All afternoon B.Ed. and BS students were 225 from the Educational Sciences department of the National University of Management Sciences will be 70%of the whole population.

Data Collection Instrument

Questionnaire

A questionnaire is a type of research tool that consists of a list of inquiries or prompts intended to elicit data from subjects. It is a widely used technique in research and surveys to gather information on a range of subjects, such as demographics, opinions, attitudes, and behaviors. A questionnaire was used by the

researcher of the reading following research studies. The researcher obtained data through in-person interactions.

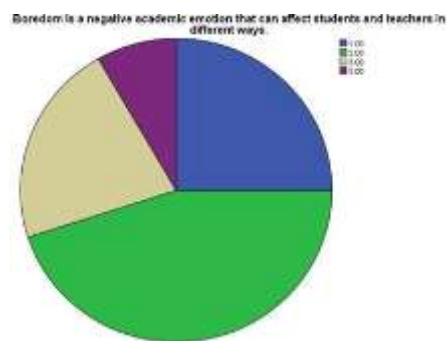
Data Analysis

The process of carrying out certain calculations and assessments to draw out pertinent information from data is known as data analysis. The goal is to compile the gathered data and arrange it in a way that would enable the questions to be answered.

Table: 1 Participant

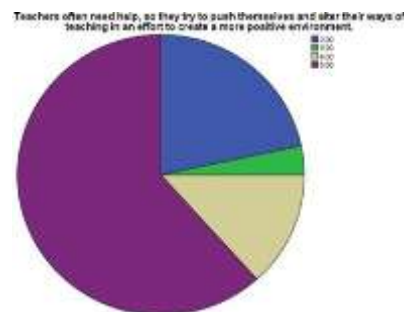
Sr. No	Classes	Shift	Total
1	BS(Education), B.Ed(Hons)	Afternoon	225

Figure 1



In this figure, most people disagree with “Boredom is a negative academic emotion that can affect students and teachers in different ways”. Some participants Strongly Disagree, Neutral and some of them are Strongly Agree. In this pie chart, 40 % disagreed with the above statement, 20 % is strongly disagreed and neutral and 10 is strongly agreed.

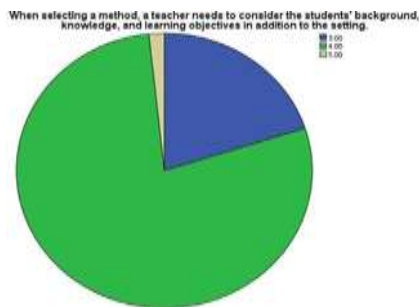
Figure 2



In this figure, most of the people strongly agreed that “Teachers often need help, so they try to push themselves and alter their ways of

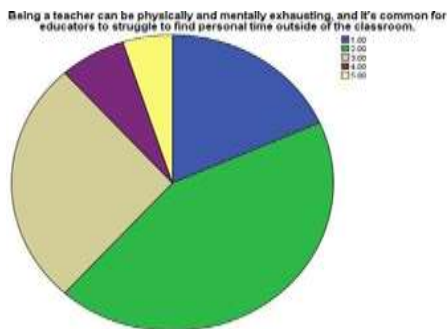
teaching to create a more positive environment.”. Some participants Strongly Disagree, Neutral and some of them are Strongly Agree. In this pie chart, 55 % agreed with the above statement, 30 % disagreed 5 % were neutral, and 10%is strongly agreed.

Figure 3



In this figure, most people agree that “When selecting a method, a teacher needs to consider the students' background, knowledge, and learning objectives in addition to the setting”. Some participants are Neutral and some of them are Strongly Agree. In this pie chart, 80 % strongly agreed with the above statement 15 %neutral and 5 % agreed.

Figure 4



In this figure, most people disagree that “Being a teacher can be physically and mentally exhausting, and it's common for educators to struggle to find personal time outside of the classroom.”. Some participants strongly disagreed, Neutral and some of them are Strongly Agreed.

Discussion

The topic of the research study was “Effect of Teacher Boredom and Mundane Nature of Teaching on Academic Performance of Students “. The purpose of my study was to explore the effect of teacher boredom and the

mundane nature of teaching on the academic performance of students. My research objective was to examine the core cause of boredom and the mundane nature of teaching. The researcher used a quantitative research design with a target population of 200 students from B.Ed. The sample size for the target population was 10%. The delimitation of the study was National University of Modern Languages (NUML) students of the social sciences department of the evening shift. The researcher developed a questionnaire and used a correlation test on Spss23. To analyze the data, I applied the mean test. The research findings reveal several critical insights into the effect of teacher boredom and the mundane nature of teaching on the academic performance of students. Most participants acknowledged that being a teacher can be physically and mentally exhausting, with varied responses indicating the challenges educators face in maintaining a work-life balance. Interestingly, participants generally agreed that teachers need assistance and strive to alter their teaching methods to create a more positive environment. (Shahzaib, Dattoo, 2023), The study also underlined how important it is to recognize different learning styles and how educators work to accommodate these differences. Participants generally agreed that teachers employ strategies to support students' understanding and memory of material by considering their various learning preferences. The findings also brought into question the potential consequences of inadequate instruction, emphasizing the negative impacts on students' motivation, study habits, and overall academic performance. (Tahira, Muhammad, Asma, 2023), Participants also voiced the opinion that academic boredom can result in more serious psychopathological conditions like depression and anxiety, even outside of the immediate educational setting. The study also clarified what the students expected from their teachers in terms of opportunities for personal

development, emotional support, academic guidance, and recognition.

Findings

The findings demonstrate the intricate relationship that exists between teacher boredom and the repetitive nature of teaching. The awareness of the emotional and physical challenges educators face highlights the value of providing supportive work environments for educators as well as the need for institutional support. The study's emphasis on distinguishing between various learning styles aligns with contemporary educational theories that promote differentiated instruction. The discussion also touches on the potential long-term consequences of academic boredom, emphasizing its link to psychopathological conditions. This highlights how important it is to have a holistic approach to education that considers students' mental health in addition to their academic achievement.

Conclusion

In summary, the study offers insightful information about the mechanics of teacher boredom and how it affects pupils. It underlines how critical it is to address these issues to build a more stimulating and encouraging learning environment. The results indicate that teacher enthusiasm and well-being are important factors affecting the overall quality of education.

Limitations

Although the study offers insightful information, some limitations should be noted. The study may not be broadly applicable because it is specific to the National University of Modern Languages, Islamabad. There is a chance of response bias when self-reported data is obtained through a questionnaire. Furthermore, the study's cross-sectional design makes it more difficult to determine the causes of the various variables. For a more thorough understanding, future studies could make use of longitudinal designs and incorporate a wider variety of educational institutions.

Recommendations

1. To sustain student engagement, educators ought to investigate and integrate a variety of teaching approaches. Group discussions, projects, and hands-on activities are examples of interactive and participatory methods that can add novelty to the learning process and lower the risk of boredom.
2. Organizations ought to provide teachers with frequent professional development opportunities that emphasize cutting-edge methods, effective classroom management, and boredom-busting tactics. Opportunities for continuous learning can give teachers the abilities they need to modify their methods of instruction to fit the changing needs of their pupils. Enhancing the psychological and physical conditions in the classroom can help create a more engaging learning environment. Educators ought to contemplate integrating interactive displays, technology, and visual aids to establish a captivating environment that stimulates curiosity and excitement for education.
3. Instructors ought to regularly evaluate themselves to consider their pedagogy and pinpoint areas in need of development. This self-awareness can result in modifications to teaching tactics, keeping lessons engaging and pertinent for learners.
4. Connecting lesson content to real-life experiences can make the curriculum more meaningful and interesting for students. Teachers should strive to make academic material relevant to students' lives, demonstrating the practical applications of what they are learning.

Innovation/Research Gap

Investigating the effect of teacher boredom and the mundane nature of teaching on the academic performance of university students can unveil various research gaps. Here are some potential gaps that could be explored:

1. **Quantitative Measurement of Teacher Boredom:** There is a lack of standardized tools or metrics to accurately measure teacher boredom. Developing reliable and valid scales

to quantify teacher boredom can help in understanding its impact better.

2. **Longitudinal Studies:** Many studies might be cross-sectional, providing only a snapshot in time. Longitudinal studies could better illustrate how teacher boredom evolves and affects student performance over longer periods.
3. **Impact on Different Disciplines:** The effect of teacher boredom might vary across different academic disciplines. Research could explore how boredom in subjects like humanities differs from that in sciences or engineering and its subsequent impact on students.
4. **Interdisciplinary Approaches:** Combine insights from psychology, education, and neuroscience to understand how teacher boredom impacts cognitive and emotional aspects of teaching and learning.
5. **Wearable Technology and Biometrics:** Use wearable devices to monitor physiological indicators of boredom and stress in teachers (e.g., heart rate variability, galvanic skin response) to obtain objective data.
6. **Social Network Analysis:** Conduct social network analysis to study the relationships and interactions between teachers and students, identifying how these dynamics are influenced by teacher boredom and how they, in turn, affect academic performance.

References

- Asal, I., Yousuf, D. M. I., & DR Muhammad Imran. (2024). Parents and Teachers Attitudes toward Life Skills-based Education at Elementary Level. *International "Journal of Academic Research for Humanities"*, 4(1), 64–76. Retrieved from <https://jar.bwo-researches.com/index.php/jarh/article/view/210>
- Batool, R., Dr. Faqir M. Aslam Rana, & Dr. Hafiz Muhammad Qasim. (2024). Investigating Gender Perceptions on Technology Use in Pakistan ELT Classrooms: A Survey-Based Study. *International "Journal of Academic Research for Humanities"*, 4(1), 58–63. Retrieved from <https://jar.bwo-researches.com/index.php/jarh/article/view/385>

- Bridge, C., Horey, D., Loch, B., Julien, B., & Thompson, B. (2023). The impact of an innovators group on the development of a culture of innovation in the use of educational technologies. *Australasian Journal of Educational Technology*, 39(6), 17–32. <https://doi.org/10.14742/ajet.8575>
- Dewaele, J. M., & Li, C. (2021). Teacher enthusiasm and students' social-behavioral learning engagement: The mediating role of student enjoyment and boredom in Chinese EFL classes. *Language Teaching Research*, 25(6), 922-945.
- Evans, J. R. (2018). The relationship between teaching experience and perceived teacher boredom: A mixed methods study. *Teaching and Teacher Education*, 76, 86-95.
- Fried, L. M., Mansfield, C. D., & Dobozy, E. (2019). Bored teachers: A scoping review of the literature. *Teaching and Teacher Education*, 85, 59-71.
- Han, J., & Gao, C. (2023). University teachers' well-being in ICT-enhanced teaching: The roles of teacher self-efficacy and teaching support. *Australasian Journal of Educational Technology*, 39(6), 89–104. <https://doi.org/10.14742/ajet.8868>
- Laghari, D. M. A., Chachar, D. Z. A., & Saima Bachal. (2023). An overview of the influence of teachers' subject matter knowledge on students' academic achievement. *International "Journal of Academic Research for Humanities"*, 3(3), 252–258A. Retrieved from <https://jar.bwo-researches.com/index.php/jarh/article/view/327>
- Muhammad Ramzan, Dr Muhammad Moin, & Arshad Hussain Madni. (2024). Comparative Analysis of Academic Achievements of Male and Female Students in Mathematics at Government High Schools of Punjab. *International "Journal of Academic Research for Humanities"*, 4(1), 121–127. Retrieved from <https://jar.bwo-researches.com/index.php/jarh/article/view/385>

- researches.com/index.php/jarh/article/view/394
- Molero, M. M., Martos, Á., Pérez-Fuentes, M. C., Tortosa, B. M., Sisto, M., Simón, M. M., and Gázquez, J. J. (2024). Humanization, Adaptation to Change, and Mental Health in Teachers in Three European Countries. *The European Journal of Psychology Applied to Legal Context*, 16(1), 17 - 25. <https://doi.org/10.5093/ejpalc2024a2>
- Nett, U. E., Goetz, T., & Daniels, L. M. (2010). What to do when feeling bored? Students' strategies for coping with boredom. *Learning and Individual Differences*, 20(6), 626-638.
- Ortiz Beltrán, A., Hernandez-Leo, D., & Amarasinghe, I. (2023). Surviving and thriving: How changes in teaching modalities influenced student satisfaction before, during, and after COVID-19. *Australasian Journal of Educational Technology*, 39(6), 72–88. <https://doi.org/10.14742/ajet.8958>
- Pekrun, R., Goetz, T., Daniels, L. M., Stupnisky, R. H., & Perry, R. P. (2010). Boredom in achievement settings: Exploring control–value antecedents and performance outcomes of a neglected emotion. *Journal of Educational Psychology*, 102(3), 531.
- Pekrun, R., Hall, N. C., Goetz, T., & Perry, R. P. (2014). Boredom and academic achievement: Testing a model of reciprocal causation. *Journal of Educational Psychology*, 106(3), 696.
- Sarwar, N., Khurram, F., & Fayyaz, Sana. (2023). Impact of Practicing Gratitude on Focus and Resilience in Classroom Learning among University Students: A Qualitative Analysis. *International "Journal of Academic Research for Humanities"*, 3(3), 65–73. Retrieved from <https://jar.bwo-researches.com/index.php/jarh/article/view/294>
- Smith, A., & Jones, B. (2023). The impact of teacher enthusiasm on student achievement: A meta-analysis. *Journal of Educational Psychology*, 115(3), 321-335.
- Shahzaib, & Dato, A. K. (2023). Pedagogical Utility of Funds of Knowledge for Education for Pluralism: A Case Exploring Prospective Teachers' Perceptions. *International "Journal of Academic Research for Humanities"*, 3(4), 25–36A. Retrieved from <https://jar.bwo-researches.com/index.php/jarh/article/view/338>
- Tahira Asgher, Muhammad Saleem, & Dr. Asma Kashif Shahzad. (2023). Eco Linguistics-Infused Procedural Text Learning for ESL Students' Success. *International "Journal of Academic Research for Humanities"*, 3(4), 01–12. Retrieved from <https://jar.bwo-researches.com/index.php/jarh/article/view/337>
- Tze, V. M., Daniels, L. M., & Klassen, R. M. (2016). Evaluating the relationship between boredom and academic outcomes: A meta-analysis. *Educational Psychology Review*, 28(1), 119-144.
- Vansteenkiste, M., Sierens, E., Soenens, B., Luyckx, K., & Lens, W. (2009). Motivational profiles from a self-determination perspective: The quality of motivation matters. *Journal of Educational Psychology*, 101(3), 671-688.
- Van Orman, D. S. J., Gotch, C. M., & Carbonneau, K. J. (2024). Preparing Teacher Candidates to Assess for Learning: A Systematic Review. *Review of Educational Research*, 94(0). <https://doi.org/10.3102/00346543241233015>