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DISCIPLINARY PERSPECTIVES ON ARTIFICIAL INTELLIGENCE: A COMPARATIVE ANALYSIS OF SCIENCE AND ARTS STREAM STUDENTS

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ABSTRACT:

Artificial Intelligence (AI) is rapidly transforming educational landscapes by enabling personalized learning, data-driven instruction, and automation of administrative processes. While significant progress has been made in understanding the technical applications of AI in education, relatively little attention has been given to students' attitudes toward AI across different academic disciplines. This study aims to compare the attitudes of undergraduate students from the Science and Arts streams at GM University, Sambalpur, toward AI. A total of 200 students (100 from each stream) participated in the study. Data were collected using the General Attitudes toward Artificial Intelligence Scale (GAAIS), a standardized instrument measuring three dimensions: Acceptance, Trust, and Perceived Utility. An independent z-test was conducted to examine the significance of the difference in mean scores between the two groups. The results indicated a statistically significant difference in attitudes, with Science students demonstrating more favorable perceptions of AI compared to their Arts counterparts (z = 2.87, p = 0.0045). These findings highlight the influence of disciplinary background on technological attitudes and underscore the need for inclusive, cross-disciplinary AI education strategies. The study offers critical implications for curriculum design, faculty development, and institutional policy to promote digital equity and readiness among all learners.

KEYWORDS:

ARTIFICIAL INTELLIGENCE IN EDUCATION, STUDENT ATTITUDES, SCIENCE VS. ARTS STUDENTS, AI ACCEPTANCE.

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1. INTRODUCTION:

1.1. BACKGROUND AND RATIONALE:

Artificial Intelligence (AI) is significantly transforming the landscape of education. It enables systems to personalize learning experiences, adjust content delivery based on individual needs, and handle routine administrative tasks efficiently (Luckin et al., 2016). This has introduced a shift from one-size-fits-all instruction to more dynamic, data-informed pedagogy. AI-based adaptive learning platforms are designed to continuously assess learners' performance and tailor feedback and instruction accordingly. According to Lee and Park (2020), such systems can modify learning paths in real-time, accommodating individual differences in learning pace, style, and comprehension, thus improving academic engagement and outcomes.

The increasing integration of AI into educational systems globally highlights the need to understand how learners perceive and respond to this technology. In a time when digital and AI-assisted learning environments are becoming more prevalent, students' attitudes toward these tools may influence not only their willingness to engage with them but also their overall learning efficacy and digital adaptability.

1.2 IMPORTANCE OF STUDYING ATTITUDES TOWARD AI:

Attitudes toward AI are not merely academic interests—they carry practical consequences. Students who view AI positively are more likely to explore AI-enabled educational tools, integrate them into their learning practices, and develop essential competencies for technology-driven careers (Selwyn, 2019). In contrast, negative or skeptical attitudes may act as psychological barriers, leading to underutilization of available technologies and a digital divide across disciplines. Therefore, understanding students' attitudes can provide educators and policymakers with crucial insights into curriculum design, digital literacy initiatives, and pedagogical interventions.

Moreover, attitudes are often shaped by disciplinary exposure. Science and technology students, who interact more frequently with data systems, algorithms, and digital platforms, may exhibit higher familiarity and trust toward AI applications. Conversely, students from humanities or

social sciences may approach AI through ethical, philosophical, or critical perspectives, leading to more nuanced or reserved attitudes toward its role in education and society.

1.3. CONTEXT OF GM UNIVERSITY:

GM University, located in Sambalpur, Odisha, is a multidisciplinary higher education institution offering programs in Science, Arts, Commerce, and allied fields. As the university seeks to align itself with national and global educational reforms—especially under the framework of the National Education Policy (NEP 2020)—the integration of emerging technologies like AI into academic discourse has become increasingly relevant.

However, the adoption of AI and related technologies at the university level is still evolving and varies across departments. Science students at GM University are typically introduced to computational thinking, data handling, and technical applications as part of their academic training, while Arts students may encounter limited direct exposure to such tools. These differences in curriculum structure and epistemological orientation may shape how students perceive the role, relevance, and trustworthiness of AI in their academic lives.

This study was therefore designed to explore how undergraduate students at GM University—specifically from the Science and Arts streams—differ in their attitudes toward Artificial Intelligence. By investigating these attitudinal differences, the study aims to inform strategies for inclusive and discipline-sensitive AI integration in higher education.

2. LITERATURE REVIEW:

2.1 THEORETICAL PERSPECTIVES ON AI IN EDUCATION:

The integration of Artificial Intelligence (AI) into educational settings has been framed by several theoretical perspectives, ranging from behaviorist learning models to constructivist and sociocultural approaches. Early uses of AI in education were influenced by behaviorist principles, where intelligent tutoring systems (ITS) provided immediate feedback and reinforcement to shape learning behavior. As technology evolved, constructivist perspectives gained prominence, emphasizing learner-centered approaches where AI systems adapt to individual learning styles and paces (Luckin et al., 2016).

More recent models have incorporated Vygotsky's (1978) sociocultural theory, positioning AI not just as a tool for instruction, but as a mediational agent that facilitates learning through interaction and scaffolding. AI-enhanced platforms, such as adaptive learning environments and intelligent feedback systems, align with the notion of the zone of proximal development, providing support tailored to each learner's developmental level (Holmes et al., 2022). The theoretical promise of AI, therefore, lies in its capacity to personalize learning, simulate real-time mentoring, and support inclusive pedagogy.

2.2 DISCIPLINARY DIFFERENCES IN TECHNOLOGY ATTITUDES:

Disciplinary culture plays a pivotal role in shaping students' attitudes toward technology and AI. Biglan's (1973) typology of academic disciplines suggests that hard disciplines (e.g., sciences) tend to be more structured and technologically oriented, while soft disciplines (e.g., humanities and arts) emphasize critical thinking and subjective interpretation. These epistemological orientations influence how students engage with technological tools.

Studies have shown that students in STEM (Science, Technology, Engineering, and Mathematics) fields are more likely to perceive AI as beneficial, efficient, and aligned with their academic and career goals. In contrast, students in humanities or social sciences often approach AI with caution, emphasizing ethical, cultural, and existential questions surrounding its use (Selwyn, 2019). This disciplinary divide reflects both curricular exposure and broader worldviews, where Science students are trained to use computational tools, and Arts students may experience a relative disconnect from such technologies in their formal education. Teo (2011) also highlights that attitudes toward technology are shaped by perceived usefulness, ease of use, and past experiences—factors that vary significantly across disciplines. Understanding these differences is crucial for implementing AI in a way that is inclusive and responsive to the needs of all learners.

2.3 PRIOR EMPIRICAL STUDIES:

Empirical research has begun to explore how students from different academic backgrounds perceive AI. Lee and Park (2020) found that Science and Engineering students were more likely to trust AI-based learning tools and showed higher acceptance rates compared to students from the Arts and Humanities. Similarly, a study by Holmes et al. (2022) revealed that students' exposure to AI-related content in their coursework significantly predicted their openness to AI applications in education.

In the Indian context, literature on AI in higher education is emerging, with most studies focusing on technical institutes or engineering colleges. Few have explored perceptions among Arts students or offered a comparative disciplinary lens. This highlights a critical gap in research, as inclusive digital transformation requires an understanding of how all streams—especially underrepresented ones like Arts—engage with AI.

Overall, the reviewed literature emphasizes that while AI holds great potential for enhancing education, students' attitudes are not uniform and are deeply influenced by disciplinary affiliation, educational exposure, and underlying pedagogical frameworks. The present study builds on this foundation to explore these dynamics in the context of GM University, Sambalpur.

2.4. RESEARCH GAP:

While there is a growing body of international literature on the role of Artificial Intelligence (AI) in education, most

existing research predominantly focuses on the development, implementation, and pedagogical utility of AI tools in technical or STEM-based contexts. Studies often highlight the benefits of AI in enhancing learning outcomes, personalizing instruction, and supporting administrative efficiency (Luckin et al., 2016; Holmes et al., 2022). However, there remains a limited understanding of how students across different academic disciplines perceive and engage with these technologies—particularly in the context of non-STEM fields such as the humanities and social sciences.

Moreover, prior empirical studies (e.g., Lee & Park, 2020; Teo, 2011) have emphasized the importance of factors such as perceived usefulness and trust in AI systems, but they tend to overlook the disciplinary cultural context that shapes these perceptions. There is a noticeable gap in comparative research that examines attitudinal differences toward AI between students of divergent academic orientations—such as Science and Arts—especially within the Indian higher education system.

In the Indian context, much of the available research has been conducted within engineering institutions or ICT-based learning environments, with relatively little attention given to general universities and multidisciplinary institutions. As a result, students from Arts and Humanities streams remain underrepresented in AI-related attitudinal studies. The lack of comparative data makes it difficult for universities to develop inclusive, discipline-sensitive strategies for AI integration in curricula.

This study seeks to address this gap by systematically comparing the attitudes of Science and Arts undergraduate students at GM University, Sambalpur. By investigating these differences, the research aims to contribute to a more nuanced understanding of how disciplinary background influences students' openness to and engagement with AI—insights that are essential for equitable and effective educational technology policy and practice.

3. RESEARCH QUESTIONS:

- What are the attitudes of Science and Arts students toward Artificial Intelligence?
- Is there a statistically significant difference in their attitudes?

4. OBJECTIVES OF THE STUDY:

- To examine and compare the attitudes of Science and Arts students toward AI
- To analyze whether a significant disciplinary difference exists

5. HYPOTHESIS:

- **Null Hypothesis (H_0):** There is no significant difference in the attitudes toward AI between Science and Arts students.
- **Alternative Hypothesis (H_1):** There is a significant difference in the attitudes toward AI between Science and Arts students.

6. METHODOLOGY:

6.1 RESEARCH DESIGN:

This study employed a quantitative, cross-sectional, comparative research design to examine differences in attitudes toward Artificial Intelligence (AI) between Science and Arts students at GM University, Sambalpur. The objective was to identify whether a statistically significant difference exists between the two academic groups in terms of their perceptions of AI.

Data were collected at a single point in time using a structured questionnaire, making it a cross-sectional design. Since the study aimed to compare mean attitude scores between two independent groups, it followed a between-group design and utilized a z-test for independent samples as the primary statistical technique. This approach was appropriate due to the relatively large and equal sample sizes (N = 100 per group) and the assumption of known or approximated population variances.

The research followed a deductive approach, beginning with a hypothesis derived from existing literature that suggested disciplinary differences in technology-related attitudes. The design allowed for objective measurement, statistical analysis, and generalizable conclusions within the institutional context.

6.2 SAMPLE AND SAMPLING:

The sample for this study consisted of 200 undergraduate students enrolled at GM University, Sambalpur, with an equal representation of 100 students from the Science stream and 100 students from the Arts stream. The participants were selected based on their academic discipline, and the study specifically targeted those between the ages of 18 and 25 years, enrolled in full-time undergraduate programs.

A purposive sampling technique was employed to select participants from the target population. This non-probability sampling method was chosen to ensure that only students from the Science and Arts disciplines—who were the focus of the comparative analysis—were included in the study. Care was taken to achieve gender and semester-level diversity within each group, although randomization was not applied.

Participants were briefed about the purpose of the research, and informed consent was obtained prior to data collection. Confidentiality and anonymity were assured, and participation was entirely voluntary. Only those who completed the full questionnaire were included in the final analysis.

6.3 INCLUSION AND EXCLUSION CRITERIA

INCLUSION:

- Participants were enrolled as full-time undergraduate students at GM University, Sambalpur.

- Only students from the Science and Arts streams were considered for the study.
- Participants were between the ages of 18 and 25 years.
- Students who provided informed consent and voluntarily agreed to participate were included.
- Only those who completed the entire questionnaire were considered for final data analysis.

EXCLUSION:

- Students from academic streams other than Science and Arts (e.g., Commerce, Law, Management) were excluded.
- Individuals above or below the 18–25 age range were not considered.
- Participants who did not complete the questionnaire in full or submitted inconsistent responses were excluded.
- Students who declined to participate or withdrew consent at any stage were not included in the analysis.

6.4 INSTRUMENT

To measure students' attitudes toward Artificial Intelligence, the study employed the General Attitudes toward Artificial Intelligence Scale (GAAIS). This standardized instrument consists of 20 items and uses a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). It is designed to assess participants' perceptions and receptiveness toward AI in educational and daily life contexts.

The GAAIS encompasses three key dimensions:

- **Acceptance**: Reflects students' openness and willingness to engage with AI technologies.
- **Trust**: Measures confidence in AI systems' decisions, actions, and reliability.
- **Perceived Utility**: Assesses beliefs about the practical usefulness of AI in learning environments or everyday tasks.

The instrument has demonstrated strong psychometric properties. In this study, the scale yielded a Cronbach's alpha (α) of 0.89, indicating high internal consistency and reliability. Prior validation studies also support the scale's content and construct validity, making it a suitable tool for assessing AI-related attitudes in academic populations.

The scale was administered in its original form without modifications, ensuring standardization across all participants.

6.5 DATA COLLECTION PROCEDURE:

The data for this study were collected using a structured, self-report questionnaire designed to assess students' attitudes toward Artificial Intelligence (AI). Prior to data collection, necessary administrative permissions were obtained from the concerned authorities at GM University, Sambalpur. Participants were selected based on the inclusion criteria, and the objectives of the study were clearly explained to them.

Respondents were assured of the confidentiality and anonymity of their responses. Informed consent was obtained from all participants before administering the questionnaire. The survey was distributed in person during regular classroom hours, with the cooperation of faculty members to ensure smooth facilitation. Participants were given clear instructions and approximately 15–20 minutes to complete the questionnaire.

To ensure data quality, the researcher remained available to clarify any doubts while maintaining a non-intrusive presence. Completed questionnaires were checked for completeness and consistency at the time of collection. Only fully completed responses were included in the final analysis, and no incentives were provided to the participants, ensuring voluntary participation.

Data were subsequently coded and entered into a statistical software program for analysis, with all personal identifiers removed to preserve confidentiality.

6.6 DATA ANALYSIS:

The collected data were first screened for completeness and accuracy. Only fully completed questionnaires were included in the final analysis, resulting in a total sample size of 200 participants—100 from the Science stream and 100 from the Arts stream. The data were coded and entered into Statistical Package for the Social Sciences (SPSS) version [specify version, e.g., 26.0] **for statistical** analysis.

Descriptive statistics, including means, standard deviations, and standard errors**,** were computed to summarize the participants' attitude scores toward Artificial Intelligence. To examine whether a significant difference existed between the two independent groups, an independent samples z-test was performed. This test was selected based on the large sample sizes and approximate normal distribution of the data.

The significance level was set at $\alpha = 0.05$ for hypothesis testing. Additionally, the 95% confidence interval (CI) for the mean difference was calculated to assess the precision of the estimate. The statistical decision was based on the z-value**,** p-value**,** and whether the confidence interval included zero. The results were interpreted in accordance with conventional criteria for statistical significance.

7. RESULTS:

An independent z-test was conducted to examine whether there was a significant difference in attitudes toward Artificial Intelligence (AI) between Science and Arts students at GM University, Sambalpur. The analysis showed that Science students (M = 18.39, SD = 4.98, N = 100) reported significantly more positive attitudes toward AI than Arts students (M = 16.21, SD = 5.72, N = 100). The

mean difference between the groups was 2.18, and the calculated z-value was 2.874. The standard error of the difference was 0.758, and the p-value for the two-tailed test was 0.0045, which is below the standard alpha level of 0.05.

Furthermore, the 95% confidence interval for the mean difference ranged from 0.6844 to 3.6756, indicating that the true mean difference is unlikely to be zero. These results confirm a statistically significant difference between the two groups. A summary of the statistical results is presented below:

TABLE 1: DESCRIPTIVE STATISTICS OF ATTITUDE SCORES TOWARD AI

Groups	N	M	SD	SEM
Science Students	100	18.39	4.98	0.498
Arts Students	100	16.21	5.72	0.572

TABLE 2: Z-TEST SUMMARY

Statistic	Value
Mean Difference (Science – Arts)	2.18
Standard Error of Difference (SED)	0.758
z-value	2.874
p-value (two-tailed)	0.0045
95% Confidence Interval (CI)	0.6844 to 3.6756
Statistical Significance ($\alpha = 0.05$)	Significant

8. DISCUSSION:

The findings of this study highlight a statistically significant difference in students' attitudes toward Artificial Intelligence, with Science students demonstrating more favorable perceptions than Arts students. This outcome may be attributed to curriculum exposure, as students in scientific disciplines are generally more familiar with digital tools, algorithms, and technological concepts that are foundational to AI (Lee & Park, 2020). In contrast, Arts students may lack direct interaction with AI technologies in their coursework, potentially leading to reduced confidence, uncertainty, or lower perceived relevance of AI in their academic and future professional lives (Holmes et al., 2022).

The result aligns with prior studies that show disciplinary background plays a critical role in shaping technology-related attitudes and preparedness (Teo, 2011). Students in technical or scientific domains are often trained to engage with systems thinking, data analysis, and computational models, all of which foster more accepting and positive views of artificial intelligence. Conversely, students in the humanities or social sciences may approach AI with more skepticism, reflecting a critical perspective on its ethical, cultural, and philosophical implications (Selwyn, 2019).

Additionally, the significant z-value and narrow confidence interval indicate a consistent difference that is unlikely due to sampling error. However, the moderate effect size, as suggested by the mean difference, also implies the need for curricular support for Arts students to reduce this perceptual gap. Addressing such disparities is essential in a world where AI literacy is becoming vital across all professions.

9. IMPLICATIONS FOR GM UNIVERSITY:

The findings of this study reveal a statistically significant difference in attitudes toward Artificial Intelligence between Science and Arts students at GM University, with Science students showing more favorable perceptions. This suggests a need for the university to promote AI awareness and digital confidence across all academic disciplines. Integrating basic AI concepts, digital ethics, and real-life applications into Arts curricula can help bridge this attitudinal gap. Furthermore, interdisciplinary seminars, workshops, and elective courses involving both Science and Arts students could foster collaborative learning and holistic understanding. Faculty development programs focusing on emerging technologies may also enhance pedagogical innovation across departments. Such efforts would align the university's educational practices with global trends in technology-integrated higher education.

10. CONCLUSION:

The study concluded that Science students at GM University exhibit significantly more positive attitudes toward Artificial Intelligence compared to Arts students. This disciplinary difference may stem from differences in curriculum design, exposure to technological tools, and perceived relevance of AI in respective career paths. The statistically significant findings ($z = 2.874$, $p = 0.0045$) support the need for integrated AI education across all streams, not just within the sciences.

To promote equitable AI awareness, GM University may consider interdisciplinary initiatives, AI awareness campaigns, and curriculum reform to promote inclusive technological literacy. By doing so, the university can ensure that students from all academic backgrounds are well-prepared for a future where AI is increasingly influencing education, employment, and society.

LIMITATIONS:

Despite yielding meaningful insights, the study has certain limitations. The research was confined to students from GM University, Sambalpur, which limits the generalizability of the findings to broader academic populations. Only two academic streams—Science and Arts—were considered, excluding disciplines such as Commerce, Management, and Law, which may also hold distinct perspectives on AI. Additionally, data were collected using self-report questionnaires, which may be subject to social desirability bias. The study employed a cross-sectional design, capturing responses at one point in time; as a result, it cannot assess changes in attitude over time or establish causal relationships.

RECOMMENDATIONS FOR FUTURE RESEARCH:

Future studies should involve larger and more diverse samples from multiple universities across different regions to enhance generalizability. Including other disciplines such as Commerce, Law, and Engineering could offer a more comprehensive understanding of how academic background influences attitudes toward AI. A mixed-methods approach combining quantitative data with in-depth qualitative interviews would yield richer insights into the reasons behind differing perceptions. Longitudinal research is also recommended to track how students' attitudes evolve over time, especially in response to curriculum changes or technological exposure. Finally, future studies could examine the influence of factors such as digital literacy, socio-economic background, and prior experience with AI tools.

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REFERENCES

1. Baghel, R., & Tripathy, M. (2022). To study the effect of birth order on adjustment of adolescents. *International Educational Scientific Research Journal, 8*(4), 26-30.

2. Baker, R. S. (2019). Challenges for the future of educational data mining: The Baker Learning Analytics Prizes. *Journal of Educational Data Mining, 11*(1), 1–17. https://doi.org/10.5281/zenodo.3555543

3. Bhatt, D., & Tripathy, M. (2022). Pet owners and non-pet owners - a study of emotional intelligence in relation to pet ownership. *International Educational Scientific Research Journal, 8*(4), 53-60.

4. Biglan, A. (1973). The characteristics of subject matter in different academic areas. *Journal of Applied Psychology*, *57*(3), 195–203.

5. Gairola, P., & Tripathy, M. (2022). A comparative study of the aggression level among yogic and non-yogic male individuals. *International Educational Scientific Research Journal, 8*(5), 19-22.

6. Garg, S., & Tripathy, M. (2021). To study the effect of COVID diagnosed working and non-working women on their level of emotional maturity. *International Journal of Arts, Humanities and Social Studies, 3*(6), 82-87.

7. Gumber, K., Trivedi, P., & Tripathy, M. (2023). A study of defense mechanisms and psycho-immunity on gender and the use of indigenous techniques to improve psycho-immunity: A review paper. *International Journal of Arts, Humanities and Social Studies, 5*(3), 27-33.

8. Gupta, A., & Bansal, P. (2020). Student perceptions of AI in higher education: A comparative study across disciplines. *International Journal of Educational Technology, 7*(2), 45–58.

9. Gupta, R., & Tripathy, M. (2023). The effect of intergenerational conflict among adolescents, young adults and older adults living in spiritual environment. *International Journal of Arts, Humanities and Social Studies, 5*(3), 34-38.

10. Holmes, W., Bialik, M., & Fadel, C. (2022). *Artificial Intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign https://curriculumredesign.org/wp-content/uploads/AI-in-Education-Promises-and-Implications_CCR-Report.pdf

11. Jyoti, P., Tripathy, M., Suman, S., & Trivedi, P. (2023). Exploring indigenous perspective on traits that let humans thrive: An Indian model for developing resilience as a tool for optimal human life. *Research Journal of Humanities and Social Sciences, 2*(1), 4-11.

12. Kala, A., & Tripathy, M. (2023). A comparative study of meta cognitive skills of music practicing students and non-music students. *International Journal of Arts, Humanities and Social Studies, 5*(3), 49-51.

13. Kashyap, S., Joshi, H., Dabral, A., Sahu, J., Tripathy, M., & Vishvakarma, S. (2024). A comparative study of eight psychological dimensions (anxiety, stress, depression, regression, fatigue, guilt, extraversion & arousal) among students before and after the implementation of New Education Policy (NEP) 2020. *IASR Journal of Humanities and Social Sciences, 4*(1), 1-11.

14. Khatri, M., Soni, T., Chauhan, D., Tripathy, M., Vishvakarma, S., & Gupta, M. (2024). Exploring the power of resilience: A comparative analysis between yoga practicing and non-practicing students of Dev Sanskriti Vishwavidyalaya. *IASR Journal of Humanities and Social Sciences, 4*(1), 25-31.

15. Khuntia, V., & Tripathy, M. (2022). Optimistic-pessimistic attitude among the national cadet corps in DSVV, 31 UK Battalion, Haridwar. *International Educational Scientific Research Journal, 8*(4), 66-69.

16. Kumar, R., & Sharma, M. (2022). Demographic determinants of AI awareness among university students in India. *Asian Journal of Education and Social Studies, 19*(3), 55–67. https://doi.org/10.9734/ajess/2022/v19i330469

17. Kumari, S., & Tripathy, M. (2022). A comparative study on mental health among yagya practitioners and non-practitioners. *International Educational Scientific Research Journal, 8*(4), 75-78.

18. Lee, L., & Park, J. (2020). The role of artificial intelligence in education: Current progress and future prospects. *Educational Technology Research and Development*, *68*(4), 2315–2332. https://doi.org/10.1007/s11423-020-09777-5

19. Lee, S., & Park, Y. (2020). Impact of prior technical exposure on students' attitudes toward AI in education. *Journal of Technology and Teacher Education, 28*(4), 621–638.

20. Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson Education. https://www.pearson.com/content/dam/one-dot-com/one-dot-com/global/Files/about-pearson/innovation/open-ideas/Intelligence-Unleashed-Publication.pdf

21. Modi, R., & Tripathy, M. (2023). Effect of social internship on quality of life. *Research Journal of Humanities and Social Sciences, 2*(1), 12-19.

22. Namdeo, M., & Tripathy, M. (2022). Comparative study in the level of death anxiety in families going through bereavement due to death by COVID-19 and non-COVID deaths. *International Educational Scientific Research Journal, 8*(5), 15-18.

23. Parth, R., & Tripathy, M. (2022). A study on stress level between yoga practitioners and non-yoga practitioners. *International Educational Scientific Research Journal, 8*(4), 70-74.

24. Patnaik, S., & Rani, M. (2021). Infrastructure gaps in digital learning at regional universities in India. *Journal of Educational Planning and Administration, 35*(2), 129–145.

25. Pattanayak, P., & Tripathy, M. (2022). To find the efficacy of eco spirituality on the well-being of older people. *International Educational Scientific Research Journal, 8*(4), 43-46.

26. Rani, S., & Tripathy, M. (2021). Effect of Covid-19 pandemic on the level of death anxiety of an individual. *International Journal of Arts, Humanities and Social Studies, 3*(6), 77-81.

27. Rathod, P., & Tripathy, M. (2023). Emotional intelligence and emotional maturity in male and female of Dev Sanskriti Vishwavidyalaya students: A comparative study. *International Journal of Arts, Humanities and Social Studies, 5*(3), 55-57.

28. Sahu, V., & Tripathy, M. (2022). A comparative study on study habits of college students in online and offline sitting. *International Educational Scientific Research Journal, 8*(4), 87-90.

29. Saini, H., & Tripathy, M. (2022). Comparative study of mental health among college student living in rural and urban areas. *International Educational Scientific Research Journal, 8*(4), 35-38.

30. Sajal, G., & Tripathy, M. (2022). Comparative study between mental health of males and female suffering post-COVID effect. *International Educational Scientific Research Journal, 8*(4), 83-86.

31. Schepman, A., & Rodway, P. (2020). Initial validation of the General Attitudes Toward Artificial Intelligence Scale. *Computers in Human Behavior Reports, 1*, 100014. https://doi.org/10.1016/j.chbr.2020.100014

32. Selwyn, N. (2019). *Should robots replace teachers? AI and the future of education*. Polity Press.

33. Sharma, P., Saxena, N., Shrestha, Tripathy, M., & Vishvakarma, S. (2024). Resilience levels of male and female undergraduate students at Dev Sanskriti Vishwavidyalaya: A comparative analysis. *IASR Journal of Humanities and Social Sciences, 4*(1), 12-17.

34. Sharma, S., & Tripathy, M. (2023). A study on the relationship between SRT personality and mental health. *Research Journal of Humanities and Social Sciences, 2*(1), 20-27.

35. Sharma, V., & Tripathy, M. (2022). Difference among midlife crises between a man and a woman. *International Educational Scientific Research Journal, 8*(4), 31-34.

36. Sharma, V., Rana, P., & Tripathy, M. (2023). A comparative study of life satisfaction between working and non-working women in a spiritual environment. *International Journal of Arts, Humanities and Social Studies, 5*(3), 52-54.

37. Shukla, P., & Tripathy, M. (2022). Effect of parenting style on adjustment skills of school going students. *International Educational Scientific Research Journal, 8*(4), 39-42.

38. Singh, S., Luitel, A., Sharma, N., Tripathy, M., Vishvakarma, S., & Gupta, M. (2024). Exploring emotional intelligence: A comparative analysis between NSS and NCC students of Dev Sanskriti Vishwavidyalaya. *IASR Journal of Humanities and Social Sciences, 4*(1), 18-24.

39. Suman, S., Tripathy, M., Jyoti, P., & Trivedi, P. (2023). Impact of environment on mental efficiency of elderly: Spiritual ambience, normal family environment, old age home environment. *Research Journal of Humanities and Social Sciences, 2*(1), 28-36.

40. Teo, T. (2011). Factors influencing teachers' intention to use technology: Model development and test. *Computers & Education*, *57*(4), 2432–2440. https://doi.org/10.1016/j.compedu.2011.06.008

41. Tomor, S., & Tripathy, M. (2022). A comparative study of adjustment level on single child and child with siblings. *International Educational Scientific Research Journal, 8*(4), 47-52.

42. Tripathy, M. (2013). Exploring the influence of family decisions on youth behavior: A quantitative and qualitative analysis. *Indian Journal of Health and Wellbeing, 2*(1), 46-56.

43. Tripathy, M. (2014). Exploring the depths: Insights from Vedic knowledge. *Indian Social and Psychological Studies, 5*(9), 63-71.

44. Tripathy, M. (2015). Investigating the differential effects of slow and fast Chandra Namaskara on physiological function. *Journal of Psychosocial Research, 10*(2), 89-97.

45. Tripathy, M. (2016). Examining emotional intelligence and social maturity levels in mothers of adolescents: A comparative study of working and non-working mothers. *Indian Journal of Psychosocial Sciences, 6*(3), 69-77.

46. Tripathy, M. (2017). A contextual analysis of gender on social and emotional maturity of senior school adolescents of Bhawanipatna. *International SAMANM Journal of Finance & Accounting, 5*(1), 10-16.

47. Tripathy, M. (2017). A study the effect of academic achievement on inferiority-insecurity feeling. *Mediterranean Journal of Basic and Applied Sciences, 1*(1), 316-327.

48. Tripathy, M. (2017). Monitoring aggression in adolescents: Chandra Namaskara as a panacea. *Elysium Journal of Engineering Research and Management, 4*(6), 1-6.

49. Tripathy, M. (2017). The comparative study of social maturity among yog students of master degree. *International Journal of Advance Research, Ideas and Innovations in Technology, 3*(6), 1286-1291.

50. Tripathy, M. (2018). A comparative study of personality traits of students belonging to ICSE & CBSE board. *International SAMANM Journal of Finance & Accounting, 6*(1), 16-20.

51. Tripathy, M. (2018). A study of aggression and self confidence among the different disciplines of university male students. *Researcher, 10*(2), 61-64.

52. Tripathy, M. (2018). Concentrate the effect of psychosocial factor on teenagers' behavior. *Mediterranean Journal of Basic and Applied Sciences, 2*(1), 22-29.

53. Tripathy, M. (2018). Effect of Chandra Namaskara and Om mediation on aggression of adolescents. *Academia Arena, 10*(4), 75-79.

54. Tripathy, M. (2018). Level of aggression in male adolescent through Pragya Yog with chanting of Gayatri Mantra. *Elysium Journal of Engineering Research and Management, 5*(1), 1-7.

55. Tripathy, M. (2018). Observing aggression of adolescent: Om meditation followed by Surya Namaskara as a nostrum. *Sadakath: A Research Bulletin, 5*(2), 48-54.

56. Tripathy, M. (2018). The effect of Anuloma Viloma Pranayama and Kapalbhati on resting pulse rate and stress of school going children in Bhubaneswar. *Academia Arena, 10*(1), 44-48.

57. Tripathy, M. (2018). To study the effect of birth orders on achievement motivation among adolescent. *Mediterranean Journal of Basic and Applied Sciences, 2*(1), 10-21.

58. Tripathy, M. (2019). A comparative study of frustration level of sports playing and non-sports playing students. *International Journal of Recent Research and Applied Studies, 6*(6), 1-3.

59. Tripathy, M. (2019). A study of alienation and emotional stability among orphan and non-orphan adolescents. *Irish Interdisciplinary Journal of Science & Research, 3*(3), 51-60.

60. Tripathy, M. (2019). Reactions to frustration level of high school students as related to their academic achievement. *New York Science Journal, 12*(9), 28-32.

61. Tripathy, M. (2020). A study on emotional maturity of secondary school students in Kalahandi and Bolangir districts of Odisha. *International Journal of Arts, Humanities and Social Studies, 2*(1), 21-28.

62. Tripathy, M. (2021). Effect of empathy, emotional intelligence on interpersonal communication. *Journal of American Science, 17*(9), 24-27.

63. Tripathy, M. (2021). Evaluation of integrated approach of psycho and yoga therapy in management of anxiety neurosis: A case study. *Journal of Ayurvedic Herbal and Integrative Medicine, 2*(1), 1-13.

64. Tripathy, M. (2024). The impact of misinformation on public health: Lessons from the COVID-19 vaccine rollout. *Research Journal of Humanities and Social Sciences, 3*(4), 1-10.

65. Tripathy, M., & Sahu, B. (2018). A comparative study of adjustment problems of high and low achiever students in high schools of Bhawanipatna (Odisha). *Middle East Journal of Applied Science & Technology, 1*(1), 1-6.

66. Tripathy, M., & Sahu, B. (2018). Gender: It's effect on adjustment level of high school students. *New York Science Journal, 11*(2), 88-91.

67. Tripathy, M., & Sahu, B. (2019). Immediate effect of Nadi Shodhana Pranayama on blood glucose, heart rate and blood pressure. *Journal of American Science, 15*(5), 65-70.

68. Tripathy, M., & Sahu, B. (2019). Impact of family environment on socio-emotional adjustment of adolescent girls in rural areas of Western Odisha. *Asian Journal of Basic Science & Research, 1*(1), 27-35.

69. Tripathy, M., & Sahu, B. (2019). Study the relationship between adolescence problems & frustration of school students in Kalahandi district. *International Journal of Arts Humanities and Social Studies, 1*(1), 1-6.

70. Tripathy, M., & Sahu, B. (2019). To study the effect of family structure on adjustment level of adolescents boys & girls. *BAOJ Psychology, 4*(1), 1-6.

71. Tripathy, M., & Sahu, B. (2020). The counseling techniques in tackling the problem of truancy among the students of Uttarakhand schools. *International Journal of Scientific Advances, 1*(3), 177-180.

72. Tripathy, M., & Sahu, B. (2021). A comparative study on mental health of rural and urban students. *International Educational Scientific Research Journal, 7*(12), 67-77.

73. Tripathy, M., & Sharma, P. (2017). Aggression of adolescents in relation to their academic achievement. *Jyotirmay Research Journal of Education, 5*(2), 70-75.

74. Tripathy, M., & Sharma, P. (2018). Effect of psychosocial factors on behavioral problems of adolescent. *International Journal of Science and Consciousness, 4*(1), 1-9.

75. Tripathy, M., & Sharma, P. (2018). Monitoring behavioral problem of adolescent: Management through psycho yogic moduleCRS module. *International Journal of Yoga and Allied Science, 7*(2), 93-102.

76. Tripathy, M., & Srivastava, S. K. (2011). A study on effect of perceived academic achievement on the level of inferiority and insecurity feeling. *Indian Journal of Psychosocial Sciences, 1*(2), 42-46.

77. Tripathy, M., & Srivastava, S. K. (2012). A study the effect of academic achievement on the level of self-confidence. *International Journal of Yoga and Allied Sciences, 1*(1), 33-45.

78. Tripathy, M., Khanduri, G., & Sahu, B. (2017). A comparative study on risk taking behavior between boys and girls. *Printing Area International Multilingual Research Journal, 2*(34), 101-104.

79. Tripathy, M., Sahu, B., & Pokhariyal, T. (2020). To study the effect of high economic status and low economic status on personal value and family pathology. *International Journal of Arts, Humanities and Social Studies, 2*(6), 43-51.

80. Upadhyay, A., & Tripathy, M. (2022). The comparative study on academic stress between government and private secondary students in Banda. *International Educational Scientific Research Journal, 8*(4), 79-82.

81. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

82. Yadav, S., & Tripathy, M. (2022). Comparative study of emotional intelligence among arranged married and unmarried women. *International Educational Scientific Research Journal, 8*(4), 61-65.

83. Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on AI applications in higher education: Opportunities and challenges. *International Journal of Educational Technology in Higher Education, 16*(1), 39. https://doi.org/10.1186/s41239-019-0171-0